

**CARBON DISCLOSURE PROJECT**

# Three years on: more aware more transparent

**CDP Turkey 100 Climate Change Report 2012**

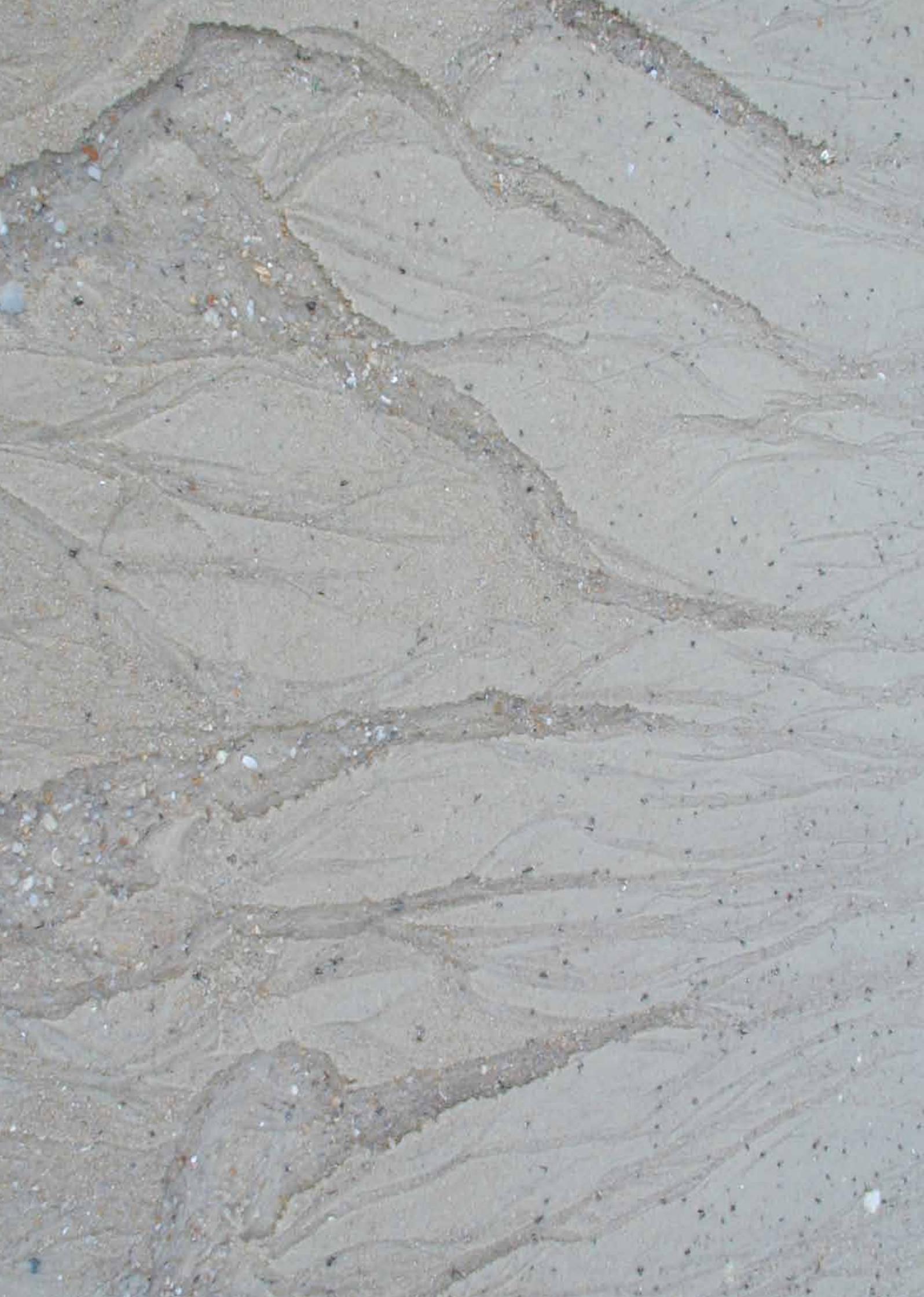
On behalf of 655 investors  
with assets of US\$ 78 trillion

CDP Partner



Scoring Partner





# Foreword



Climate change is a global challenge that requires global solutions. Cost of inaction is becoming critical as time is ticking away. If necessary steps are not taken on a global scale, humanity may face its irreversible consequences. There are a number of reports and academic findings revealing climate change's repercussions on the globe. For instance, Intergovernmental Panel on Climate Change tells us, unequivocally, that greenhouse gas emissions must be reduced by half by 2050 – if we are to keep the rise in global temperatures to 2 degrees since pre-industrial times. In the meantime International Energy Agency warns that we are nearing the 'point of no return' and the window of opportunity for limiting the temperature rise to 2 degrees is unfortunately closing down. In the face of these challenges, we need to create an effective regime for addressing climate change. Negotiation is the only instrument that will pave the way for solutions. Our main objective is to contribute to the global efforts in line with the sustainable development policies and on the basis of common but differentiated responsibilities.

As Turkey, our vision is to become a country making use of energy more efficiently, increasing the share of renewable resources in energy generation, integrating development policies with those of climate change and thereby lowering carbon intensity. To this end, we announced our National Climate Change Strategy which establishes our national policies on mitigation, adaptation, finance and technology. Also, the Climate Change Action Plan, prepared within the context of this Strategy, sets out the mitigation activities in relevant sectors and the urgent adaptation measures to enhance our country's resilience to the ramifications of climate change.

I believe that the lessons generated by the Carbon Disclosure Project report will be instrumental for evaluating the current status of climate change and discuss how the adverse effects and risks of climate change can be eliminated. I would like to thank those who worked for and contributed to this valuable Project. I hope that this Project will produce innovative ways to encourage development of clean energy technologies and widespread adoption of promising solutions for a more sustainable world for everyone.

**Ali Babacan**  
Deputy Prime Minister, Republic of Turkey

# 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. Bad harvests due to unusual weather have this year rocked the agricultural industry, with the price of grain, corn and soya beans reaching an all time high. Last year, Intel lost US\$1 billion in revenue and the Japanese automotive industry lost US\$450 million of profits as a result of the business interruption floods caused to their Thailand-based suppliers.

It is vital that we internalise 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.

**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)

# Sponsor Foreword



**“We take great pride in having supported over the last three years in Turkey the implementation of the Carbon Disclosure Project which has been one of the most significant projects for creating awareness and making a better world.”**

The concept of ‘Sustainable Development’ became part of our lives after the ‘Earth Summit’ that took place in Rio de Janeiro 20 years ago. This year, Ban Ki-Moon, Secretary General of the United Nations, issued a very important statement evaluating the past two decades during the Rio+20 United Nations Sustainable Development Conference, organised in the very same city: “Let me be frank: our efforts have not lived up to the measure of the challenge. For too long, we have behaved as though we could indefinitely burn and consume our way to prosperity. Today, we recognize that we can no longer do so.” The warning he issued to everyone, governments and consumers alike, is that ‘time has run out’.

Numerous studies such as the ‘OECD Environmental Outlook to 2050’ report published at the beginning of 2012 have issue similar admonitions. The OECD report states that the use of sustainable agriculture, water and energy supply and production cannot meet the needs of the world population which will exceed nine million in the year 2050 if the necessary measures are not taken. In addition, it also emphasises that “the cost of the negligence or inaction has the potential to reach gigantic dimensions, not only economically but also in terms of human life”.

All these detailed studies argue that we cannot wait any longer to act and that be the private or public sector, producer or consumer, the situation requires immediate measures. As noted in the concluding statement of the Rio+20 Summit, we are entering a period in which a sensitive balance needs to be struck between two seemingly contradictory goals: decreasing carbon emissions and continuing economic development. In this period, both the public and private sector will have important responsibilities. No government can fight global climate change without the support of the private

sector. Private sector investment is necessary if government supported projects are to succeed.

It is with this in mind that we must increase private sector awareness; and encourage that same private sector to use low emission technology and applications, to increase R&D resources and make low-carbon development a priority.

‘Sustainability’ is a concept which lies in the very DNA of our organisation. From its inception, Akbank has been conscious of the environmental, social and economic impact of its activities. We have made the battle against climate change a priority both within the banking sector and the wider community of which we are a part. As a bank, we actively participate in a huge variety of projects which help reduce climate change and its negative impact on our planet.

In this context, we take great pride in having supported over the last three years in Turkey the implementation of the Carbon Disclosure Project which has been one of the most significant projects for creating awareness and making a better world. In Turkey, this year an overall total of 32 companies have disclosed their approaches to managing climate change. This was an increase of 12 compared to 2011 when 20 companies in total responded to CDP - pointing to an encouraging increase in commitment from the private sector.

As the first deposit bank which published a Sustainability Report in Turkey, we are proud to be supporting these important initiatives which focus on the complex environmental, social and economical dimensions of sustainability. Looking to the future, Akbank will continue to be a pioneer of change both in our sector and in our country.

**Suzan Sabancı Dinçer**  
Chairman, Akbank

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# Introduction

“CDP has become the most recognized initiative in the fight against climate change in Turkey.”



Photo: EQOIQ

With this report we celebrate the third year of CDP Turkey with a sense of accomplishment. We are indebted to various parties including our host Sabanci University for the moral and intellectual support to our project, to our main sponsor Akbank for their ongoing generosity, and to Ernst & Young Turkey for their rigorous analysis of CDP disclosures presented in this report. Thanks to all the support we receive, but more importantly thanks to the companies who accepted our invitation to use CDP platform to inform their stakeholders about the impact of climate change on their businesses, CDP has become the most recognized initiative in the fight against climate change in Turkey.

In our previous reports we noted some of the challenges we face in achieving transparency of firm level climate change risks in a growing carbon intense economy like Turkey. There are specific issues around lack of standards, underdeveloped local fund management industry and the concerns expressed by companies about competitive disadvantage of being more transparent than their rivals. None of these challenges have been overcome. However, there are positive signs to be more optimistic; while many Turkish firms are typically reluctant to issue non-financial reports, none of the companies that had responded to CDP's request earlier has left the platform even when they were no longer included in the ISE-100 sample. We have an overwhelming increase in voluntary responses. Business group structures, which originally affected the response rate negatively, have demonstrated the potential to create a resource-sharing environment through pioneer members setting examples and sharing their experiences with other group

companies improving the quality of disclosures; a race to the top. Another reason to be optimistic is the significant improvement we observed in the disclosure scores compared to 2011.

In 2012, we have organized workshops, issued newsletters, participated in climate change related projects and conferences as we have in previous years. CDP Turkey team also participated in Turkey's delegation to Rio+20. Additionally, this year, Ernst & Young Turkey scored both the disclosure quality and performance in responding to climate change of the respondents, enabling us to launch leadership awards in two categories: Disclosure Leadership and Performance Leadership.

In our encounters with invitee firms, we continued to come across with our alumni as transformation agents in their companies involved in sustainability related activities including GDP reporting. It is no doubt that management schools have an extraordinary challenge in training the future managers given the increasing role of businesses in destroying or creating 'the future we want'. We take pride in welcoming the challenge and engaging through teaching, research and projects like CDP with the critical issues facing businesses and communities in Turkey. We are grateful to CDP's leadership team for their continuous innovation of programs and platforms to help this engagement.

