CARBON DISCLOSURE PROJECT

CDP Turkey-100 Report 2011

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

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

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Standard Chartered

Sun Life Financial Inc.

TD Asset Management Inc. and TDAM USA Inc.

The Wellcome Trust

Zurich Cantonal Bank

2011 Carbon Disclosure Project Investor Signatories

Carbon Disclosure Project 2011

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

Aberdeen Asset Managers
Aberdeen Immobilien KAG mbH
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Active Earth Investment Management
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AEGON N.V.
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AIG Asset Management
Ak Asset Management
AKBANK T.A.S.
Alberta Investment Management Corporation (AIMCo)
Alberta Teachers Retirement Fund
Alcyone Finance
Allianz Elementar Versicherungs-AG
Allianz Group
Altira Group
Amalgamated Bank
AMP Capital Investors
AmpegaGerling Investment GmbH
Amundi AM
ANBIMA – Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais
Antera Gestão de Recursos S.A.
APG Group
Aprionis
Aquila Capital
ARIA (Australian Reward Investment Alliance)
Arisaig Partners Asia Pte Ltd
ARK Investment Advisors Inc.
Arma Portföy Yönetimi A.Ş.
ASB Community Trust
ASM Administradora de Recursos S.A.
ASN Bank
Assicurazioni Generali Spa
ATP Group
Australia and New Zealand Banking Group Limited
Australian Central Credit Union incorporating Savings & Loans Credit Union
Australian Ethical Investment Limited
AustralianSuper
Aviva
Aviva Investors
AXA Group
Baillie Gifford & Co.
Bakers Investment Group (Australia) Pty Ltd
Banco Bradesco S/A
Banco de Credito del Peru BCP
Banco de Galicia y Buenos Aires S.A.
Banco do Brasil S/A
Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Banco Santander
Banesprev – Fundo Banespa de Seguridade Social
Banesto (Banco Español de Crédito S.A.)
Bank of America Merrill Lynch
Bank of Montreal
Bank Sarasin & Cie AG
Bank Vontobel
Bankhaus Schelhammer & Schattera Kapitalanlagegesellschaft m.b.H.
BANKINTER S.A.
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Baumann and Partners S.A.
BAWAG P.S.K. INVEST GmbH
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BayernInvest Kapitalanlagegesellschaft mbH
BBC Pension Trust Ltd
BBVA
Bedfordshire Pension Fund
Bentall Kennedy
Beutel Goodman and Co. Ltd
BioFinance Administração de Recursos de Terceiros Ltda
BlackRock
Blumenthal Foundation
BNP Paribas Investment Partners
BNY Mellon
BNY Mellon Service Kapitalanlage Gesellschaft
Boston Common Asset Management, LLC
BP Investment Management Limited
Brasilprev Seguros e Previdência S/A.
British Columbia Investment Management Corporation (bcIMC)
BT Investment Management
Busan Bank
CAAT Pension Plan
Cadiz Holdings Limited
Caisse de dépôt et placement du Québec
Caisse des Dépôts
Caixa Beneficente dos Empregados da Companhia Siderurgica Nacional - CBS
Caixa de Previdência dos Funcionários do Banco do Nordeste do Brasil (CAPEF)
Caixa Econômica Federal
Caixa Geral de Depositos
Caja de Ahorros de Valencia, Castellón y Valencia, BANCAJA
Caja Navarra
California Public Employees' Retirement System
California State Teachers' Retirement System
California State Treasurer
Calvert Asset Management Company, Inc
Canada Pension Plan Investment Board
Canadian Friends Service Committee (Quakers)
Canadian Imperial Bank of Commerce (CIBC)
CAPESESP
Capital Innovations, LLC
CARE Super Pty Ltd
Carlson Investment Management
Carmignac Gestion
Catherine Donnelly Foundation
Catholic Super
Cbus Superannuation Fund
CCLA Investment Management Ltd
Celeste Funds Management Limited
Central Finance Board of the Methodist Church
Ceres
Christian Super
Christopher Reynolds Foundation
Church Commissioners for England
Church of England Pensions Board
CI Mutual Funds' Signature Global Advisors
Clean Yield Group, Inc.
Cleantech Invest AG
ClearBridge Advisors
Climate Change Capital Group Ltd
CM-CIC Asset Management
Colonial First State Global Asset Management
Comerica Incorporated
Comite syndical national de retraite Bâtirente
Commerzbank AG
CommInsure
Commonwealth Bank of Australia
Compton Foundation, Inc.
Concordia Versicherungsgruppe
Connecticut Retirement Plans and Trust Funds
Co-operative Financial Services (CFS)
Corston-Smith Asset Management Sdn. Bhd.
CRD Analytics
Crédit Agricole
Credit Suisse
Gruppo Credito Valtellinese
Daegu Bank
Daiwa Securities Group Inc.
de Pury Pictet Turrettini & Cie S.A.
DekaBank Deutsche Girozentrale
Deutsche Asset Management Investmentgesellschaft mbH
Deutsche Bank AG
Deutsche Postbank Vermögensmanagement S.A.
Development Bank of Japan Inc.
Development Bank of the Philippines (DBP)
Dexia Asset Management
Dexus Property Group
DnB NOR ASA
Domini Social Investments LLC
Dongbu Insurance
DWS Investment GmbH
Earth Capital Partners LLP
East Sussex Pension Fund
Ecclesiastical Investment Management
Ecofi Investissements - Groupe Credit Cooperatif
Edward W. Hazen Foundation
EEA Group Ltd
Elan Capital Partners
Element Investment Managers
ELETRA - Fundação Celg de Seguros e Previdência
Environment Agency Active Pension fund
Epworth Investment Management
Equilibrium Capital Group
Erste Asset Management
Erste Group Bank
Essex Investment Management Company, LLC
ESSSuper
Ethos Foundation
Eureko B.V.
Eurizon Capital SGR
Evangelical Lutheran Church in Canada Pension Plan for Clergy and Lay Workers
Evli Bank Plc
F&C Management Ltd
FAELCE – Fundacao Coelce de Seguridade Social
FAPERS- Fundação Assistencial e Previdenciária da Extensão Rural do Rio Grande do Sul
FASERN - Fundação COSERN de Previdência Complementar
Fédéris Gestion d'Actifs
FIDURA Capital Consult GmbH
FIM Asset Management Ltd
FIPECq - Fundação de Previdência Complementar dos Empregados e Servidores da FINEP, do IPEA, do CNPq
FIRA. - Banco de Mexico
First Affirmative Financial Network, LLC
First Swedish National Pension Fund (AP1)
Firstrand Limited
Five Oceans Asset Management Pty Limited
Florida State Board of Administration (SBA)
Folketrygdfondet
Folksam
Fondaction CSN
Fondation de Luxembourg
Fondiaria-SAI
Fonds de Réserve pour les Retraites – FRR
Fourth Swedish National Pension Fund (AP4)
FRANKFURT-TRUST Investment-Gesellschaft mbH
Fukoku Capital Management Inc
FUNCEF - Fundação dos Economiários Federais
Fundação AMPLA de Seguridade Social - Brasiletros
Fundação Atlântico de Seguridade Social
Fundação Attilio Francisco Xavier Fontana
Fundação Banrisul de Seguridade Social
Fundação de Assistência e Previdência Social do BNDES - FAPES
FUNDAÇÃO ELETROBRÁS DE SEGURIDADE SOCIAL - ELETROS
Fundação Forluminas de Seguridade Social - FORLUZ
FUNDAÇÃO ITAUBANCO
Fundação Itaúsa Industrial
Fundação Promon de Previdência Social
Fundação Vale do Rio Doce de Seguridade Social - VALIA
Fundação Rede Ferroviaria de Seguridade Social – Refer
Fundação Sistel de Seguridade Social (Sistel)
FUNDIÁGUA - FUNDAÇÃO DE PREVIDENCIA COMPLEMENTAR DA CAESB
Futuregrowth Asset Management
Gartmore Investment Management Ltd
GEAP Fundação de Seguridade Social
Generali Deutschland Holding AG