**Melsa Ararat**  
Director, CDP Turkey  
Director, Corporate Governance Forum  
School of Management, Sabanci University

# 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>

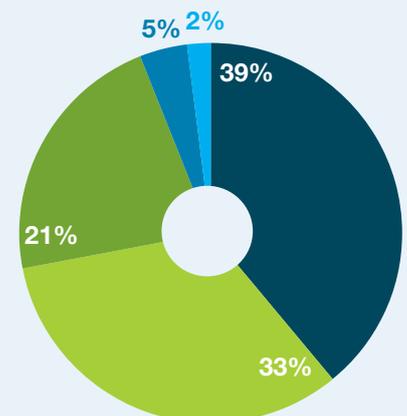
## 1 CDP INVESTOR SIGNATORIES & ASSETS (US\$ TRILLION) AGAINST TIME

- Investor CDP Signatories
- Investor CDP Signatory Assets



## 2 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 FINER, 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 ("GEPF"), 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	Provinzial 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 - Prevdada  
 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

# Executive summary

The Carbon Disclosure Project (CDP) works to transform the way the world does business to prevent dangerous climate change and protect our natural resources. CDP envisions a world where capital is efficiently allocated to create long-term prosperity rather than short-term gain at the expense of our environment.

Evidence and insight is vital to driving real change. CDP uses the power of measurement and information disclosure to improve the management of environmental risk. By leveraging market forces including shareholders, customers and governments, CDP has incentivized thousands of companies and cities across the world's largest economies to measure and disclose their greenhouse gas emissions, climate change risk and water strategies. This information is used in business, investment and policy decision-making.

CDP currently holds the largest collection globally of self reported climate change data. Through its global system companies, investors and cities are better able to mitigate risk, capitalize on opportunities and make investment decisions that drive action towards a more sustainable world. In 2012, CDP requested information on greenhouse gas emissions, energy use and the risks and opportunities from climate change from thousands of the world's largest companies on behalf of 655 institutional investors with US\$78 trillion in assets. It offers a unique opportunity for companies to make their climate related strategies and actions more visible to international investors.

## CDP Turkey

Sabancı University is the local partner of CDP in Turkey with the sponsorship of Akbank and report sponsorship of Ernst & Young Turkey. The project was first launched in January 2010. In 2012, companies included in the Istanbul Stock Exchange 100 (ISE-100) index were invited to respond to CDP's information request. In addition, CDP Turkey accelerated its efforts to increase voluntary responses from Turkey's carbon-intense sectors. As a result, the number of voluntary respondents increased significantly from 2011 (3 companies in 2011 and 15 companies in 2012).

While Sabancı University is responsible for implementing the Investor CDP programme, Turkey is also covered by other CDP programmes. In 2012, 13 Turkish supplier companies received information requests as part of the CDP Supply Chain programme. Istanbul, Ankara, and Izmir received invitations to respond to the CDP Cities questionnaire in 2011. Istanbul and Kadıovacık Village were two responding municipalities in 2011. These numbers are expected to grow in the upcoming years.

Among the 665 international investor signatories to CDP Investor Programme in 2012, there were eight from Turkey: Ak Asset Management, Akbank T.A.Ş, Arma Asset Management, T. Garanti Bank, Industrial Development Bank of Turkey (TSKB), Logos Asset Management, Groupama Pension Fund and Groupama Insurance Fund. Five of them, Ak Asset Management, TSKB, Logos Asset

Management, Groupama Pension Fund and Goupama Insurance Fund are signatories to the CDP Water Disclosure programme as well.

## Turkey Specific Challenges

Previous CDP Turkey reports outlined the specific challenges unique to Turkey, which include the uncertainty of Turkey's position with respect to international agreements and uncertainty on the future direction of government climate change strategy. Lastly, business group structures pose a great challenge. Listed companies are not fully representative of Turkey's private sector, as most group companies functioning in emission intensive industries remain unlisted.

Outcomes from the two major international climate conferences over the past year, Rio+20 and COP17, significantly influenced Turkey's climate change and environmental policy. In late 2011, the UNFCCC COP 17 meeting defined detailed measurement, reporting, and verification (MRV) processes, in support of a new market mechanism that will become operational from 2020 at the international level. In Turkey, this was followed up by the Regulation on Monitoring GHG Emissions issued by MoEU in April, in line with UNFCCC and EU ETS standards. In June 2012, paragraph 47 of the Rio+20 outcome document called on governments to encourage the private sector to enhance sustainability reporting – a crucial development in support of CDP. Such developments encourage companies to give increasing attention to climate change and sustainability. CDP Turkey observed increased participation to events and higher response rates. The response rates are expected to grow further as the regulatory environment becomes less uncertain both at the national and international levels.

In 2012, CDP requested climate change information from ISE-100 companies, and also extended invitations to companies that were included in ISE-100 and have responded to the questionnaire in 2011. Furthermore, CDP Turkey partnered with the British Embassy to implement 'Expanding CDP to Energy Intensive and Less Transparent Sectors in Turkey' project. The aim was to facilitate the dialogue around climate change within key sectors, and help build capacity within companies to develop climate strategies, measure and disclose their emissions through CDP. The success of the project is reflected in the significant increase in the voluntary reporters this year.

## Responses to CDP in 2012

This year, 17 of the ISE-100 companies responded to the CDP questionnaire, and 32 Turkish companies in total responded to CDP including non-ISE-100 respondents. These responses provide a valuable insight into how companies are operating in an uncertain environment with regards to government strategies, shareholder expectations and international agreements. Overall we conclude that companies in Turkey are demonstrating increasing levels of awareness of the strategic opportunities associated with acting on climate

change and handle sustainability issues at higher managerial levels; however, very few are setting ambitious targets or making investments needed to ensure long-term resilience. 93% of ISE-100 responders assign board level responsibility to climate change related issues. However, the majority of ISE-100 respondents (54%) reported no targets for reducing emissions. CDP responses show that there is an increasing trend in total emissions in line with economic growth. There is an evident need for action to decouple emissions from economic growth, and national strategies to support this goal.

82% of the companies who responded directly to CDP assigned the responsibility of climate change issues to a board committee or an executive body. The trend towards placing higher importance on climate change is further supported by the incentives given by companies to their management. 86% of the respondents indicated that they provide incentives for the management of climate change issues. Furthermore, corporations increasingly establish formal sustainability procedures. 79% of respondent companies have said that they have integrated 'Risk management procedures with regard to climate change risks and opportunities' either into their multi disciplinary company-wide risk management processes or a specific climate change risk management process.

Companies in Turkey are starting to establish internal procedures to measure and report their emissions as a result of increasing government expectations and pressure from the public and shareholders. All companies disclose some scope of their emissions; seven of these companies reported their emissions for the first time in 2012. Verification and assurance levels remain low at 32% for Scope 1 and 25% for Scope 2. These levels are expected to increase given government efforts to establish a regulatory framework for an MRV system.

There is an increasing trend in emissions reflecting Turkey's economic growth. Among 21 companies who have disclosed more than one year of emissions data, 12 reported an increase in their combined Scope 1 and Scope 2 emissions. Eight of these companies reported a decrease and one reported no change. The increase in their operational capacity is reported as the main reason behind this trend. These results indicate that Turkey, in the near future, will be challenged to achieve economic targets, while keeping its emissions stable. Emissions reduction targets will be key in achieving this goal. In 2012, 43% companies report targets. Only 28% however report absolute targets.

**“In 2012, company responses were assessed both for disclosure and performance based on the CDP scoring methodology. Through this assessment, Carbon Disclosure and Carbon Performance Leaders of Turkey in 2012 were identified. We note the significant improvement in disclosure scores from 2011.”**

#### **Scoring in 2012**

In 2012, company responses in Turkey were assessed by Ernst & Young Turkey both for disclosure and performance, according to the CDP scoring methodology. As a result, each company receives a Carbon Disclosure Score based on the comprehensiveness of their response, and a Carbon Performance Band on the extent to which they demonstrate action to support their climate change strategies. However, more respondents from each sector are needed for healthy comparisons. Therefore, this report will only acknowledge five Turkish companies for their leadership on disclosure, and two for leadership in performance.

#### **Carbon Disclosure Leaders in Turkey**

In 2012 15 companies out of the 28 companies scored over 70. 3 of these were successful in getting disclosure scores over 80. The Carbon Disclosure Leaders in 2012, the best five companies displaying leadership in alphabetical order on disclosure are: Akbank T.A.Ş., Arçelik A.Ş., T. Garanti Bankası A.Ş., Türk Telekomünikasyon A.Ş., and Zorlu Enerji Elektrik Üretim A.Ş.

#### **Carbon Performance Leaders in Turkey**

In 2012, there were no companies in band A. The Carbon Performance Leaders in band B are: Coca-Cola İçecek A.Ş., and T. Garanti Bankası A.Ş.

# Key Trends in Turkey

Since last year's 'CDP 2011 Turkey Report', two major events have taken place at the international level - the Rio+20 United Nations (UN) Conference on Sustainable Development and the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP-17). Both events emphasized the urgency of taking action at national and international levels to minimize the impacts of climate change, and had outcomes that significantly influence Turkey's climate change and environmental policy.

## A) International Developments

### Rio+20 UN Conference on Sustainable Development 'The Future We Want'

The United Nations Conference on Sustainable Development (UNCSD) – Rio+20, hosted by Brazil in Rio de Janeiro, was a 20-year follow-up to the 1992 UNCSD – Earth Summit and the 10th anniversary of the World Summit on Sustainable Development (WSSD) that was held in Johannesburg in 2002.

Most of the commitments from 1992 were left unfulfilled, and were replaced with voluntary commitments in 2002. Rio+20 Conference was expected to eliminate some of the uncertainty through mutual agreements. In this line, one of the objectives of the Conference was to assess progress on sustainable development issues since 1992 and identify gaps. Other objectives included emphasizing the importance of sustainable development, identifying latest threats and opportunities for ensuring sustainable development.

The main outcome document, 'The Future we want', met only some expectations. One of the most significant outcomes is the document's Paragraph 47, which calls on governments to encourage enhanced sustainability reporting from the private sector. This is crucially important for CDP, and marks a significant step towards a low-carbon economy.

#### Paragraph 47

Rio+20 outcome document included a paragraph calling on governments to support corporate sustainability reporting. Financial institutions, including Aviva Investors as a leading supporter, strongly advocated for the inclusion of Paragraph 47. Brazil, Denmark, France and South Africa formed a group called 'Friends of Paragraph 47' to advance corporate sustainability reporting.

The United Kingdom (UK) had the most encouraging approach; UK Deputy Prime Minister Nick Clegg announced that as of April 2013, all companies listed on the main London Stock Exchange (LSE) will be required to report their GHG emissions. The directive will apply to about 1,600 listed companies and with the possibility of extension to all large companies in the UK after it is reviewed in 2015.

Local governments actively participated in the events throughout the Rio+20 summit. Gaziantep Metropolitan Municipality was the only local participant from Turkey to the Local Governments for Sustainability - ICLEI events and the panel on Climate Leadership for the low-carbon urban world 2030.

Rio+20 witnessed many developments that are of significant importance for the financial industry. A new set of 'Principles for Sustainable Insurance' was published in partnership with the UNEP and was endorsed by more than 30 insurers. These principles require signatories to embed environmental, social and governance (ESG) issues in their decision-making processes, including investment, risk management and underwriting activities; work with clients and business partners to raise awareness of ESG issues; work with governments and regulators to drive sustainable actions across society; and report regularly on progress against the principles.

A group of five stock exchanges, which ISE was a part of, announced their commitment to promote long-term, sustainable investment in their markets. In this line, ISE has ongoing efforts to establish the ISE Sustainability Index.

## PARAGRAPH 47

"We acknowledge the importance of corporate sustainability reporting and encourage companies, where appropriate, especially publicly listed and large companies, to consider integrating sustainability information into their reporting cycle. We encourage industry, interested governments as well as relevant stakeholders with the support of the UN system, as appropriate, to develop models for best practice and facilitate action for the integration of sustainability reporting, taking into account the experiences of already existing frameworks, and paying particular attention to the needs of developing countries, including for capacity building."

## Turkey and the Rio+20 Process

The Ministry of Development led Turkey's preparations to Rio+20 Summit. UNDP supported the Ministry providing technical assistance as part of its project 'Assistance to Turkey for the UN Conference on Sustainable Development 2012 (Rio+20) Preparations'.

The initial output of the project was stocktaking and impact analysis of Turkey's progress towards sustainable development between 1992 and 2010. Following up on this analysis was the stage on initiating the Green Growth debate in Turkey by supporting the World Bank Policy Paper study and capacity building on Green Growth. An in-depth analysis was conducted and a synthesis report on best practices on sustainable development and green growth in Turkey was published with support from Business Council for Sustainable Development. Best Practices supporting 'Sustainable Development' and 'Green Growth' concepts were selected among on-going projects and programmes from private sector, public institutions, universities and NGOs to be presented at the Rio+20 Conference. As Turkey prepared for Rio+20, many meetings were held at the local and central levels with wide participation from public and private sectors, local governments, academicians and NGOs. The outcomes of the debates that took place were summarized in the 'National Synthesis Report' that was prepared for presentation at the Rio+20 Conference.

## United Nations Climate Change Conference – Durban (COP 17)

The 17th United Nations Climate Change Conference (COP 17) was held in Durban, South Africa, from 28 November to 11 December 2011. The aim was to establish a new treaty to limit carbon emissions and secure a global climate agreement, as the Kyoto Protocol's first commitment period (2008–2012) is about to end.

The outcome of the conference was the 'Durban Platform'. In this deal, negotiators agreed that all countries would work towards a legally binding treaty to address global warming that will cover all countries. The aim is to prepare the new treaty by 2015, with it taking effect in 2020. The countries are expected to continue their voluntary efforts to reduce emissions until 2020. It also included the continuation of the Kyoto protocol in the interim - although several developed countries have joined the United States in declining to be further involved in the Kyoto Protocol (Japan, Russia and Canada).

Another outcome from the Durban Platform was the launch of the Green Climate Fund (GCF) and the adoption of its management framework. It will support projects, policies, and other activities in developing countries; through transfer of US\$100 billion a year from developed countries. However, the sources of the GCF funding are still uncertain.

A decision to develop a new 'Technology Mechanism' to form an institutional infrastructure was taken. This

## CARING FOR CLIMATE INITIATIVE

'Caring for Climate' is the UN Global Compact and UNEP's initiative aimed at advancing the role of business in addressing climate change. Signatories commit taking further practical actions to improve continuously the efficiency of energy usage and to reduce the carbon footprint of our products, services and processes, to set voluntary targets for doing so, and to report publicly and annually on the achievement of those targets.

Caring for Climate states that it works with leading reporting initiatives including the Carbon Disclosure Project, the Global Reporting Initiative, and the Climate Disclosure Standards Board. CDP questions cover all commitment areas included in Caring for Climate Initiative, and offers a platform for its signatories to comply with all obligations. Signatories are expected to send a copy of their CDP response to the initiative secretariat. For more information on the initiative, please visit: [http://www.unglobalcompact.org/issues/environment/climate\\_change/](http://www.unglobalcompact.org/issues/environment/climate_change/)

mechanism will be operational by 2012 with the aim to support developing countries' transition to clean and low-carbon technologies. Moreover, with the aim to help developed countries reach their goals and carry out their responsibilities, market-based mechanisms will be established with the details to follow by the end of 2012.

The two most important outcomes of Durban were the decision to keep the global average temperature increase below 2°C and the agreement to work towards a legally binding treaty that will cover all countries. However, when it is considered that this treaty will only become operational in 2020, it is understood that lack of action until then may hinder efforts to achieve that goal.

Private sector representatives attended the conference at Durban. Levent Çakıroğlu, CEO of Arçelik participated the panel titled 'Durban Debate' where he underlined the need for the private sector to operate within clear policy frameworks. He added that through innovation, particularly in energy efficiency, companies could differentiate themselves on the market. Zorlu Energy Group attended the launch event of The 2°C Challenge Communiqué.

## B) Government Response to Climate Change

### Ongoing Climate Change Projects

#### **Enabling Activities for the Preparation of Turkey's Second National Communication to the UNFCCC**

The overall objective of the project is to assist the Republic of Turkey in implementation of obligations under UNFCCC by preparing its Second National Communication (SNC), as well as to strengthen its technical and institutional capacities to help the government fulfill its commitments to the Convention.

The MoEU is the leading executing agency and UNDP is the implementing agency. The Global Environment Facility (GEF) funds the project.

#### **Improving Energy Efficiency in Industry**

Through this project it is aimed to improve energy efficiency of the Turkish industry by enabling and encouraging companies in the industrial sector for efficient management of energy use by different energy conservation measures and energy efficient technologies. The project will be completed by 2015 and is being implemented by UNDP, United Nations Industrial Development Organizations (UNIDO), General Directorate of Electrical Power Resources Survey and Development Administration (EIE), Small and Medium Enterprises Development Organization (KOSGEB), Technology Development Foundation of Turkey (TTGV) and Turkish Standards Institution (TSE) with the financial support of GEF.

#### **Promoting Energy Efficiency in Buildings in Turkey**

The project is financially supported by GEF and implemented by UNDP Turkey, and aims to reduce energy consumption and associated GHG emissions in public buildings in Turkey by raising building energy performance standards, improving enforcement of building codes, enhancing building energy management and introducing the use of an integrated building design approach.

#### **Partnership for Market Readiness**

Turkey is one of the eight countries which received an initial grant of US\$350,000 to help think through and plan how to design, pilot, and eventually implement market-based instruments for GHG mitigation. The grants are the first made under the Partnership for Market Readiness (PMR), a World Bank initiative that aims to build capacity in countries so that they can develop new market-based instruments to fight climate change. Each recipient country will develop a 'Market Readiness Proposal' that will detail the country's plans. In this context, efforts to design and implement Nationally Appropriate Mitigation Actions (NAMAs) started in Turkey as part of emission reduction initiatives. Improving MRV processes and prioritizing sector needs are among project priorities for the near future.

## Government Strategy

### **Turkey's Sustainable Development Report: Claiming the Future - 2012**

As part of the 'Assistance to Turkey for the UN Conference on Sustainable Development 2012 (Rio+20) Preparations' Project, Turkey has prepared a report entitled 'Turkey's Sustainable Development Report: Claiming the Future' within the context of national preparations for Rio+20 Conference through a participatory and transparent process. In the Report, Turkey's experience on sustainable development during recent years was examined.

The aim of this report is to assess the actions, which Turkey has taken during its sustainable development processes, to reveal the policies, which Turkey will apply in the future, to determine its national 'vision' and to evaluate the possible contribution of Turkey to solve global problems. In addition, the report intends to determine Turkey's opportunities and threats about implementing green growth as an instrument for sustainable development, and to discuss the fields which green growth may contribute to the creation of integrated policies for economy, society and environment.

The reforms implemented in the last decade primarily in economics as well as in environment, education, health, energy and local governments, and advancements on institutional structure in public administration are assessed from a sustainable development perspective. All these changes and developments are complemented with a study in which 'best practices' are identified. 24 practices out of 181 applications are identified as country's 'best practice examples' in sustainable development through an independent evaluation process and are shared with the global community in the report.

The report explicitly states that Turkey will continue contributing to the negotiation platforms for more livable, equitable and resilient world by taking complementary decisions to strengthen the existing mechanisms abiding by 'common but differentiated responsibilities', 'respective capabilities' and 'equity' principles of 1992 Rio Declaration.

### Regulatory Developments

#### **Regulation on Monitoring of Greenhouse Gas Emissions**

The regulation concerning monitoring of GHG emissions is based on the UNFCCC and the Kyoto Protocol. In this line, government continues its efforts to establish a MRV system to be in place for the post-2012 regime in line with the UNFCCC and EU's environmental legislation. MRV system plans include capacity building and awareness raising activities for all stakeholders. The regulation, effective as of 25 April 2012, stipulates requirements for operators of manufacturing facilities on annual GHG emissions monitoring and reporting. Operators are required to comply with monitoring and reporting provisions by 2016.

Operators are required to monitor the GHG arising from their facilities and prepare a GHG monitoring plan for this purpose, which will then be sent to the Ministry for approval. Furthermore, they will be required to submit an annual GHG report plan to the Ministry by the end of each April for the GHG emissions emitted in the previous calendar year. Accredited verification institutions shall verify these plans.

Operators that are subject to the regulation are expected to submit their GHG monitoring plans by June 2014. They are required to start submitting their verified annual GHG emissions reports by 2016. The regulation defines the qualifications of verification institutions and general principles for their authorization by the MoEU, and accreditation by the Turkish Accreditation Institution. The Ministry will issue communiqués to determine other principles and procedures for the monitoring and reporting obligations and authorization of the verification institutions. The government also called on sector representatives to work with the Ministry on determining the emissions factors to be used in GHG emissions calculations.

50% of national emissions will be monitored through the regulation, which will also require around 2000 facilities to employ the MRV processes. The registration system will provide the data to inform the climate change and environmental policy debate in Turkey. Establishment of the MRV system will also help establishment of a carbon management system in Turkey and ease integration to carbon markets. In that regard, companies that are already reporting to CDP will be at an advantage. They will be more prepared for the regulation since they have already developed their climate change reporting capacity and established systems for carbon management.

### C) Turkey's Emissions

Based on data from Turkish Statistical Institute, total GHG emissions increased to 401.9 million tones CO<sub>2</sub>e in 2010. In 2010, total GHG emissions as CO<sub>2</sub>e increased 115% when compared to the 1990 levels. CO<sub>2</sub>e emission per capita was 5.51 tones/capita in 2010, compared to 3.39 tones/capita for the year 1990. Turkey's GHG emissions over time – by gas and by sector – are shown in table 3. While these numbers are still low in comparison to EU and OECD countries, the rate of increase is a cause for concern.

#### Carbon Market in Turkey

Turkey cannot participate in the flexibility mechanisms (i.e. emissions trading, Clean Development Mechanism, and Joint Implementation) offered by the Kyoto Protocol to assist Annex I countries in meeting their GHG emission limitations. Turkey, however, participates in voluntary carbon markets since 2005. In this context, 'Communication On Registry Operations Of Greenhouse Gas Emission Reduction Projects' was published in 2010. The objective of the communication is to regulate the principles and procedures concerning the registry of projects carried out to reduce and limit GHG emissions within the context of combating climate change. Such regulatory mechanisms will ensure better functioning of voluntary carbon market, guide the project developers, and increase reliability of carbon certificates produced in Turkey.

As outlined in the National Action Plan on Climate Change, the negotiations on Turkey's participation to existing carbon markets will continue until 2013. Turkey also expects to develop its national carbon market by 2015.