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

- SEIU Master Trust
- Seligson & Co Fund Management Plc
- Sentinel Investments
- SERPROS - Fundo Multipatrocinado
- Seventh Swedish National Pension Fund (AP7)
- Shinhan Bank
- Shinhan BNP Paribas Investment Trust Management Co., Ltd
- Shinkin Asset Management Co., Ltd
- Siemens Kapitalanlagegesellschaft mbH
- Signet Capital Management Ltd
- SMBC Friend Securities Co., LTD
- Smith Pierce, LLC
- SNS Asset Management
- Social(k)
- Sociedade de Previdencia Complementar da Dataprev - Prevdata
- Solaris Investment Management Limited
- Sompo Japan Insurance Inc.
- Sopher Investment Management
- SPF Beheer bv
- Sprucegrove Investment Management Ltd
- Standard Chartered
- Standard Chartered Korea Limited
- Standard Life Investments
- State Bank of India
- State Street Corporation
- StatewideSuper
- StoreBrand ASA
- Strathclyde Pension Fund
- Stratus Group
- Sumitomo Mitsui Banking Corporation
- Sumitomo Mitsui Card Company, Limited
- Sumitomo Mitsui Finance & Leasing Co., Ltd
- Sumitomo Mitsui Financial Group
- The Sumitomo Trust & Banking Co., Ltd.
- Sun Life Financial Inc.
- Superfund Asset Management GmbH
- SUSI Partners AG
- Sustainable Capital
- Svenska Kyrkan, Church of Sweden
- Swedbank AB
- Swiss Re
- Swisscanto Holding AG
- Syntrus Achmea Asset Management
- T. Rowe Price
- T. SINAI KALKINMA BANKASI A.S.
- T.GARANTI BANKASI A.S.
- Tata Capital Limited
- TD Asset Management Inc. and TDAM USA Inc.
- Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA-CREF)
- Telluride Association
- Tempis Asset Management Co. Ltd
- Terra Forvaltning AS
- TerraVerde Capital Management LLC
- The Brainerd Foundation
- The Bullitt Foundation
- The Central Church Fund of Finland
- The Collins Foundation
- The Co-operative Asset Management
- The Co-operators Group Ltd
- The Daly Foundation
- The GPT Group
- The Hartford Financial Services Group, Inc.
- The Japan Research Institute, Limited
- The Joseph Rowntree Charitable Trust
- The Local Government Pensions Institution
- The Pension Plan For Employees of the Public Service Alliance of Canada
- The Pinch Group
- The Presbyterian Church in Canada
- The Russell Family Foundation
- The Shiga Bank, Ltd.
- The Standard Bank Group
- The United Church of Canada - General Council
- The University of Edinburgh Endowment Fund
- The Wellcome Trust
- Third Swedish National Pension Fund (AP3)
- Threadneedle Asset Management
- Tokio Marine & Nichido Fire Insurance Co., Ltd.
- Toronto Atmospheric Fund
- Trillium Asset Management Corporation
- Triodos Investment Management
- Tryg
- UBS
- UniCredit Group
- Union Asset Management Holding AG
- Unipension
- UNISON staff pension scheme
- UniSuper
- Unitarian Universalist Association
- United Methodist Church General Board of Pension and Health Benefits
- United Nations Foundation
- Universities Superannuation Scheme (USS)
- Vancity Group of Companies
- VCH Vermögensverwaltung AG
- Veris Wealth Partners
- Veritas Investment Trust GmbH
- Vermont State Treasurer
- Vexiom Capital, L.P.
- VicSuper Pty Ltd
- Victorian Funds Management Corporation
- VietNam Holding Ltd.
- Vision Super
- VOLKSBANK INVESTMENTS
- Waikato Community Trust Inc
- Walden Asset Management, a division of Boston Trust & Investment Management Company
- WARBURG - HENDERSON Kapitalanlagegesellschaft für Immobilien mbH
- WARBURG INVEST KAPITALANLAGEGESELLSCHAFT MBH
- Wells Fargo & Company
- West Yorkshire Pension Fund
- WestLB Mellon Asset Management (WMAM)
- Westpac Banking Corporation
- White Owl Capital AG
- Winslow Management, A Brown Advisory Investment Group
- Woori Bank
- Woori Investment & Securities Co., Ltd.
- YES BANK Limited
- York University Pension Fund
- Youville Provident Fund Inc.
- Zegora Investment Management
- Zevin Asset Management
- Zurich Cantonal Bank

Figure 1: 2011 Signatory Investor Breakdown

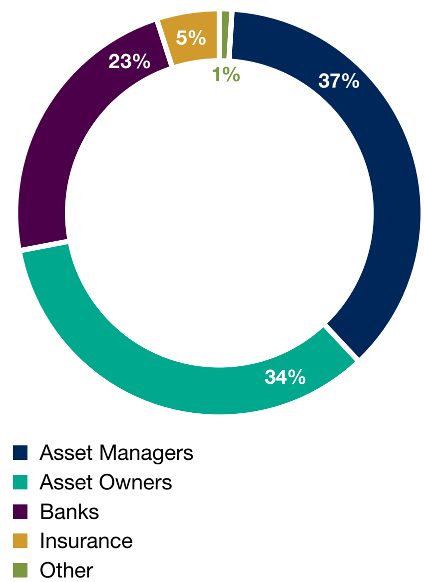
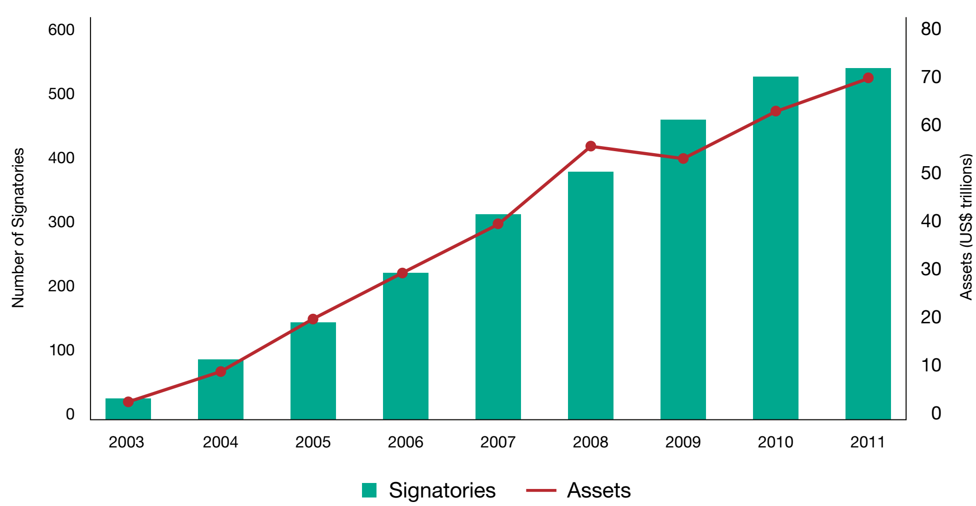


Figure 2: CDP Investor Signatories & Assets over time



CEO Foreword

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

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

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

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

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

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

It is through partnerships that CDP can achieve the largest impact. In Turkey we are delighted to be working with our local report writing partner Ernst & Young Turkey. In addition, we highly value the continued support of our Global Advisor, PwC, as well as that of Accenture, Microsoft, SAP and Bloomberg. These and our other partners around the world are integral to the acceleration of CDP's mission.

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

Paul Simpson
CEO
Carbon Disclosure Project

Sponsor Foreword - Akbank

Energy, a primary resource for maintaining economic developments of countries around the globe, has climbed to increased prominence in the global agenda today. Many institutions with global operations and visibility are continuing to work to produce safe, sustainable, environment-friendly energy policies with minimized risk. Analysis of energy production and consumption indicates that we are on the brink of a new economic order which will create a strong need for multi-dimensional and long-term strategies that put energy at the top of the agenda.

We are indeed entering a new era and the search for a global solution for economic growth, maintaining safe and plentiful energy supplies and fighting climate change is paramount. Our country must strike a careful and considered balance between 'creating high-growth' and 'transitioning to a low carbon economy'. In other words, while on one hand we will have to develop optimum solutions in order to meet increasing energy demands, on the other hand, we must work to make the energy composition less 'carbon-intensive'.

In a mid to long term period in which we will maintain economic growth by reducing carbon emissions, it is crucial that all stakeholders work for the same purpose in accordance with their respective responsibilities and capacities. The public and the private sector must work together to achieve this common goal as it is simply not possible for any single government to fight against global climate change alone. In this regard, the projects supported by governments must also be supported by private sector investments in both developed and developing countries.

It is clear from the research that most of the total cost of the measures to be taken to comply with climate change reduction quotas and reduce emissions must be covered by private sector and raising awareness of this matter is a prerequisite for its involvement. Part of the measures to reduce carbon emissions is to redirect private sector investments to innovative low emission technology and implementations, while at the same time giving priority to the R&D resources that support low-carbon development.

We, at Akbank, believe that the issue of climate change is a vital one which concerns the wider society and business community and we feel a strong responsibility to pioneer and support measures to reduce the impact of climate change. We see as part of our scope of responsibility, to stay abreast of the latest projects and measures to reduce the effects of climate change. We are therefore proud to have initiated the Carbon Disclosure Project in Turkey, which has created some of the greatest awareness campaigns on the subject and and pioneers improvement projects worldwide.

Carbon Disclosure Project, launched in 2000, is acting on behalf of 551 institutional investors holding US$ 71 trillion in assets under management. 3000 agencies and institutions in approximately 60 countries have been disclosing their greenhouse gas emissions and climate change strategies through the Project.

It gives me great pleasure that Turkey has been taking part in such a big and important initiative for the past two years. This year 20 companies have responded to the Carbon Disclosure Project in our country while this number was 11 in 2010. There are also 5 signatory investors in 2011 from Turkey. These developments show that our efforts in this matter have yielded results and give great hope to us.

I want to reiterate that we, at Akbank, will continue to work for a sustainable environment and fight against global climate change with our best efforts and sense of responsibility, and I would like to thank those who worked for and contributed to this valuable project. We hope that such meaningful work continues apace and that we are able to eliminate all adverse outcomes of the Climate Change by working together on a matter that is truly of global and immediate concern to us all.

Suzan Sabancı Dinçer
The Chairman and Executive Board Member
Akbank

Executive Summary

Introduction

The Carbon Disclosure Project (CDP), launched in 2000 in London, aims to accelerate solutions to climate change and water management by putting relevant information at the heart of business, policy and investment decisions. CDP furthers this mission by harnessing the collective power of corporations, investors and political leaders to accelerate unified action on climate change.

Over 3,000 organizations in some 60 countries around the world now measure and disclose their greenhouse gas emissions, water management and climate change strategies through CDP, in order that they can set reduction targets and make performance improvements.

CDP operates the only global climate change reporting system. Climate change is not a problem that exists within national boundaries. That is why CDP harmonizes climate change data from organizations around the world and develop international carbon reporting standards.

Since CDP sent out the first request for climate change information in 2003, not only has the number of disclosing companies grown more than tenfold, but also the data is made available to a growing body of audience.

CDP Turkey

Sabanci University is the local partner of CDP in Turkey with the sponsorship of Akbank and report sponsorship of Ernst & Young Turkey. The project was launched in January 2010. As promised, CDP Turkey doubled its work for 2011 and expanded the invitation to include companies that are included in the Istanbul Stock Exchange 100 (ISE-100) index. The companies in the index represent the largest 100 companies by market capitalisation in Turkey, by the end of third quarter of 2010 fiscal year. The range of programmes carried out within the CDP framework includes Supply Chain, Cities, Water Disclosure, Public Procurement, and Investor CDP.

While Sabanci University is responsible for implementing the Investor CDP programme, Turkey is also covered by CDP's other programmes. In 2010, 5 Turkish supplier companies received information requests as part of the CDP Supply Chain programme. Istanbul received CDP Cities questionnaire in 2011. These numbers are expected to grow in the following years.

CDP acts on behalf of 551 institutional investors, holding US$71 trillion in assets. CDP Turkey respondents have the unique opportunity to communicate their climate change policies to international institutional investors through a proper platform. Such an opportunity will enable responding companies to be more visible to international investors and increase investments in Turkey. Investors in Turkey show an increasing interest in climate change, in parallel to international trends. Currently there are 5 signatory investors to the CDP Investor programme: Ak Asset Management, Akbank T.A.Ş, Arma Asset Management, T. Garanti Bank, and Industrial Development Bank of Turkey (TSKB). Two of them, Ak Asset Management and TSKB, are signatories to the CDP Water programme as well.

CDP Questionnaire went through extensive consultation in 2010, and was updated accordingly. The CDP 2011 Information Request covers three major areas: (i) corporate management with regard to climate change, (ii) management's views on the risks and opportunities that climate change presents to the business, (iii) greenhouse gas emissions accounting. The questions are grouped in five modules:

- Governance
- Strategy
- Targets & Initiatives
- Risks & Opportunities
- Emissions Data

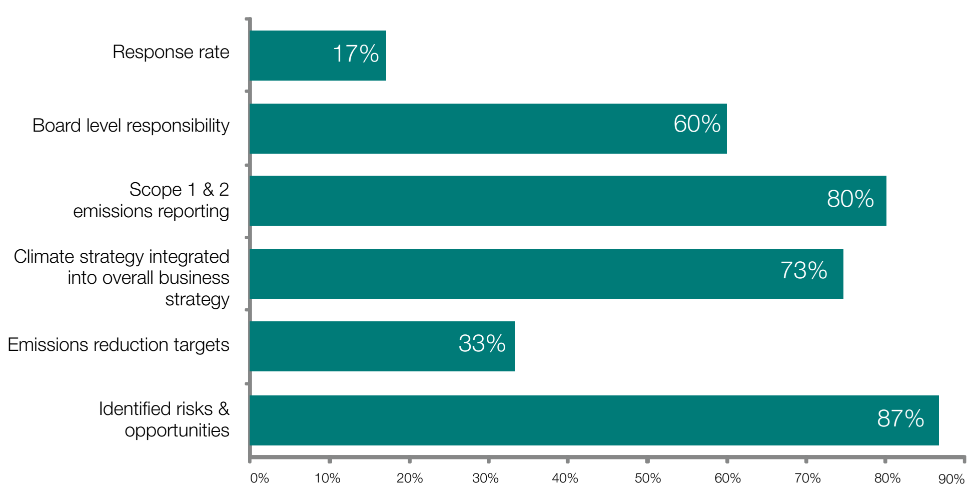
This report presents the highlights of company responses, and sheds light on challenges affecting the disclosure of corporate actions on climate change in Turkey.

Turkey's Specific Challenges

Most challenges presented in CDP Turkey Report 2010 continue to be significant obstacles for Turkish companies to develop strong climate strategies. The uncertainty of Turkey's position with respect to international agreements, and insufficient regulation are persistent.

On the other hand, Turkish government announced the first National Action

Table 1: Summary of CDP 2011 Responses of ISE-100 Companies



Plan on Climate Change in August 2011. Further analyses are presented in the 'Key Trends in Turkey' section within this report. It is also important to note the significant share of securities investments trusts, real estate investment trusts, venture capital trusts etc. within ISE-100. Such high share does have a significant negative impact on CDP response rates, as these companies find it hard to disclose emissions.

Unique Mission for CDP Turkey

In addition to being a data and information broker, CDP Turkey has a unique mission to facilitate a dialogue among companies, help emerging consulting firms to become more visible, assist the government's communication efforts, educate and inform companies about the likely benefits of responding to the CDP's invitation and share good practices.

In this line, CDP Turkey is partnering with the British Embassy in order to implement a project, titled "Expanding CDP to Energy Intensive and Less Transparent Sectors in Turkey". The project aims to facilitate the dialogue around climate change within key sectors, and help them build capacity to develop climate strategies, measure and disclose their emissions through CDP.

Key Findings

A total of 17 ISE-100 companies responded to CDP 2011, giving a response rate of 17%. This total includes two ISE-100 companies whose international parent companies responded on their behalf. For this reason, data relating to these two companies was not included in the analyses within this report. There are three voluntary responses outside the ISE-100 sample, taking the number of direct CDP responses from Turkish companies up to 20. While the percentage response rate seems to have decreased from last year, the actual number of respondent companies almost doubled compared to 2012, when only 10 responses were received.