### 3 TOTAL GHG EMISSIONS AND BY SECTOR (MILLION TONES OF CO<sub>2</sub>E) IN TURKEY

	1990	1995	2000	2005	2010
CO <sub>2</sub>	141.36	173.90	225.43	259.61	326.47
CH <sub>4</sub>	33.50	46.87	53.30	52.38	57.54
N <sub>2</sub> O	11.57	16.22	16.62	14.18	13.03
F Gases	0.60	0.52	1.66	3.73	4.89
<b>Total</b>	<b>187.03</b>	<b>237.51</b>	<b>297.01</b>	<b>329.90</b>	<b>401.92</b>

	1990	1995	2000	2005	2010
Energy	132.13	160.79	212.55	241.75	285.07
Industrial Processes	15.44	24.21	24.37	28.78	53.90
Agricultural Activities	29.78	28.68	27.37	25.84	27.13
Waste	9.68	23.83	32.72	33.52	35.83
<b>Total</b>	<b>187.03</b>	<b>237.51</b>	<b>297.01</b>	<b>329.90</b>	<b>401.92</b>

### 4 NUMBER OF PROJECTS DEVELOPED WITHIN VOLUNTARY CARBON MARKETS FRAMEWORK

Project Type	Number of projects	Annual GHG Reduction (tonnes CO <sub>2</sub> e)
Hydroelectricity	119	5,367,035
Wind	59	5,267,055
Bio-gas	2	100,884
Geothermal	5	285,309
Energy Efficiency	3	96,246
Landfill gas	13	2,741,890
<b>Total</b>	<b>201</b>	<b>13,858,419</b>

## D) Role of Institutions

### United Nations Development Program (UNDP) Turkey

Some of the ongoing projects targeting climate change include: Enabling Activities for the Preparation of Turkey's Second National Communication to the UNFCCC, Assistance to Turkey for the UN Conference on Sustainable Development 2012 (Rio+20) Preparations, Enhancing Forest Protected Areas Management System, Strengthening Protected Area Network of Turkey: Catalyzing Sustainability of Marine and Coastal Protected Areas.

### European Bank for Reconstruction and Development (EBRD)

Some of the projects that EBRD supports in Turkey in the field of climate change and environment are: Promoting Energy Efficiency and Renewable Energy Projects in Turkey with the financing package provided to Is Bank for on-lending to local private companies investing in mid-size sustainable energy projects, Pilot Climate Change Adaptation Market Study which will be implemented and financed together with IFC, and Mersin Wastewater Project as part of the support for Municipal and Environmental Infrastructure.

### International Finance Corporation (IFC)

IFC plans to invest US\$2 billion in Turkey in the 2012-2015 period. IFC will invest US\$500 million in Turkey by the end of the 2012 fiscal year. IFC have been providing support to financial institutions and SMEs in Turkey and works related to hydroelectric plants and wind power are expected to follow.

### World Bank (WB)

Private Sector Renewable Energy and Energy Efficiency Project provides credit lines to TSKB and TKB to be given to private investors in order to finance investments in renewable energy and energy efficiency. Municipal Services project aims to support sustainable municipal services.

### Agence Française de Développement (AFD)

AFD promotes energy efficiency of SMEs in Turkey through direct investments and providing finance to TEB, TSKB, and Halkbank to be given to SMEs. Furthermore, AFD financially supports the project lead by SME Development Organization of Turkey (KOSGEB) for capacity building on energy efficiency.



### The British Embassy

The British Embassy provides grants to projects in themes of commerce, economy, energy safety and climate change in Turkey within the framework of Prosperity Fund Turkey Programme. In 2012, Nature Conservation Centre, REC Turkey, International Labour Organization Turkey, Turkish Society of HVAC and Sanitary Engineers, and UNDP Turkey receives support from the fund.

### Centre for Regional Cooperation Turkey (REC Turkey)

REC receives support from the Netherlands Embassy Matra Fund for Capacity Building in NGOs in the area of Sustainable Business.

### WWF-Turkey (World Wildlife Fund)

WWF Turkey calculated the Ecological Footprint for Turkey for the first time. Turkey's Ecological Footprint Report, published in March 2012, examines the relationship between Ecological Footprint that indicates the amount of resources consumed and the biocapacity. WWF Turkey launched 'Turkey's Life Grant' (Türkiye'nin Canı) campaign to boost awareness of Turkey's bio-diversity and spread nature conservation activities nationwide.

**“I believe that the lessons generated by the Carbon Disclosure Project report will be instrumental for evaluating the current status of climate change and discuss how the adverse effects and risks of climate change can be eliminated. I would like to thank those who worked for and contributed to this valuable Project.”**

**Ali Babacan,  
Deputy Prime Minister,  
Republic of Turkey**



# 2012 Leaders

## 5 TURKEY'S CARBON DISCLOSURE LEADERS IN 2012 (in alphabetical order)

Company	Sector	Sample
Akbank T.A.Ş	Financials	ISE-100
Arçelik A.Ş.	Consumer Discretionary	ISE-100
T. Garanti Bankası A.Ş.	Financials	ISE-100
Türk Telekomünikasyon A.Ş.	Telecommunication Services	ISE-100
Zorlu Enerji Elektrik Üretim A.Ş.	Energy	non-ISE-100

In 2011, companies were assessed on the comprehensiveness of their response and given a Carbon Disclosure Score. In 2012, for the first time in Turkey, company responses were assessed for performance in addition to pure disclosure. All companies with a sufficiently high disclosure score received a performance band. The performance bands provide an indication of the extent to which companies are demonstrating action to support integrated climate change strategies.

### Disclosure Scores

- Disclosure scores are an assessment of the quality and completeness of a company's response; they are not a measure of a company's performance in relation to climate change management.
- Scores are plotted over a 100-point normalized scale.

### Performance Bands

- Where a company's disclosure score is 50 or more, its performance in mitigating carbon emissions is assessed and allocated to a performance band.
- There are six performance bands: A, A-, B, C, D and E.

### Carbon Disclosure Leaders in Turkey

In 2012 15 companies out of the 28 companies scored over 70. Three of these were successful in getting disclosure scores over 80. The Carbon Disclosure Leaders in 2012, the best five companies displaying leadership on disclosure are listed above.

### What does a disclosure score represent?

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

High (>70) - senior management understand the business issues related to climate change and build climate related risks and opportunities into core business

Midrange (50–70) - increased understanding and measurement of company-specific risks and opportunities related to climate change

Low (<50) - limited or restricted ability to measure and disclose climate related risks, opportunities and overall carbon emissions

### How is the disclosure score determined?

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

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



## 6 TURKEY'S CARBON PERFORMANCE LEADERS IN 2012 (in alphabetical order)

Company	Sector	Sample
Coca-Cola İçecek A.Ş.	Consumer Staples	non-ISE-100
T. Garanti Bankası A.Ş.	Financials	ISE-100

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

### Carbon Performance Leaders in Turkey

In 2012, there are no companies in band A. The two companies in band B are listed above in alphabetical order as the Carbon Performance Leaders in Turkey.

### What does a performance band represent?

All companies with a sufficiently high disclosure score received a performance band; the qualifying threshold to receive a performance band was a disclosure score of 50. Disclosure scores of less than 50 do not necessarily indicate poor performance; rather, they indicate insufficient information to evaluate performance. However, it is reasonable to assume that companies, which do not disclose well, may not be taking much action on climate change.

Performance is grouped in six bands: A, A-, B, C, D and E that are defined by the following characteristics:

Band A/A- (>85) – fully integrated climate change strategy driving significant reductions in emissions due to climate change initiatives,

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

Band C (>40) – some activity on climate change with varied levels of integration of those initiatives into strategy,

Band D (>20) – limited evidence of mitigation or adaptation initiatives with no, or limited, strategy on climate change,

Band E ( $\leq 20$ ) – little evidence of initiatives on carbon management potentially due to companies just beginning to take action on climate change,

No performance score allocated below a disclosure score of 50%.

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

# Company Responses Overview

## The Questionnaire

In 2012, the collaboration between Sabancı University and CDP targeted the 100 largest publicly listed companies in Turkey. ISE-100 companies were requested by CDP's 655 signatory investors to report their climate change related data through CDP. Even if they were not in the ISE-100 in 2012, the respondents of CDP 2011 and 2010 were also invited to complete the CDP questionnaire and make this important information available to investors.

Similar to 2011, CDP has requested disclosures in five main areas;

- Corporate level climate change management and governance,
- The opportunities and risks as perceived stemming from climate change and the strategies being contemplated to manage these opportunities and risks,
- Emission reduction strategies,
- Direct and indirect Green House Gas (GHG) emissions with emission intensity, energy consumption and related costs,
- Performance of companies about GHG emission reduction strategies and risks of the GHG rates.

## Respondents

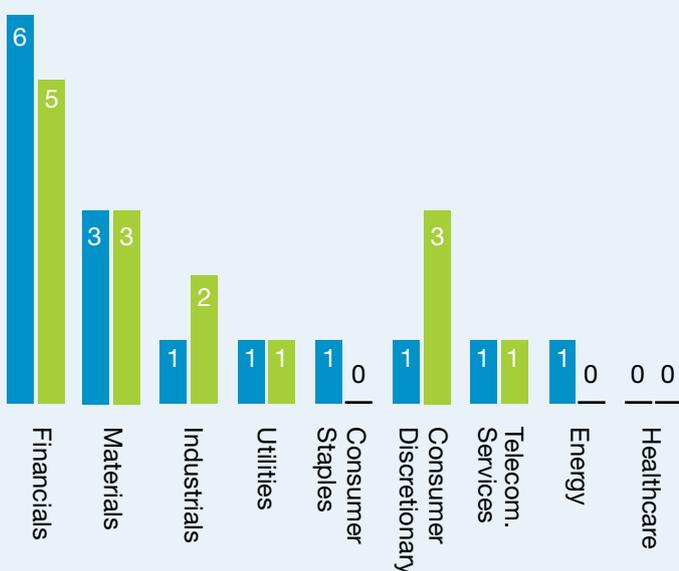
In 2012, 17 companies from the ISE-100 responded to CDP's information request, a static response rate compared to ISE-100 results in 2011. Nevertheless, this does show progress as three of these 17 responding companies had not previously responded to CDP. These three new responders did not cause an increase in the overall ISE-100 response rate only because three companies who responded in 2011 were no longer members of the ISE-100 due to movements in market capitalization from year to year. Figure 7 shows the number of ISE-100 respondents by sector. Increases were observed for the Consumer Discretionary and Industrials sectors.

Besides the official ISE-100 sample that it targeted with CDP's investor information request, occasionally Turkish companies are included in CDP's other global samples targeted with the investor information request, such as the Emerging Markets 800 group of companies. Furthermore, any other company that is interested in disclosing its climate change strategies is also welcome to use CDP's reporting platform. In 2011, three companies outside of the ISE-100 chose to report to CDP in this way. In 2012, this has increased to 15 companies outside the ISE-100 making CDP submissions. Among them were eight companies, which were included in ISE-100 in 2011.

In total 32 Turkish companies responded in 2012– a dramatic increase in overall numbers of responses from Turkey. This shows leading Turkish companies are developing a much greater awareness of climate change and its importance for business. It is hoped that this trend of voluntary disclosure will continue and the number will be multiplied in upcoming years.