Response rates to CDP 2011 across developing countries: When we look at CDP 2011 response rates, Russia has an 8% response rate in its 3rd year, China has 11% in its 4th year, India has 28% in its 5th year, Asia (excluding Japan, India, China, and Korea) has 26% in its 6th year, and Brazil has 67% in its 7th year. Appendix II presents detailed comparisons across all geographies covered in 2011. Furthermore, unlike Turkey, most of the developing countries within CDP have national emissions targets, and emissions measurement standards. A rapid increase in the response rates is expected in Turkey once rigorous national policies are implemented.

ISE-100 companies see climate change regulation as an opportunity. 77% of the respondents see regulation as a way to increase demand and to benefit from their achievements in energy efficiency. 80% of respondents report that they perceive regulation as risk to their business.

60% of the respondents assign responsibility for climate change to their board or other executive level. This proves that companies take the issue seriously. This percentage is a decrease from 2010 responses, and points to the need for nation-wide policies for the private sector to maintain its interest and support in the field.

33% of the respondents have emissions reduction targets in place. Such low target levels are alarming, as private sector targets will be key in national reductions achieved. Nation-wide government action will be crucial for companies to start setting targets to reduce their emissions.

33% and 27% of respondents reported third party verification for their Scope 1 and Scope 2 emissions respectively. CDP has a strong stand to support third party verification at a global level, as investors are increasingly interested in moving towards action based on reliable data.

In 2010, Turkish banks showed a significant performance in their disclosure to CDP. Such high rates were expected to encourage other sectors, as banks have a strong influence on others as they manage allocation of financial resources. In 2011, the respondent banks again carried out their strong presence, while they proved to be key drivers. The new respondents in 2011 are from energy, telecommunication services, consumer discretionary, consumer staples, and utilities sectors. The interest from emission intensive sectors is very encouraging. CDP Turkey aims to promote this trend, with the support of the British Embassy project through expanding CDP to emission intensive sectors.

17%

A total of 17 ISE-100 Companies responded to CDP 2011. There are three vountary response outside ISE-100.

CDP Scoring Methodology

The CDP Scoring Methodology has been developed by Price Waterhouse Coopers and CDP for assessing the disclosure and performance levels of respondents. In 2011, this methodology was applied for the first time in Turkey.

Ernst & Young Turkey assessed each response from ISE-100 companies to score companies on disclosure using this methodology. However, more respondents from each sector are needed for healthy rankings and comparisons. Therefore, this report will only acknowledge the companies below, which have disclosure scores higher than 70, in alphabetical order: Akbank T.A.Ş. Coca-Cola Içecek A.Ş. T. Garanti Bankası A.Ş. Türk Telekomünikasyon A.Ş. Zorlu Enerji Elektrik Üretim A.Ş.

An overview of the methodology applied for assessing disclosure in 2011 is provided in this report. Scoring on performance was not implemented in 2011. However, it is intended that in future years, performance scores will be incorporated and published together with disclosure scores, as the number of respondents and the quality of submissions increase.

Contents

After the beginning; the second year in Turkey

CDP Turkey was launched on the 11 January 2010 with a keynote speech delivered by Prof. Nicholas Stern stressing the vulnerabilities of Turkey to climate change. Climate change was then a new topic for Turkey and hence the first year was challenging.

We explained the difficulties we faced, including regulatory uncertainties, lack of emission calculation standards and lack of awareness in our 2010 report. In addition to these difficulties which are perhaps common to many developing countries, we noted that Turkey's business group structures posed a unique challenge for the project; the decision to disclose climate change response could not be made by the individual firms in some cases and required approval or endorsement at the holding level.

None of these challenges have been overcome, and perhaps the persistence of the global financial crises and the crowding effect of the intense political agenda in Turkey can be added to the list. However, 19 months after the launch of the project, we are overwhelmed by the speed of change within the private sector in recognizing the risks and opportunities posed by climate change, made apparent by the high profile conferences, workshops, corporate communications originated by the private sector. For example, two companies announced their participation in the CDP project by press conferences. We believe CDP Turkey activities have contributed to this change amongst other factors. Business group structures, which originally affected the response rate negatively, have played a positive role in broadening the circle of actors involved in the discourse and action.

In 2011, we have increased the number of invitees from 50 to 100. Therefore, 50 companies received invitation the first time to disclose their climate change strategies. We have continued the facilitation of dialog between stakeholders, educating and informing companies about the likely benefits of responding to CDP's invitation, sharing good practices and fostering mutual learning.

- CDP-Turkey was invited to lead a workshop on the role of financial institutions in combatting climate change and how CDP can help by the Banking Association of Turkey. The workshop took place on the 18th February with more than 20 participants from major banks
- We organized our first workshop on 31 March 2011 with 80 participants. The workshop focused on reporting process and the technicalities of reporting through CDP.
- We organized our second workshop on 16 June 2011. The workshop focused on financial opportunities and risk-adjusted returns on low carbon businesses.
- We updated our website and issued three newsletters to share our progress with the project.
- We participated in Turkey's delegation to the Cancun conference.
- We attended many workshops, conferences and seminars organized by other initiatives and shared our knowledge, experience and thoughts with the public.
- We started scoring company responses with the help of Ernst & Young Turkey office using the CDP methodology. The scoring enabled us to launch Turkey Carbon Disclosure Leadership Award.

We made hundreds of calls to the invitee companies; met with their managers in charge, tried to convince them to be a part of the project, answered their questions, helped the internal advocates to be heard by their top managers. Many times, we have come across Sabanci University alumni in positions responsible for investor relations, corporate communications, and risk management. They were the transformational managers in their organisations. Sabanci University's students offered their voluntary support to the project as well. We owe the Sabanci University community for their on-going support.

Meanwhile, other CDP programmes also started to include companies in Turkey. Five companies received requests directly by their buyers to join CDP within the scope of CDP Supply Chain Project and four of them responded. The CDP Water Disclosure programme launched in 2010 had two investor signatories from Turkey. Istanbul Municipality received an invitation to participate in CDP Cities amongst 42 cities around the world.

After the 'beginning', we have become more ambitious. We plan to overcome the negative 'group affect' on disclosure rates by engaging with sector organizations and developing voluntary disclosure initiatives. We are grateful to the British Government for supporting this ambitious undertaking and allowing us to expand our team. We are also grateful to our main sponsor Akbank and our report sponsor Ernst & Young Turkey for their continuous financial and intellectual support.

We will continue to expand our activities with more confidence, more partners, more allies and more insight.

Melsa Ararat

Director-CDP Turkey

Key Trends in Turkey

CDP Turkey 50 report in 2010, which is the first CDP Turkey report, mainly focused on developments around climate change since the Rio Summit and their effects on Turkey. In 2011, this section aims to present a summary of developments around climate change within the past year.

In 2011, the Ministry of Environment and Forestry was abolished and replaced by two newly formed offices: the Ministry of Environment and Urban Planning, and the Ministry of Forestry and Waterworks. These two bodies are the primary agencies responsible for climate change, although other ministries are expected to play a supporting role.

Obstacles to Turkey's transition towards a low-carbon economy maintain their relevance. As a Party to the Kyoto Protocol, but not included in the Protocol's Annex B, Turkey has no emission reduction commitments for the initial period ending at 2012. This absence of commitments creates uncertainty around Turkey's future stance on climate issues. Furthermore, Turkey still lacks specific emission factors and standards for greenhouse gas accounting. Greenhouse gas inventories are largely carried out based on Intergovernmental Panel on Climate Change (IPCC) default emission factors, preventing the exact calculation of absolute emissions in Turkey.

The uncertain environment presented above prevents Turkey from participating the flexible 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. Currently Turkey can only participate in voluntary carbon markets, and its participation to post-2012 emission trading mechanisms is still unclear.