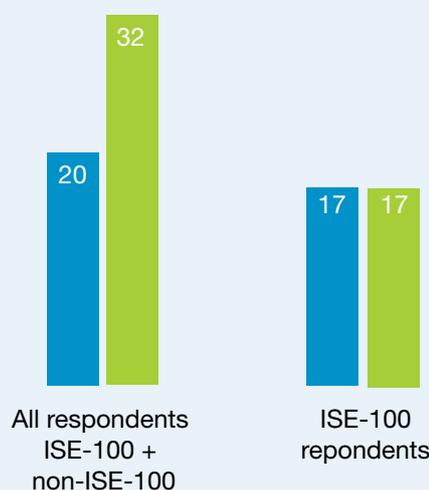
7 ISE-100 RESPONDENTS BY SECTOR

- 2011
- 2012



8 NUMBER OF RESPONDENTS

- 2011
- 2012



Within the respondents, four companies, Mondı Tire Kutsan, Trakyacam, Tesco Kipa and OMV Petrol Ofisi, are subsidiaries of companies that are also requested to respond to CDP. Since emissions of these subsidiaries are consolidated with their parent companies' CDP responses, these companies are considered as responding. However, they are excluded from our analysis. Over all, out of 32 companies which responded to CDP questionnaire, 28 are included in the analysis. A list of all respondent companies is given below.

This year, due to a high number of non-ISE-100 companies participating in CDP, CDP-Turkey has decided to represent companies' overview and analysis in two sections. The first section of this report will present the analysis based on the answers of ISE-100 companies, and the second section will analyse responses from the full group of Turkish companies who have responded to CDP in 2012. The findings and analysis provided in this report are based only on the data provided by respondent companies.

**“Türk Telekom perceives that the cost of inaction with regard to the physical, regulatory and reputational risks associated with climate change will be higher than the cost of adopting to address these risks. The company aims to efficiently manage these risks and turn them into significant advantages, such as benefiting from the latest environmentally friendly technological developments, increasing public awareness of climate change and providing energy efficient services and products to customers. Turk Telekom has initiated an internal multi-phase process to define and assess the risks related to climate change and the potential opportunities.”**

**Türk Telekom**

## 9 LIST OF RESPONDING COMPANIES

Respondents in 2011 and 2012	New Respondents in 2012
Akbank T.A.Ş.	Arçelik A.Ş.
Akçansa Çimento Sanayi ve Ticaret A.Ş. (*)	Aselsan Elektronik Sanayi ve Ticaret A.Ş.
Akenerji Elektrik Üretim A.Ş.	Çelebi Hava Servisi A.Ş. (*)(**)
Bağfaş Bandırma Gübre Fabrikaları A.Ş.	Ekoten Tekstil Sanayi ve Ticaret A.Ş. (*)
Brisa Bridgestone Sabancı Lastik Sanayi ve Ticaret A.Ş.	OMV Petrol Ofisi A.Ş. (SA) (*)(**)
Coca-Cola İçecek A.Ş. (Emerging Markets 800) (*)(**)	Sapro Temizlik Ürünleri Sanayi ve Ticaret A.Ş. (*)
Kardemir Karabük Demir Çelik Sanayi ve Ticaret A.Ş.	Sun Tekstil Sanayi ve Ticaret A.Ş. (*)
Mondi Tire Kutsan Kağıt ve Ambalaj Sanayi A.Ş. (SA)	Trakyacam Sanayii A.Ş. (SA)
Petkim Petrokimya Holding A.Ş.	Vestel Beyaz Eşya Sanayi ve Ticaret A.Ş. (*)(**)
Sabancı Holding A.Ş.	Vestel Digital Üretim A.Ş. (*)
Şekerbank T.A.Ş.	Vestel Elektronik Sanayi ve Ticaret A.Ş. (*)(**)
T. Garanti Bankası A.Ş.	Zorlu Doğal Elektrik Üretim A.Ş. (*)
T. Sınai Kalkınma Bankası A.Ş.	
T.Şişe ve Cam Fabrikaları A.Ş.	
Tav Hava Limanları Holding A.Ş.	
Tesco Kipa Kitle Pazarlama Ticaret Lojistik ve Gıda Sanayi A.Ş. (SA)(*) (**)	
Türk Ekonomi Bankası A.Ş. (*)(**)	
Türk Telekomünikasyon A.Ş.	
Yünsa Yünlü Sanayi ve Ticaret A.Ş. (*)	
Zorlu Enerji Elektrik Üretim A.Ş. (*)(**)	

(\*) Non-ISE100 company

(\*\*) Companies that were ISE-100 last year, but not in 2012.

(SA) Company is either a subsidiary or has merged during the reporting process.

# ISE-100 Responses

17 of the ISE-100 companies, which were invited by investors to respond to the CDP information request have submitted their responses, with two companies consolidating their response with that of their parent company. This response rate is expected to increase in upcoming years as companies become more aware of the importance of this information to investors.

## Governance

The aim of this section of CDP's questionnaire is to draw out the level of commitment from company management to climate changes, by asking questions such as: (i) who is responsible for climate change issues in the company? (ii) what types of incentives are offered to the management for climate change management performance?

14 out of the 15 ISE-100 companies who responded directly to CDP assign the responsibility of climate change to their board committee or executive body. As reflected in section 1, there is a growing trend towards giving the responsibility to higher ranks in the organization. Being among the largest companies operating in Turkey and pioneers of their sectors, this trend is stronger among ISE-100 companies (82% all respondents, 93% of ISE-100).

Rate of providing incentives for the management of climate change issues, including the attainment of targets is the same as that of all the respondents (87%). In terms of types of incentives provided to management for climate management issues, higher percentage of ISE-100 companies provide monetary incentives when compared to all responding companies (37% all respondents, 47% ISE-100).

## 10 LIST OF RESPONDING ISE-100 COMPANIES

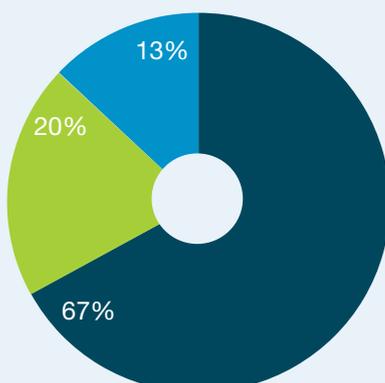
Akenerji Elektrik Üretim A.Ş.  
 Arçelik A.Ş.  
 Aselsan Elektronik Sanayi ve Ticaret A.Ş.  
 Brisa Bridgestone Sabancı Lastik San. Tic. A.Ş.  
 T. Garanti Bankası A.Ş.  
 Kardemir Karabük Demir Çelik Sanayi ve Ticaret A.Ş.  
 Petkim Petrokimya Holding A.Ş.  
 Sabancı Holding A.Ş.  
 Şekerbank T.A.Ş.  
 T. Şişe ve Cam Fabrikaları A.Ş.  
 TAV Hava Limanları Holding A.Ş.  
 Türk Telekomünikasyon A.Ş.  
 Akbank T.A.Ş.  
 Bağfaş Bandırma Gübre Fabrikaları A.Ş.  
 T. Sınai Kalkınma Bankası A.Ş.  
 Trakyacam Sanayii A.Ş. (SA)(\*)  
 Mondı Tire Kutsan Kağıt ve Ambalaj Sanayi A.Ş.(SA)(\*)

(\*) These companies are not included in the analysis.

## 11 RISK MANAGEMENT PROCEDURES WITH REGARD TO CLIMATE CHANGE

% of total

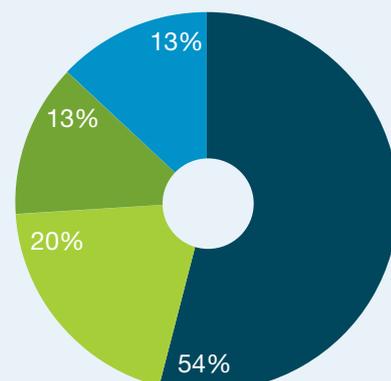
- 67% Integrated into multi-disciplinary company-wide risk management process
- 13% A specific climate change risk management process
- 20% There are no documented processes for assessing and managing risks and opportunities from climate change



## 12 ACTIVE EMISSION REDUCTION TARGETS IN THE REPORTING YEAR

% of total

- 54% No target
- 20% Absolute target
- 13% Intensity target
- 13% Absolute and intensity target



### Strategy

The majority of ISE-100 respondents report that climate change strategy is integrated into their overall corporate strategy and risk management processes. 80% of ISE-100 companies state that they either have a risk management procedure with regard to climate change that is integrated into multi-disciplinary company-wide risk management process or have a specific risk management process in place. Furthermore, 12 out of 15 ISE-100 companies (80%) assert that they have integrated climate change strategy into their corporate business strategy. Engaging with policy makers carries a significant value for ISE-100 companies and the majority of ISE-100 companies stated that they engaged with policymakers (73% of ISE-100).

### Targets and Initiatives

In addition to encouraging companies to disclose information regarding their company strategy, CDP also asks companies if their climate change strategy is tied to emission reduction targets and relevant initiatives. Companies who answered this question as having either ‘absolute’ or ‘intensity’ targets are asked to provide more information about the targets, as well as their progress against the targets during the reporting year. Companies who have no targets are asked to explain the reasons.

Among ISE-100 companies, seven out of 15 companies have said that they have active emission reduction targets. Some of these companies have only absolute or intensity targets while others have both. Similar to the answers of all respondents, ISE-100 companies are also aiming to reach their targets through adopting and supporting innovation and increasing awareness.

### Communications

Similar to last year, within the communication section, the companies were asked whether they have published information about their companies’ position on climate change and GHG emissions performance for this reporting year in places other than their CDP submissions.

An increasing number of investors are scrutinizing companies’ climate change and GHG emissions policies, before investing in those companies. Therefore corporate communication is becoming more and more important for ISE-100 companies. 11 out of 15 ISE-100 companies disclosed that they have published their position on climate change in their annual reports and/or other voluntary communication platforms.

### Climate Change Risks

Respondents are asked if they have identified any climate change risks – such as risks driven by regulations, changes in physical climate parameters, or other climate related risks such as changing consumer behavior – affecting their companies.

14 out of 15 ISE-100 companies consider both regulatory and physical climate change-related changes as significant risks for business continuity. These issues vary from threats to materials in company’s supply chain, disruptions to their operations due to climate parameters and investment requirements for greener technologies that might arise from regulatory changes.

### Climate Change Opportunities

Although climate change creates detrimental risks for many businesses and sectors, it also provides opportunities. Opportunities can also be categorized into those driven by regulatory changes, by physical climate parameters or by other climate related developments.

Other climate change related opportunities are observed as more significant than opportunities driven by regulatory changes and physical climate change parameters. More opportunities are spotted by companies in finance and technology production.

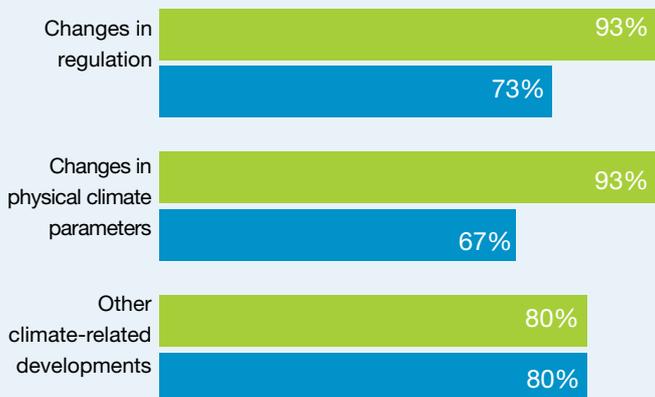
### Emissions

While strategies, communications, identified risks and opportunities are very important aspects of how a company approaches climate change, greenhouse gas emissions remain an absolutely key issue for business. CDP’s questionnaire therefore requests that companies disclose their Scope 1, 2, and 3 emissions as well as a number of other emissions-related data points, including how the companies’ emissions have changed over time.