Domestically, the 'Communication on registry operations of greenhouse gas emission reduction projects', prepared by the Ministry of Environment and Forestry, entered into force in August 2010. The objective of the Communication is to facilitate Turkey's participation to voluntary carbon markets, and ensure reliable certification through regulating principles and procedures around project registry in Turkey.

Table 2: Turkey's Voluntary Carbon Market Profile	
Registered projects for voluntary carbon markets	151
Approximate annual emission reductions	- 10 Mt CO2e

Despite all shortfalls, international resources from EU funds, the Global Environment Fund (GEF), and bilateral agreements do exist, in addition to national resources, which can be used to facilitate Turkey's transition to a low carbon economy. International funds available for Turkey include: World Bank, European Bank for Reconstruction and Development, French Development Agency (AFD), German Development Bank (KfW), UK Trade and Investment Organisation, and Japan International Cooperation Agency (JICA). Turkey also receives funding from the Clean Technology Fund, one of two Climate Investment Funds.

There have been significant achievements in environmental regulation in Turkey during the past year. However, the steps taken for their implementation will be of crucial importance. The difficulties that were faced up until now, in putting passed legislation into practice, should now be overcome.

International Developments

International action on climate change beyond the end of the Kyoto Protocol's first commitment period in 2012 remains unclear. The 16th Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) took place last year in Cancun Mexico, and was of crucial importance for shaping post-2012 climate strategies at a global scale. The most important outcome from the conference, as captured in Decision 1/CP.16, was the shared recognition of the need for action towards climate change mitigation and transition to a low carbon economy, and the shared vision for long-term corporation.

Outside the UNFCCC negotiations, another international development of crucial interest to Turkey is the transition plans for the third phase of European Union Emission Trading System.

a) 16th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 16)

CDP Turkey was among the invited parties to COP 16, in December 2010, by the Turkish Ministry of Environment and Forestry.

All parties agreed upon 'measuring', 'reporting', and 'verification' (MRV) aspects of GHG accounting, which are crucial in financing and achieving emission reductions. The Cancun text also obliges developing countries to report on their national emissions, climate actions, and the results in terms of emission avoidance. Furthermore, developing countries agreed to report their nationally appropriate mitigation actions and the support needed for their implementation to be recorded in a registry, which will facilitate matching of action with support from developed economies. These developments are expected to have significant impact on emerging economies, including Turkey.

The Cancun agreements also established 'Green Climate Fund' to provide financial support to developing countries for adaptation and mitigation. Developed countries are committed to transfer $30 billion in the short term (2010-2012), and $100 billion a year by 2020 to support climate adaptation in emerging economies. However, there is still much further work to be done in South Africa this year, to resolve issues around the sources of funds and their allocation.

Despite the progress made in Cancun, there are many outstanding issues. The difficult task of deciding the post-2012 future of the Kyoto Protocol - which sets binding targets for 37 industrialized countries including the EU that currently end in 2012 - remains unresolved. This has been delayed until the December 2011 COP 17 talks in Durban - South Africa. Nevertheless, the need for Kyoto Protocol signatories to reduce emissions by 25-45% by 2020 was emphasized again. Another area which remained undefined is the sensitivity levels of countries to climate change, and no international mechanisms to finance compensation for climate damage were established. While important steps were taken to preserve forests, expectations for REDD+ to reduce emissions by preventing deforestation were not fully met.

Where does Turkey sit within this picture? During the Cancun talks, the Turkish delegation focused on recognition of Turkey's special status by all parties, and enabling Turkey to access to climate funds. As a result of such efforts, Turkey was exempted from the requirement to set absolute targets, and to contribute to generate climate finance and technology. However, Turkey's request to gain access to funds was rejected.

Emerging nations such as Brazil, China, India, Mexico and South Africa announced their national emissions reduction targets and renewable energy strategies. Turkey has no commitments for reduction, but is among countries with largest increase in emissions since 1990. Turkey will face increasing pressure to reduce emissions, in an environment where both developed and emerging economies are setting ambitious reduction targets.

b) EU Emissions Trading Scheme - The next phase

The EU Emissions Trading System is one of the key policies introduced by the EU to help meet its GHG emissions target under the Kyoto Protocol. As Europe-wide cap and trade scheme, it started in 2005, as the first of its kind, and covers the highest number of sectors within its kind. 'The Community Independent Transaction Log' (CITL) was put into place to gather information from national registries to facilitate allowance tracking and installation compliance assessments each year. Participating countries are required to report to CITL through their own national registries, all gathered data are then put under one umbrella database, the EU ETS Registry.

EU ETS was designed as a three-phase scheme. The first trading period of the EU ETS, which was a 'learning-by-doing' phase, started in 2005 and ended in 2007. The second trading period, through 2007-2012, brought revised reporting and a tighter cap. The last and the third phase will begin in 2012, and will last up until 2020.

The third phase of the scheme was expanded and improved by Directive 2009/29/EC. First of all, a 1.17% annual target for emission capping from the EU states is set. Secondly, auctioning is set as the basic principle for allocation of allowances, as it is the simplest and economically efficient system, which will also ensure environmentally efficient allocation. Any allowances which will not be allocated free of charge should be auctioned by Member States, from 2013 onwards. At least 50% of the revenue generated should be used for activities, detailed by the Directive, to facilitate mitigation and adaptation in developing countries. It is also planned 12% of the revenue to be distributed among states with low Gross National Products (GNP).

A crucial issue for the industrial sector is the share of allowances which will be allocated free of charge. Tighter rules on emissions might drive factories to relocate abroad, leading to threat of 'carbon leakage'. To prevent carbon leakage, the EU granted exemptions for industries deemed to be at risk. These industries will get 100% of their allowances free of charge. Other medium-risk sectors will get 80% of allowances free of charge, and the percentage will be decreased over time.

Environmental groups object to the high number of exempt industries defined by the EU. They claim that carbon leakage is inevitable for almost all sectors. This would mean that most companies will be exempt from carbon emission requirements.

Airlines will receive 85% of EU ETS allowances free in 2012. Allowances above this limit will be bought through auctioning. The aim is to eliminate 72 million tonnes of CO2 emissions by 2020. Free allocations in aviation aims to facilitate adoption of environmentally friendly practices and technology by airline companies.

Turkey made a commitment to the EU to establish a GHG registry system at a sufficient level to facilitate emissions trading by 2019. Efforts are underway to harmonise systems with EU ETS guidelines, with the objective of attaining EU-level standards in emission calculation systems.

Government Response to Climate Change

a) Existing projects on climate change

Turkey's Second National Communication

The First National Communication (FNC) was prepared with the cooperation of UNDP and the Republic of Turkey, and was submitted to United Nations Framework Convention on Climate Change (UNFCCC) in 2009; which was covered extensively in CDP 2010 report. The capacity building process, which was accelerated during the preparation FNC, had a significant positive impact on other climate mitigation efforts undertaken by Turkey and helped to enhance public awareness.

Turkey has now started the preparation of its Second National Communication (SNC). The overall objective of the project, executed by Ministry of Environment and Forestry and implemented by UNDP, is to assist Turkey in the implementation of obligations under the UNFCCC in the post-2012 period. Turkey expects to submit its SNC to the UNFCCC Secretariat by the end of 2011. The project is funded by the Global Environment Fund (GEF).

United Nations Joint Programme - Enhancing the Capacity of Turkey to Adapt to Climate Change

On December 2006, UNDP Administrator Kemal Derviș and Spanish Secretary of State for International Cooperation, Leire Pajin, signed a landmark agreement to allocate funds through UNDP, towards the achievement of key Millennium Development Goals and related development goals in the selected countries. Turkey, as one of the 57 eligible countries worldwide, was awarded US$ 7,000,000 through the funding window; and started the project titled 'Enhancing the Capacity to Adapt to the Climate Change'.

The core objective of the programme is to develop capacity for managing climate change risks to rural and coastal development in Turkey, and establishing long-terms strategies for climate risk management. Various climate change adaptation projects will be implemented with this scope. The programme is expected to be integrated with other projects led by academia and civil organisations, towards achieving Millennium Development Goals.

World Bank Partnership of Market Readiness (PMR)

Eight countries received an initial grant of $ 350 million through this World Bank initiative launched at the 2010 UN climate change conference in Cancun, to support them develop new market-based instruments to fight climate change. The eight countries receiving the grant include: Chile, China, Columbia, Costa Rica, Indonesia, Mexico, Thailand, and Turkey. Each of the recipient countries will develop proposals to detail their plans.

Turkey's proposal to PMR is related to national emission reduction strategies and action plans. Target sectors include: energy, industrial, waste, transportation, agriculture, land use, land use change and forestry (LULUCF). The proposal includes Turkey's plans for Nationally Appropriate Mitigation Actions (NAMAs) as part of emission reduction activities.

Furthermore, it draws upon Turkey's search for new carbon markets and emphasizes the need for capacity building for Turkey's participation in international carbon markets. The activities to facilitate capacity building include: establishment of measuring, reporting, and verification (MRV) processes and defining national sectoral approaches.

Pilot Climate Change Adaptation Market Study in Turkey

The aim of the assignment, financed and managed jointly by EBRD and IFC, will aim to establish a national approach for managing climate-related risks, with a specific focus on the private sector. It also aims to define priority areas (finance, technology, IT) within this framework.

This assignment will establish a methodology to help private sector adopt climate strategies, which then can be applied to other countries. The focus will be on needs and shortfalls of the private sector with respect to adopting climate management strategies in Turkey, as the pilot country.

Mid-size Sustainable Energy Financing Facility (MidSEFF)

EBRD launched a new financing facility to support Turkey's investments in renewable energy and energy efficiency projects to increase energy savings and decrease carbon emissions.

The new Mid-size Sustainable Energy Financing Facility, or MidSEFF, will help Turkey in reducing its dependence on fossil fuels by financing private sector investments in mid-size sustainable energy projects. EBRD will offer a total of €400 million in loans to Turkish banks (Garanti Bank, Deniz Bank, Akbank, Vakifbank) for on-lending to private sector borrowers to undertake mid-size renewable energy, waste-to-energy and industrial energy efficiency investments. The loans aim to reduce energy intensity and ensure the sustainable development of the energy sector.

The project is expected to help enhance local environmental consultancies working in the financial and technical assessments for renewable energy projects.

Private Sector Renewable Energy and Energy Efficiency Project

The project consists of lines of credit to Industrial Development Bank of Turkey (TSKB) and Development Bank of Turkey (TKB) for on lending to private investors in order to fund investments in renewable energy and energy conservation/efficiency. These funds come from the World Bank (IBRD) and the Clean Technology Fund administered by the World Bank.

The Bank loaned US$ 210 million and EUR 109.6 Million to TSKB and US$ 130 million and EUR 15.7 Million to TKB. The Clean Technology Fund loaned US$ 70 Million to TSKB and US$ 30 Million to TKB. These loans are guaranteed by the Turkish Treasury.

The project's development objective is to help increase privately owned and operated energy production from indigenous renewable sources within the market based framework of the Turkish Electricity Market Law, enhance energy efficiency, and thereby help reduce greenhouse gas emissions.

Promoting Energy Efficiency in Buildings in Turkey

In Turkey, in terms of final energy consumption, the building sector represents the second-largest energy consumer - accounting for 36% of the total final energy consumption in 2008 - and its emissions are 32% of the total national energy-related CO_2

emissions. However, the building sector in Turkey presents significant opportunities for cost-effective energy and CO2 savings. The Promoting Energy Efficiency in Buildings in Turkey Project, financially supported by Global Environment Facility (GEF), 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.

UNDP is the implementing agency of the project. The project will be executed by General Directorate of Electrical Power Resources Survey and Development Administration (EIE). The Ministry of Public Works and Settlements, Housing Development Administration (TOKİ) and Ministry of National Education are other partners of the project

Industrial Energy Efficiency and Technology Programme

The Improving Energy Efficiency in Industry in Turkey project is implemented by United Nations Development Programme (UNDP) and United Nations Industrial Development Organizations (UNIDO); and managed by General Directorate of Electrical Power Resources Survey and Development Administration (EIE) and Technology Development Foundation of Turkey (TTGV) with the financial support of GEF.

Through the project, it is aimed to improve energy efficiency of the Turkish industry by enabling and encouraging companies in the industrial sector to more efficiently manage energy use by different energy conservation measures and energy efficient technologies. It will further national efforts on energy efficiency and support Energy Efficiency Law, which entered into force on May 2007. The project will end in 2015.

b) Government Strategy

National Climate Change Action Plan

“Republic of Turkey National Climate Change Action Plan” (NCCAP) was developed within the framework of the “Developing Turkey’s National Climate Change Action Plan” project that was coordinated by Ministry of Environment and Urbanization and carried out by UNDP.

The sectors covered in the NCCAP have been mainly defined in line with the Annex-A of the Kyoto Protocol, as well as UNFCC’s national action plan reporting requirements and measures for reducing greenhouse gas emissions. These sectors are energy, industry, transportation, building, waste, agriculture, land use and forestry.

Under each title, the actions pertaining to institutional structure and policy-making, technology development and transfer, financing and economic tools, data and information systems, training and capacity building, and monitoring and evaluation mechanisms are assembled.

Energy: NCCAP states that pursuing emission limitation policies seems to be the most likely option to carry on with efforts to combat climate change.

NCCAP states that the most prominent measure regarding the sustainability of energy policies employed in Turkey is energy efficiency, and covers regulatory development in the area. The National Energy Efficiency Strategy Document published in 2004 and Law on Energy Efficiency published in 2007 are seemed as two important steps. The Law on Energy Efficiency includes the variety of resources available for electrical energy, increase in the number of investments on renewable energy sources such as hydraulic, wind, geothermal, biomass and biogas.

The objectives defined include reducing primary energy intensity by 10% compared to 2008 by 2015, increasing the share of clean energy in energy production and use through ensuring an increase in share of renewable energy in electricity production, limiting GHG emissions originating from use of coal in electricity production, by using clean coal technologies and taking efficiency-increasing measures, and reducing nationwide electricity distribution losses to 8% by 2023.

Buildings: NCCAP states that the buildings sector is among the most energy intensive sectors and it shall be considered as a priority area for all policies and programs dealing with increasing energy efficiency and combating climate change.

The first purpose defined is to increase energy efficiency in buildings. For this purpose several objectives are defined as follows: (i) establish heat insulation and energy-efficient systems meeting standards in commercial and public buildings with usable areas larger than 10 thousand square meters and in at least 1 million residential buildings by 2023, (ii) effective implementation of the Regulation on Energy Performance in Buildings (EPB) and other energy –efficiency regulations until 2017, (iii) develop instruments that will provide the necessary financial support with regard to energy efficiency, renewable energy and EPB until the end of 2013, (iv) issuing “Energy Performance Certificates” to all buildings until 2017, and (v) decrease annual energy consumption in the buildings and premises of public institutions by 10% until 2015 and by 20% until 2023.

Another purpose defined is to increase renewable energy use in buildings, through setting a target of at least 20% of the annual energy demand of new buildings met via renewable energy resources as of 2017.

Industry: The first area covered in NCCAP is facilitating efficient use of energy, together with low carbon economy projects through transition to clean technologies.

The objectives listed to increase energy efficiency in the industry sector include (i) making legal arrangements for energy efficiency and limitation of greenhouse gas emissions, (ii) limiting GHG emissions originating from energy usage (including electrical energy share) in the industry sector.

Strengthening the capacity of the industry sector for combating climate change is among objectives defined by NCCAP.

Transportation: Road transport and air transport have the largest share of emissions generated by the transportation sector, whereas railroad is a highly efficient transportation activity, creating the least amount of greenhouse gas emissions. Urban transportation is another important sub heading with respect to its emissions.

The first objective covered is developing an inter-modal transport system and ensuring balanced utilization of transport modes in freight and passenger transport, through preparing and putting in practice the 'Transportation Master Plan' until 2023. Other objectives include restructuring urban transportation in line with sustainable transport principles, dissemination of the use of alternative fuels and clean vehicle technologies in the transport sector, increasing efficiency in energy consumption of transportation sector, and developing the information infrastructure in the transport sector.