Responses of ISE-100 companies show that for most of the companies, compared to 2011, combined values of Scope 1 and 2 emissions have increased (11 out of 15 companies).

## 13 PERCENTAGE OF COMPANIES IDENTIFYING RISKS AND OPPORTUNITIES

- Risks
- Opportunities



“Having received significant attention of governments, investors and also individuals over the last decades, the risks associated with the climate change are inevitably affecting the manufacturing industry as well as all industries, although the risks are assumed not to have considerably higher impacts as in the case of energy sector and/or energy intensive industries. As Vestel Electronics, we are placing ‘environmental sustainability’ and decreasing the ecological footprint of our products at the core of our business strategy. Furthermore, as being the manufacturer of high technology energy efficient products, which help our consumers to actually reduce their footprint, we have increased awareness on the impacts of climate change on our business. Climate drivers are important factors that we pay attention in building our broad company strategy.”

**Vestel Elektronik**

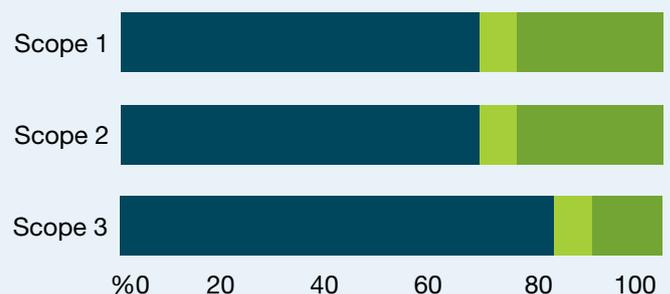
### Verification and Assurance

Verification provides an independent assessment of the systems and processes used to monitor and report an organization’s climate information, together with the data that is included within a company’s GHG assertion or a CDP response. CDP asks companies to provide a verification or assurance statement to support the information they report, as it is important evidence of data quality for investors. Verification also benefits companies as it aids the continual improvement processes used, as well as accuracy and usefulness of data that can feed in to internal development and cost saving programmes.

Within the ISE-100 respondents, the majority of the companies disclose that they have not verified or assured neither Scope 1 and 2 emissions, nor Scope 3 emissions. Five out of 15 companies (33.3%) have verification or assurance completed or underway for Scope 1 and 2 emissions, only three companies have verification or assurance completed or underway for Scope 3 emissions.

#### 14 VERIFICATION / ASSURANCE STATUS APPLYING TO SCOPE 1, 2 AND 3 EMISSIONS

- Verification or assurance complete
- Verification or assurance underway but not yet complete - first year it has taken place
- Verification or assurance underway but not yet complete - last year’s statement available
- Not verified or assured/question not answered



# All Responses

## Governance

Out of 28 respondent companies, 23 (82%) assign the responsibility of climate change issues to a board committee or an executive body. This indicates that there is a growing trend towards giving the responsibility to higher ranks in the organization, suggesting that climate change is considered to be a more strategic issue by the companies.

When different sectors are compared in terms of having higher management levels in charge of climate change, Consumer Discretionary, Financials and Materials sectors take the lead. The trend towards placing higher importance on climate change is further supported by the incentives given by companies to the management. 86% of the respondents indicate that they provide incentives for the management of climate change issues.

Monetary reward is the most frequently used incentive by companies (37%), followed by recognition (non monetary) (30%). 11% of the companies use both monetary rewards and recognition to incentivize management for better performance in climate change relevant issues. Through these incentives, companies aim to increase the awareness and the responsibility, as well as the commitment of the management and employees to reducing GHG emissions.

## Strategy

In order to manage the climate change and GHG emissions, companies should integrate the climate change strategy to their overall corporate strategy.

Most respondents report that climate change has been integrated into their corporate strategy. With regard to climate change risks and opportunities, 22 out of 28 companies (79%) integrate a climate change risk management process into their company-wide risk management processes or have a specific climate change risk management process.

Furthermore, 79% of the companies report that they integrate climate change strategy to their overall strategy through establishing sustainability committees in their boards, introducing company-wide emission reduction targets, and reporting and monitoring of specific activities. In order to create a sector-wide climate change strategy, it is important for companies to engage with policy makers. 68% of respondents report that they engage with policy makers to encourage further action on mitigation and/or adoption, an increase companies to last year.

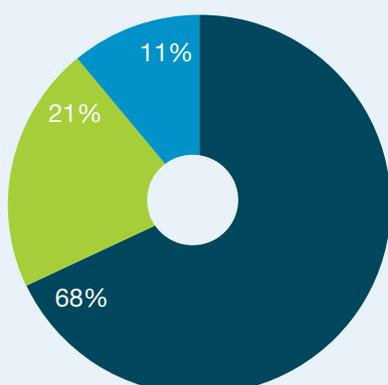
## Targets and Initiatives

Figure 16 shows the percentage distribution of the companies in terms of different emission reduction targets. Although more than half of the companies have not set active emission reduction targets; almost one third of the companies have set absolute reduction targets which describes a reduction in actual emissions in a future year when compared to a base year. In order to reach their absolute or intensity targets, companies implement strategies such as adopting new green technologies with lower carbon footprint for refrigeration and transportation, moving towards paperless operations, training their employees and encouraging their employees to give ideas for creating greener work environment and through various competitions.

### 15 RISK MANAGEMENT PROCEDURES WITH REGARD TO CLIMATE CHANGE

% of total

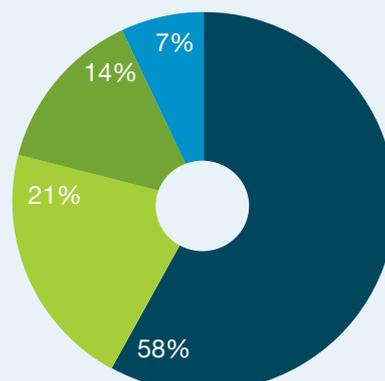
- 68% Integrated into multi-disciplinary company-wide risk management process
- 11% A specific climate change risk management process
- 21% There are no documented processes for assessing and managing risks and opportunities from climate change



### 16 ACTIVE EMISSION REDUCTION TARGETS IN THE REPORTING YEAR

% of total

- 58% No target
- 21% Absolute target
- 14% Intensity target
- 7% Absolute and intensity target



**“Our approach to corporate social responsibility with a focus on stakeholder participation is based on the principles of transparency and accountability. Therefore, providing our stakeholders with accurate, open and honest information about company operations, objectives and accomplishments is an important part of our sustainability management”**

**Coca Cola İçecek**

**Communications**

As illustrated in Figure 17, more than two thirds of companies state that they publish information about their climate change and GHG emissions performance. Most companies used both annual reports and voluntary communications to do so. 35% of the companies (ten out of 28) have published information both in their annual reports and voluntary communications and 32% of the companies (nine out of 28) have not communicated their position on climate change. Out of the 19 companies who disclose that they have published information regarding their climate change initiatives, 12 provide evidence by

attaching the relevant report. Compared to 2011, this is a significant shift from most companies not publishing any reports to publishing multiple reports. This increase in communication of climate change policy and GHG emission performance is positive as it shows more responsibility and accountability on the part of these companies.

**Climate Change Risks and Opportunities**

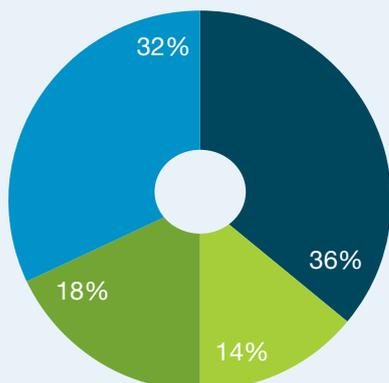
27 out of 28 companies have responded that regulatory risks are most significant for them. This is mainly due to the fact that currently many companies do not set absolute reduction targets, if such regulation passes, companies without defined reduction targets will face additional investment costs.

The majority of the Companies (23 out of 28) voice concerns about risks stemming from physical climate parameters. Those risks include variations in the flow of rivers for companies that operate in the energy industry; for other companies’ droughts and severe weather conditions impose detrimental risks to their supply chain and operations.

23 out of the 28 companies consider that they have identified opportunities for their businesses driven by both regulation and other climate related developments. Companies in the financial industry see the regulatory changes imposed on other industries as an opportunity because such regulatory changes would require several industries to invest in greener technologies, which could be financed by financial institutions. Companies also identify increasing sales of greener technologies as a climate change driven opportunity. As more and more

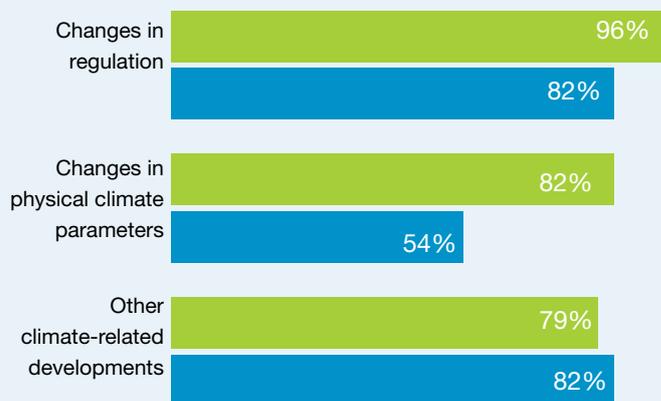
**17 COMMUNICATION OF CLIMATE CHANGE RELATED INFORMATION IN PLACES OTHER THAN CDP RESPONSES**

- % of total**
- 36% Voluntary communication & annual reports
- 14% Only in annual reports
- 18% Only voluntary communication
- 32% Not published



**18 PERCENTAGE OF COMPANIES IDENTIFYING RISKS AND OPPORTUNITIES**

- Risks
- Opportunities



people become environmentally conscious, the money spent on energy-efficient and green products increases benefiting companies leading the green technologies market.

### Emissions

In 2012, all respondents reported their Scope 1 emissions, 24 out of 28 report Scope 2 emissions. Such high levels of emissions reporting are highly significant and promising for Turkey’s plans to monitor private sector emissions. The energy expenses of companies are important, as this is a key area where possible operational savings can be realized by reducing emissions. Investors are also very interested in companies’ operational spend on energy as this data indicates the vulnerability of a company to energy price changes – which may increase due to regulation – as well as vulnerability to energy supply issues. This year, 22% of the respondents (six out of 28) were coming from high energy intensity industries, with over 75% of their operational spend on energy. 39% of responding companies were from the lowest energy intensity group, with only between 0% and 5% of their operational expenditures on energy.

### Verification and Assurance

The results for verification statuses for Scope 1, 2, and 3 of emissions data are given in Figure 19. Most companies in Turkey are still not verifying their Scope 1 and 2 emissions, with verification very rare for Scope 3. As discussed, CDP asks companies to report on increases or decreases in their emissions compared to previous years. Seven out of 28 companies have estimated their absolute emissions for the first time this year, so cannot compare their emissions with a previous year. 12 out of remaining

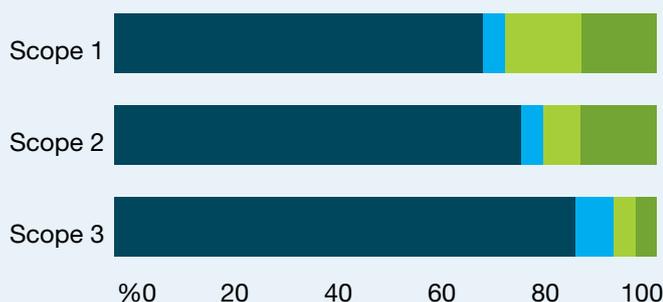
“Our corporate strategy is based on diversifying our energy sources with the increased use of ‘local and renewable’ resources in energy production. Referring to the identified regulatory risks, ‘reduction of carbon emissions’ and ‘off-setting of carbon footprint’ are kept at the centre of our all activities. Our strategy is also linked to the reputational opportunities that arise from climate change.”

Zorlu Enerji

21 companies state that their combined Scope 1 and 2 emissions have increased, other eight observe a decrease in their combined Scope 1 and Scope 2 emissions and 1 states that there is no change in the combined Scope 1 and 2 emissions. The main reason behind the increase in total emissions is the increase in the total operational capacity of these companies.

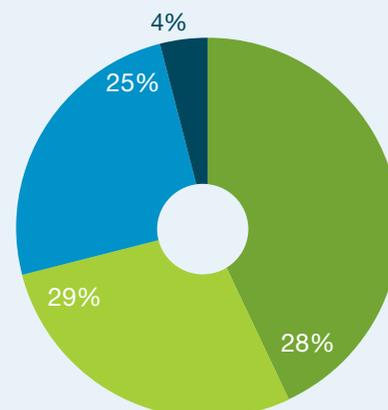
## 19 VERIFICATION / ASSURANCE STATUS APPLYING TO SCOPE 1, 2 AND 3 EMISSIONS

- Verification or assurance complete
- Verification or assurance underway but not yet complete - first year it has taken place
- Verification or assurance underway but not yet complete - last year’s statement available
- Not verified or assured/question not answered



## 20 CHANGE IN ABSOLUTE EMISSIONS (SCOPE 1 AND 2 COMBINED)

- 12 Increased
- 8 Decreased
- 7 First year of estimation
- 1 No change



# Conclusion



**“Garanti grows its total assets at a pace far greater than growth of its physical footprint. We attribute this to our emphasis of alternative delivery channels (internet banking, mobile banking, and next generation ATMs that provide full service) for which Garanti is the leader in Turkey. These channels greatly reduce energy and other resources required to meet customers’ needs while greatly enhancing customer satisfaction.”**

**Garanti Bankası**

Participation in reporting to CDP by ISE-100 companies has remained static in 2012, but there has been a significant increase in this year’s total number of respondents from Turkey, which is very promising. The low response rate among the ISE-100 may be due to the belief that disclosing such information could create competitive disadvantage. There is also evidence of this belief in the low rate of public disclosure, as 11 out of the 17 ISE-100 responses were non-public. This reveals a false perception among these companies. Communication of climate change strategies and GHG reduction initiatives improves companies’ reputations tremendously, and signals to investors that the company is well managed. It also gives companies a mechanism for benchmarking themselves, which is very valuable for internal learning and improvement processes.

The analysis of this year’s company responses portray a promising picture, companies give higher importance to climate change issues and GHG emission reductions.

In terms of governance, compared to 2011, higher percentage of companies give the responsibility of corporate climate change strategies to higher ranked positions in their operational structure. It is also seen that percentage is even higher for ISE-100 companies.

In order to ensure the full commitment to their climate change strategy from different sections of their organization, companies should integrate their climate change strategy into their corporate strategy. This year a higher percentage of companies report that they

integrate their climate change strategy into their corporate strategy. Again, as the pioneers of their industries, higher percentage of ISE – 100 companies state that they have completed this integration.

Similarly, compared to 2011, there is improvement in setting emission targets and communicating these targets and different initiatives. Higher percentage of ISE – 100 companies are also taking part in these activities.

While the government clarified its plans on regulating emissions in 2012, there are still significant uncertainties around the implications of potential regulations. Such uncertainty is reflected in company responses, regulatory changes are seen as risks by almost all of the companies. This provides an opportunity for companies with active targets and ongoing emissions reduction initiatives, as they will be at a much better position to adapt to new regulation.

The analysis shows that ISE-100 companies show higher commitment towards climate change initiatives. Yet, emission increase is also higher. Because these companies are also higher growth companies, this result is expected however it is important for the companies to take their growth objectives into consideration while setting their targets and creating initiatives.

Having more resources to spare, ISE-100 companies should act immediately upon reducing their carbon footprint. Reducing their carbon footprint will reduce their costs, introduce new market opportunities and help them manage their climate liability.

# Ernst & Young Commentary



It is encouraging to see the ever increasing depth of analysis and quality of information that is making the corporate world more transparent, environmentally conscious and committed to a sustainable future, such as the CDP Turkey Report 2012.

This is the third year Ernst & Young Turkey have taken part in this CDP project as the report writing sponsors, and it is just one of the many initiatives we, as a firm globally, are undertaking in order to help our clients transform into low carbon and low energy businesses, integrate their financial reporting with non-financial information and become part of the green economy.

This year, not only were the companies' responses subjected to disclosure scoring, but also for the first time to performance scoring, which measures the rigorousness of their targets and action to achieve them. It is also good to see a high increase in this year's number of respondents and findings that revealed a greater importance placed on climate change issues and GHG emissions reductions.

Although participation among ISE-100 companies remained lower than desired, further work in this area will show companies that sustainability isn't just about the environment it's also about business – a sustainable business will still be operating in the next 10, 20 or even 50 years. By integrating a sustainability strategy into a corporate strategy, firms can gain more than just CSR or reputational gains. It can help identify opportunities to reduce costs, lower business risks and develop new products.

Recent research we conducted showed that sustainability is moving up the corporate agenda and even into the CFO's office. In this survey, a majority of respondents also said their company was now reporting their greenhouse gas emissions<sup>1</sup>. Analysis into this trend has shown that we will see increased regulation surrounding reporting of emissions and companies that are not prepared, should begin to start their contingency planning.

Indeed, we believe this report goes quite a way in helping to improve awareness and hopefully provide the catalyst to other Turkish companies that want to keep up with their competitors or even to become sustainability leaders.

**Juan Costa Climent**  
Global Leader, Climate Change and Sustainability Services

1: Ernst & Young, Six growing trends in corporate sustainability, 2012

# Turkey 2012 - Response Status Table

## ISE-100 COMPANIES

Company Name <sup>1</sup>	Sector	2012 Response Status	2011 Response Status	Permission Status	DISCLOSED EMISSIONS <sup>2</sup>		
					Scope 1	Scope 2	Scope 3
ADANA ÇİMENTO SANAYİİ T.A.Ş.	Materials	DP	X				
AFYON ÇİMENTO SANAYİ T.A.Ş.	Materials	DP	NR				
AKENERJİ ELEKTRİK ÜRETİM A.Ş.	Utilities	AQ	AQ	NP	D		
AKBANK T.A.Ş.	Financials	AQ	AQ	NP	D	D	D
AKFEN HOLDİNG A.Ş.	Financials	DP	X				
AKSA AKRİLİK KİMYA SANAYİİ A.Ş.	Materials	DP	DP				
AKSA ENERJİ ÜRETİM A.Ş.	Utilities	DP	X				
AKSİGORTA A.Ş.	Financials	NR	DP				
ALARKO HOLDİNG A.Ş.	Financials	DP	NR				
ANADOLU EFES BİRACILIK VE MALT SANAYİİ A.Ş.	Consumer Staples	DP	DP				
ANADOLU ANONİM TÜRK SİGORTA ŞİRKETİ	Financials	DP	NR				
ARÇELİK A.Ş.	Consumer Discretionary	AQ	NR	NP	D	D	
ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.	Industrials	AQ	NR	NP	D	D	D
ASYA KATILIM BANKASI A.Ş.	Financials	DP	NR				
AYGAZ A.Ş.	Utilities	NR	NR				
BAGFAŞ BANDIRMA GÜBRE FABRİKALARI A.Ş.	Materials	AQ	AQ	NP	D	D	D
BANVİT BANDIRMA VİTAMİNLİ YEM SANAYİİ A.Ş.	Materials	DP	DP				
BEŞİKTAŞ FUTBOL YATIRIMLARI SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	DP	X				
BİM BİRLEŞİK MAĞAZALAR A.Ş.	Consumer Staples	DP	NR				
BİZİM TOPTAN SATIŞ MAĞAZALARI A.Ş.	Consumer Staples	NR	X				
BORUSAN MANNESMANN BORU SANAYİ VE TİCARET A.Ş.	Industrials	DP	X				
BOYNER BÜYÜK MAĞAZACILIK A.Ş.	Consumer Discretionary	DP	X				
BRİSA BRIDGESTONE SABANCI LASTİK SANAYİ VE TİCARET A.Ş.	Materials	AQ	AQ	NP	D	D	D
DEVA HOLDİNG A.Ş.	Health Care	NR	NR				
DO&CO RESTAURANTS AND CATERING AKTIENGESELLSCHAFT	Consumer Staples	NR	X				
DOĞAN ŞİRKETLER GRUBU HOLDİNG A.Ş.	Industrials	DP	DP				
DOĞAN YAYIN HOLDİNG A.Ş.	Consumer Discretionary	DP	DP				
DOĞUŞ OTOMOTİV SERVİS VE TİCARET A.Ş.	Consumer Discretionary	DP	DP				
EİS ECZACIBAŞI İLAÇ, SİNAİ VE FİNANSAL YATIRIMLAR SANAYİ VE TİCARET A.Ş.	Health Care	DP	DP				
ECZACIBAŞI YATIRIM HOLDİNG ORTAKLIĞI A.Ş.	Financials	DP	DP				
EGE GÜBRE SANAYİ A.Ş.	Materials	NR	NR				