Waste: NCCAP states that the waste sector plays an important role in climate change and global warming as one of the main sectors generating methane (CH_4) and carbon dioxide (CO_2), the primary greenhouse gases.

The objectives, as defined by NCCAP, are (i) reducing the quantity of biodegradable wastes admitted to landfill sites, taking year 2005 as a basis, by 75% in weight till 2015, by 50% till 2018 and by 35% till 2025, (ii) establishing integrated solid waste disposal facilities across the country, and dispose 100% of municipal wastes in these facilities, until the end of 2023, (iii) finalizing packaging waste management plans, (iv) establishing the recycling facilities foreseen within the scope of the Solid Waste Master Plan with the EU-aligned Integrated Waste Management approach, (v) terminating uncontrolled disposal of wastes 100% by 2023.

Agriculture: Due to agricultural activities, the agriculture sector is an emission source, but is also considered as a sink because of biomass and soil. Furthermore, agricultural products are considered as alternative renewable energy sources.

The primary objective, as defined by NCCAP, is to increase the sink capacity of the agriculture sector through determining and increasing the quantity of carbon stock captured in the soil, and identifying and increasing topsoil and subsoil biomass.

Land use and forestry: NCCAP states that almost half of forests that cover 27% of Turkey's total surface area are unproductive. They have to be rehabilitated and protected.

The objectives, as defined by NCCAP, include (i) increasing the amount of carbon sequestered in forests by 15% of the 2007 value by 2020, (ii) reducing deforestation and forest damage by 20% of the 2007 values by 2020, and (iii) limiting the negative impact of land uses and changes such as forests, pastures, agriculture and settlements on climate change.

Impacts of Climate Change in Turkey and Adaptation to Climate Change

Priority areas, as handled by this section, are water resources management, agriculture sector and food security, ecosystem services, biodiversity and forestry, natural disaster risk management and public health. Efforts to include impacts of climate change into economic development strategies and national development policies in Turkey are gaining pace. Turkey aims to promote energy efficiency, increase the use of clean and renewable energy resources and to integrate its development policies with climate change policies. Policies to strengthen existing systems and establishing new ones to monitor impacts of climate change in Turkey are put forward.

Doubling incentives for energy efficiency, reducing per capita greenhouse gas emission levels, energy efficiency targets in public sector, and transportation targets are among positive developments covered within NCCAP. However, coverage of means to be employed for achieving such targets seems to be rather insufficient in NCCAP.

General approach taken in NCCAP can be summarized by the following quote: "within the scope of combating climate change, Turkey's main objective is to contribute to the global efforts in line with the sustainable development policies on the basis of common but differentiated responsibilities and taking Turkey's special circumstances into account." The absence of absolute reduction targets stands out as the most important deficiency within the framework set by NCCAP.

c) Regulatory developments

Legislation on Measuring, Reporting and Verifying Greenhouse Gas Emissions

Ministry of Environment and Urbanization announced legislation preparations for facility-level GHG measuring, reporting, and verification for emission intensive sectors, in line with EU ETS Directive 2003/87/EC and 2007/583/EC for measuring, reporting, and verification guidelines.

During its initial preparation stage the Ministry had the support and substantive input from various public organizations and sector representatives. The primary objective of this preparation stage is to carry out measurements in selected facilities through a set period by the Ministry. The next stage would involve greenhouse gas calculations and levels to be reported on the basis of the defined methodology. Lastly, these reports will be verified by accredited organizations, which will then be published as verification reports.

MRV regulation, expected to come into force by the end of 2011, will cover following facilities: thermal power plants, oil refineries, iron and steel production, gas processing facilities, cement production, lime production, glass production, ceramics production, paper manufacturing, nitrous acid, adipic acid, carolactam, glyoxal and glyoxylic acid production. The Ministry plans to hold responsible plants with a thermal input greater than 100MW under the legislation, amounting to approximately 700 facilities.

The legislation is expected to promote MRV process implementations in key sectors, and facilitate greenhouse gas reductions in the long-term.

Renewable Energy Law

Law Amending the Law on Utilization of Renewable Energy Resources in Electricity Generation came into force on 8 January 2011. The Amendment Law introduces significant amendments to improve the incentive mechanism under the Renewable Energy Law and encourage renewable energy investment opportunities in Turkey. New tariffs are introduced for the sale of electricity by generation facilities based on renewable energy resources.

Facilities, which can apply to benefit from the Renewable Energy Sources for Electiricity (RES-E) Support Mechanism, should hold an RES Certificate, and commenced/will commence operations within the period 18 May 2005 to 31 December 2015. A generation licensee within the scope this support mechanism can only benefit from the announced sale tariffs for a maximum term of 10 years from its operation date. The Council of Ministers will determine the sale tariffs applicable to generation plants starting operations after 31 December 2015 but such tariffs cannot exceed the rates that are included in the amendment law. Investors however claim that the Amendment Law still has significant gaps, and the tariffs are not adequate to boost renewable energy investments.

The Amendment Law states that the total installed capacity of solar power generation plants with RES Certificates that connect to the transmission line before the end of 2013 cannot exceed 600MW. The Amendment Law allows for the construction of power plants based on renewable energy resources in national and natural parks, natural monuments, protected regions, conserved forestry, wildlife development zones, special environmental protection zones and natural protected areas provided necessary permissions are obtained from the Ministry of Environment and/ or regional protection boards.

An additional incentive to promote the use of Turkish equipment states that if the mechanical and electromechanical components of a power plant subject to the RES Support Mechanism, which commences operations before 31 December 2015, are manufactured in Turkey, the tariffs will be increased in the amounts set out under the Renewable Energy Law. The incentive is expected to promote Turkish equipment manufacturing in solar technology.

d) Political developments

Hydroelectric Power Plants

Contribution methods for hydroelectric power plants, insufficient environmental impact assessments, and lack of public support are causes for concern and debate. Many hydropower projects are being implemented all over Turkey, and especially in eastern Black Sea Region. Based on data from Energy Market Regulatory Authority (EMRA) and General Directorate of State Hydraulic Works, around 2000 hydro projects have been developed and constructions have started for nearly 400 of these. The General Directorate of State Hydraulic Works exhibits a positive stance towards these hydropower projects, as a renewable source of energy, and it is confident that Turkey's water resources are sufficient. On the other hand, lack of sufficient technical and scientific grounds and major deficiencies in meeting compatibility and adequacy criteria, are bases for ongoing debates in Turkey.

River basin plans are claimed to be inadequate for many hydropower projects in Turkey, and the need for a comprehensive ecological evaluation is emphasized. Ümit Boyner, the head of Turkish Industrialists' and Businessmen's Association, states that the biggest challenge in sustainability for Turkey is the current situation with hydro-electric plants. "..Our ability to satisfy all parties, to achieve sustainability, will present itself on the issue with hydro-electric power plants. We need to secure Turkey's energy needs, and protect our natural habitat at the same time. Where there is no black and whites, we do need detailed project-level assessments. If we exploit natural resources for short-term profits, such revenues will not be sustainable. We need continuous communication among all parties to find the solution."

While legislation on construction and management of these projects do exist, lack of public and NGO consultation for such legislation preparations raises concerns. Critics claim that assessments on impacts of projects on local communities and natural habitats are insufficient. Planned dams are expected to have major negative impacts on agricultural land in the areas of construction, where agriculture is the main source of income. Transfer of water rights from local communities to project coordinators draws major local reaction against these projects. While dams are being constructed, many lawsuits have been filed against these projects. Energy Market Regulatory Authority has already cancelled many of these project licenses.

Integrating local authorities, NGOs, and sectoral representatives in decision-making will be crucial for successful implementation of hydropower projects in Turkey.

Nuclear Energy

Ways to meet increasing energy needs of Turkey, with its high pace of economic growth, has been a hot topic of discussion for the past few years. Nuclear energy advocates' strongest argument is that it will secure Turkey's future energy. They also claim that nuclear energy is inevitable given concerns around climate change.

Disasters in Fukushima and Chernobyl have raised concerns on insecurity of nuclear energy at a global level. The global debate around nuclear energy has had an impact on nuclear energy projects being planned in Turkey.