Company Name <sup>1</sup>	Sector	2012 Response Status	2011 Response Status	Permission Status	DISCLOSED EMISSIONS <sup>2</sup>		
					Scope 1	Scope 2	Scope 3
EMLAK KONUT GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	NR	X				
ENKA İNŞAAT VE SANAYİ A.Ş.	Industrials	DP	NR				
EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.	Materials	DP	DP				
FENERBAHÇE SPORTİF HİZMETLER SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	DP	DP				
FORD OTOMOTİV SANAYİ A.Ş.	Consumer Discretionary	DP	DP				
GALATASARAY SPORTİF SINAİ VE YATIRIMLAR A.Ş.	Consumer Discretionary	NR	NR				
T.GARANTİ BANKASI A.Ş.	Financials	AQ	AQ	P	D	D	D
GLOBAL YATIRIM HOLDİNG A.Ş.	Financials	DP	NR				
GOLDAŞ KUYUMCULUK SANAYİ İTHALAT İHRACAT A.Ş.	Materials	NR	NR				
GOODYEAR LASTİKLERİ T.A.Ş.	Materials	NR	X				
GÖLTAŞ GÖLLER BÖLGESİ ÇİMENTO SAN. VE TİC.A.Ş.	Materials	DP	NR				
GÖZDE GİRİŞİM SERMAYESİ YATIRIM ORTAKLIĞI A.Ş.	Financials	NR	X				
GSD HOLDİNG A.Ş.	Financials	DP	NR				
GÜBRE FABRİKALARI T.A.Ş.	Materials	DP	NR				
HÜRRİYET GAZETECİLİK VE MATBAACILIK A.Ş.	Consumer Discretionary	DP	NR				
İŞIKLAR YATIRIM HOLDİNG A.Ş.	Financials	NR	NR				
İHLAS EV ALETLERİ İMALAT SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	NR	NR				
İHLAS HOLDİNG A.Ş.	Financials	NR	NR				
İPEK DOĞAL ENERJİ KAYNAKLARI ARAŞTIRMA VE ÜRETİM A.Ş.	Materials	NR	NR				
T. İŞ BANKASI A.Ş.	Financials	NR	DP				
İŞ FİNANSAL KİRALAMA A.Ş.	Financials	DP	NR				
İŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	DP	NR				
İTTİFAK HOLDİNG A.Ş.	Financials	NR	NR				
İZMİR DEMİR ÇELİK SANAYİ A.Ş.	Industrials	DP	X				
KARSAN OTOMOTİV SANAYİİ VE TİCARET A.Ş.	Consumer Discretionary	NR	NR				
KARDEMİR KARABÜK DEMİR ÇELİK SANAYİ VE TİCARET A.Ş.	Materials	AQ	AQ	NP	D	D	
KARTONSAN KARTON SANAYİ VE TİCARET A.Ş.	Materials	DP	NR				
KİLER ALIŞVERİŞ HİZMETLERİ GIDA SANAYİ VE TİCARET A.Ş.	Consumer Staples	DP	X				
KİLER GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	DP	X				
KOÇ HOLDİNG A.Ş.	Industrials	DP	NR				

Company Name <sup>1</sup>	Sector	2012 Response Status	2011 Response Status	Permission Status	DISCLOSED EMISSIONS <sup>2</sup>		
					Scope 1	Scope 2	Scope 3
KONYA ÇİMENTO SANAYİİ A.Ş.	Materials	DP	NR				
KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.	Industrials	NR	NR				
KOZA ALTIN İŞLETMELERİ A.Ş.	Materials	NR	NR				
MENDERES TEKSTİL SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	DP	X				
METRO TİCARİ VE MALİ YATIRIMLAR HOLDİNG A.Ş.	Financials	NR	NR				
MİGROS TİCARET A.Ş.	Consumer Staples	DP	NR				
MONDİ TİRE KUTSAN KAĞIT VE AMBALAJ SANAYİ A.Ş. (Mondi PLC)	Materials	SA	SA				
MUTLU AKÜ VE MALZEMELERİ SANAYİİ A.Ş.	Industrials	NR	X				
NET HOLDİNG A.Ş.	Consumer Discretionary	NR	NR				
NET TURİZM TİCARET VE SANAYİ A.Ş.	Consumer Discretionary	NR	NR				
NETAŞ TELEKOMÜNİKASYON A.Ş.	Telecommunication Services	DP	X				
OTOKAR OTOMOTİV VE SAVUNMA SANAYİ A.Ş.	Consumer Discretionary	DP	NR				
PARK ELEKTRİK ÜRETİM MADENCİLİK SANAYİ VE TİCARET A.Ş.	Energy	NR	NR				
PETKİM PETROKİMYA HOLDİNG A.Ş.	Materials	AQ	AQ	NP	D	D	
RHEA GİRİŞİM SERMAYESİ YATIRIM ORTAKLIĞI A.Ş.	Financials	NR	X				
H.Ö. SABANCI HOLDİNG A.Ş.	Financials	AQ	AQ	NP	D	D	D
SASA POLYESTER SANAYİ A.Ş.	Materials	NR	NR				
SİNPAŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	NR	NR				
ŞEKERBANK T.A.Ş.	Financials	AQ	AQ	NP	D	D	D
T.ŞİŞE VE CAM FABRİKALARI A.Ş.	Consumer Discretionary	AQ	AQ	NP	D	D	
TÜRKİYE HALK BANKASI A.Ş.	Financials	NR	NR				
TURCAS PETROL A.Ş.	Energy	DP	DP				
T.SINAI KALKINMA BANKASI A.Ş.	Financials	AQ	AQ	P	D	D	D
TAV HAVA LİMANLARI HOLDİNG A.Ş.	Industrials	AQ	AQ	P	D	D	
TEK-ART İNŞAAT TİCARET TURİZM SANAYİ VE YATIRIMLAR A.Ş.	Consumer Discretionary	NR	X				
TEKFEN HOLDİNG A.Ş.	Industrials	DP	NR				
TEKSTİL BANKASI A.Ş.	Financials	DP	DP				
TOFAŞ TÜRK OTOMOBİL FABRİKASI A.Ş.	Consumer Discretionary	DP	NR				
TORUNLAR GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	DP	X				
TRABZONSPOR SPOR TİF YATIRIM VE TİCARET A.Ş.	Consumer Discretionary	NR	X				
TRAKYA CAM SANAYİİ A.Ş. (T.Şişe ve Cam Fabrikaları A.Ş.)	Industrials	SA	NR				

Company Name <sup>1</sup>	Sector	2012 Response Status	2011 Response Status	Permission Status	DISCLOSED EMISSIONS <sup>2</sup>		
					Scope 1	Scope 2	Scope 3
TURKCELL İLETİŞİM HİZMETLERİ A.Ş.	Telecommunication Services	DP	NR				
TÜPRAŞ-TÜRKİYE PETROL RAFİNERİLERİ A.Ş.	Energy	NR	NR				
TÜRK HAVA YOLLARI A.O.	Industrials	DP	NR				
TÜRK TELEKOMÜNİKASYON A.Ş.	Telecommunication Services	AQ	AQ	P	D	D	D
TÜRK TRAKTÖR VE ZİRAAT MAKİNELERİ A.Ş.	Consumer Discretionary	DP	X				
ÜLKER BİSKÜVİ SANAYİ A.Ş.	Consumer Staples	DP	NR				
TÜRKİYE VAKIFLAR BANKASI T.A.O.	Financials	NR	NR				
YAPI VE KREDİ BANKASI A.Ş.	Financials	DP	NR				

#### Non-ISE-100 COMPANIES

COCA-COLA İÇECEK A.Ş. (Emerging Markets 800 Sample)	Consumer Staples	AQ	AQ	P	D	D	D
AKÇANSA ÇİMENTO SANAYİ VE TİCARET A.Ş.	Materials	AQ	AQ	NP	D	D	
ÇELEBİ HAVA SERVİSİ A.Ş.	Industrials	AQ	NR	P	D	D	
EKOTEN TEKSTİL SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	AQ	X	P	D	D	
OMV PETROL OFİSİ (OMV Aktiengesellschaft)	Energy	SA	NR				
SAPRO TEMİZLİK ÜRÜNLERİ SANAYİ VE TİCARET A.Ş.	Consumer Staples	AQ	X	P	D	D	D
SUN TEKSTİL SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	AQ	X	P	D		
TESCO KİPA (Tesco)	Consumer Discretionary	SA	SA				
TÜRK EKONOMİ BANKASI A.Ş.	Financials	AQ	AQ	NP	D	D	D
VESTEL BEYAZ EŞYA SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	AQ	DP	P	D	D	D
VESTEL DİJİTAL ÜRETİM A.Ş.	Consumer Discretionary	AQ	X	P	D	D	D
VESTEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	AQ	DP	P	D	D	
YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	AQ	AQ	P	D	D	D
ZORLU DOĞAL ELEKTRİK ÜRETİMİ A.Ş.	Energy	AQ	X	P	D	D	
ZORLU ENERJİ ELEKTRİK ÜRETİM A.Ş.	Energy	AQ	AQ	P	D	D	

1: Where companies report through their parent company, the parent company name is given in parantheses.

2: If companies disclose their emissions for a given scope, their disclosure is represented by 'D' for the relevant column(s).

#### KEY TO RESPONSE STATUS TABLE

(AQ) Answered questionnaire

(NR) No response

(DP) Declined to Participate

(SA) Company is either a subsidiary or has merged during the reporting process. See company in brackets for further information on company's status.

(P) Response is publicly available

(NP) Response is not publicly available

(X) Company was not included in any GDP samples in that year

# CDP 2012 Global Key Trends

The statistics presented in this key trends table may differ from those in other CDP reports for two reasons: (1) the data in this table is based on all responses received by 3rd September 2012; (2) it is based on binary data (e.g. Yes/No or other drop down menu selection) reported to CDP and does not incorporate any validation of the follow up information provided or reflect the scoring methodology. The latter, in particular, is likely to lead to an over-reporting of data in this key trends table.

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

FTSE All-World	France	Germany & Austria	Global 500	Iberia	India	Ireland	Italy	Japan	Korea	Latin America	New Zealand	Nordic	Russia	South Africa	Switzerland	Turkey <sup>5</sup>	Turkey ISE-100 <sup>6</sup>	Transport (Global)	United Kingdom FTSE All-Share	United States S&P 500	Overall <sup>7</sup>
800	250	250	500	125	200	40	100	500	250	50	50	260	50	100	100	N/A	100	100	615	500	N/A
79	33	54	81	42	31	43	49	47	40	72	42	57	8	78	65	32	17	54	53	69	N/A
635	82	136	405	52	62	17	49	237	99	36	21	148	4	78	65	N/A	17	54	329	343	2418
94	94	76	96	94	73	100	89	93	87	88	90	92	67	96	86	82	93	93	96	92	91
75	69	42	82	68	52	59	50	73	65	44	48	58	33	65	43	86	87	80	65	69	61
90	86	66	95	90	69	65	74	88	86	69	86	90	33	81	77	79	80	91	84	83	84
82	77	57	87	82	63	59	61	74	70	72	57	74	33	84	71	68	73	83	73	70	71
79	70	51	82	72	48	65	54	92	72	34	43	71	67	59	62	42	47	72	68	70	65
45	32	29	49	44	10	41	37	68	44	19	29	32	67	28	32	28	33	30	35	39	37
95	90	74	98	90	71	76	76	95	74	75	67	72	67	96	91	86	80	93	88	92	87
71	74	64	74	80	44	41	61	76	61	63	48	88	67	56	63	64	67	74	58	62	64
80	68	55	91	86	69	76	67	89	85	75	62	83	33	99	57	96	93	78	82	69	78
76	81	66	79	90	69	59	70	80	76	69	57	77	33	92	62	82	73	70	72	64	73
53	40	26	59	56	15	35	26	54	45	16	14	47	33	57	43	32	27	39	48	49	44
69	70	44	77	80	42	71	63	40	73	53	33	49	33	64	48	32	33	69	54	53	52
64	64	36	72	74	38	59	57	40	72	47	33	45	0	63	43	25	33	59	51	48	47
44	52	30	50	60	31	35	33	32	20	44	29	48	0	68	42	25	20	26	36	33	37

1: This statistic includes those companies that respond by referencing a parent or holding company's response. However the remaining statistics presented do not include these responses.  
2: Companies may report multiple targets. However, in these statistics a company will only be counted once.  
3: This takes into account companies reporting that verification is complete or underway, but does not include any evaluation of the verification statement provided.

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

5: Shows statistics calculated using all responses from Turkish companies - both 2012 ISE100 companies and other companies who responded in 2012.  
6: includes companies that were listed on ISE-100 as of January 2012  
7: Includes responses across all samples as well as responses submitted by companies not included in specific geographic or industry samples in 2012.



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