Opponents of nuclear power have raised a number of related concerns, including: increased dependence on foreign technology and fuels, disposal of long-lived radioactive waste, associated high costs, and high risks in nuclear plant management. Plans to build a coastal nuclear power plant in Akkuyu, only 25 km's from the Ercemiș fault-line, raises concerns such as these.

Lack of sufficient public discussion and expert consultation are among criticisms against Turkey's nuclear plans. Anticipated private ownership for nuclear plant management and supervision heightens concerns, as it is feared international inspection mechanisms will not be as effective.

Anti-nuclear groups claim that reliance on nuclear energy can be reduced by adopting energy conservation and energy efficiency measures. Energy efficiency can reduce the consumption of energy while providing the same level of energy services. Furthermore, they favour the use of renewable energy, such as wind power, solar power, geothermal energy and bio-fuel.

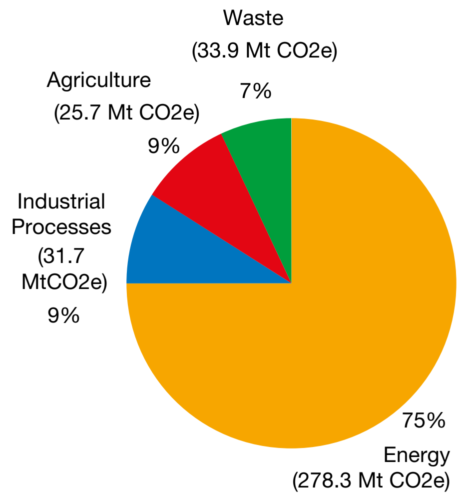
Turkey's emissions

Turkey's Official Inventory of National Greenhouse Gases, covering data from 1990 to 2009, was submitted to the UNFCC Secretariat in 2011.

Impacts of the financial crises on emissions between 2008 and 2009 are visible from the table below; the rate of increase did decline for that period.

Total greenhouse gas emissions from Turkey increased by 97.6% between 1990-2009, while emissions from the energy sector increased by 114% (TUIK, 2011). Within the energy sector, electricity has the highest share of emissions. Energy sector has a 75% share in total emissions generated in

Figure 1: GHG Emissions by sector (2009)



Source: Turkish Statistical Institute 2011

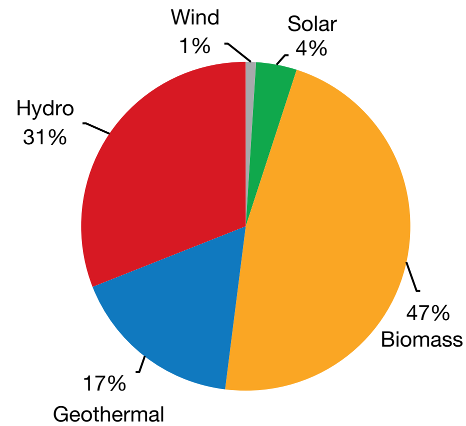
Turkey. Energy sector is responsible for 99.3% of emissions from fuels burnt.

Based on 2009 data from Ministry of Energy and Natural Resources, highest supply of energy is sourced from fossil fuels (91%), with coal's share of energy production at 31%. Hydro and renewable energy sources supply only 9% of the total energy production. 77.4% of Turkey's energy is imported.

Energy consumption in Turkey increased by 100% between 1990 and 2009. Turkey's energy policy has been largely influenced by energy security, in line with Turkey's increasing energy demand.

According to the data gathered from the Ministry of Energy and Natural Resources (ETKB), there are a large number

Figure 2: Renewable energy in Turkey by source (2009)



Source:ETKB 2011

of electrical energy plants that generate up to 50,000 MW installed power in Turkey. 32,372.7 MW of this installed power (including biogas and geothermic) comes from thermal plants, 15,831.2 MW from hydraulic plants and 1,320.2 MW from wind power plants. Although investments in renewable energy sources have increased in the last couple of years, power generated by wind and geothermal plants only amount to 2% of the installed power by the end of 2009.

For final energy consumption, the percentages of the industrial sector and building sector were 32% and 37%, respectively (ETKB, 2011). The CO2 emission of the building sector was 53.4 Mt CO2e in 2009. It is expected that the CO2 emission of the sector will double the 2009 values in 2020. Looking at the data of the Ministry of Energy and

Table 3: Turkey's emissions by sectors between 1990 - 2009

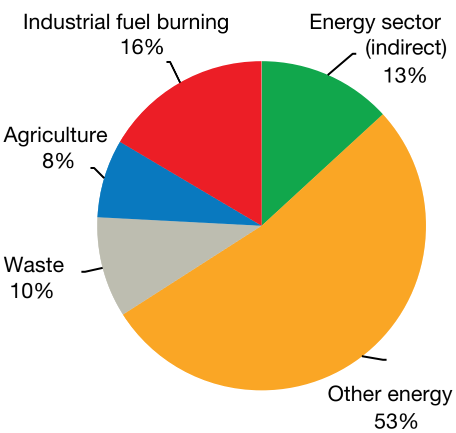
Years / Sectors	1990	1995	2000	2005	2006	2007	2008	2009
Energy	132.13	160.79	212.55	241.75	258.56	288.69	276.71	278.33
Industrial Processes	15.44	24.21	24.37	28.78	30.70	29.26	29.83	31.69
Agricultural Processes	29.78	29.68	27.37	25.84	26.50	26.31	25.04	25.70
Waste	9.68	23.83	32.72	33.52	33.88	35.71	33.92	33.93
Total	**187.03**	**239.17**	**297.01**	**329.56**	**349.64**	**379.98**	**366.49**	**369.65**

Source: Turkish Statistical Institute 2011

Natural Resources, it appears that the consumption rates of oil (27%) and natural gas (24%) in the building sector are very close to each other (ETKB, 2011). 24 % of the energy consumption in the building sector is met by electricity and 21% from renewable energy sources composed of solar and geothermal energy, as well as wood and plant-animal wastes.

By 2009, the ratio of the industrial sector in final energy consumption is 32%. Along with that, it appears that 44.5 % of electrical energy consumption is done by the industrial sector (ETKB, 2011).

Figure 3: Emissions breakdown from the industrial sector (2009)



Source: Turkish Statistical Institute 2011

Greenhouse gas emissions caused by the transportation sector in Turkey are equal to 17% of total emissions (TÜİK, 2011). Although the amount of emissions caused by transportation is relatively low when compared to the amount in developed countries, the rate of increase is high. In the 19-year period between 1990 and 2009, CO2 equivalent greenhouse gas emissions caused by the transportation sector increased by 44% throughout the world, whereas during the same period CO2 equivalent greenhouse gas emissions caused by transportation increased by 78% in Turkey (ITF, 2008).

The Role of Institutions in the Fight against Climate Change

United Nations Development Program (UNDP) Turkey; works in close cooperation with numerous public institutions, municipalities, private sector associates, NGOs and academicians. Some of the ongoing projects targeting climate change are: Increasing Turkey's Adaptation Capacity to Climate Change; Developing Turkey's National Action Plan on Climate Change, Increasing Capacity for Fight Against Climate Change, Supporting Preparation Activities of Turkey's Second National Communication. In the energy field, the projects Increasing Energy Efficiency in the Industrial Sector and Promoting Energy Efficiency in Buildings are still continuing. Along with these joint implementation projects, the Global Environment Facility's Small Grants Programme (GEF-SGP) is carried on since 1993.

European Bank for Reconstruction and Development (EBRD) finances banks, sectors and business enterprises and supports privatizations, restructuring of companies and development of services by working together with public companies. Some of the projects that EBRD supports in Turkey in the field of climate change and environment are: Mid-Size Sustainable Energy Financing Facility (MidSEFF); Pilot Climate Change Adaptation Market Study which will be implemented and financed together with IFC; and Turkey Sustainable Energy Financing Facility (TurSEFF) providing credit facility of 200 billion dollars for buildings and the private sector in Turkey to be distributed through project partner local banks.

International Finance Corporation (IFC) chose Turkey as the centre where Europe, Middle East and North Africa (EMENA) region will be administered. In the coming three years, IFC plans to invest 3 billion dollars in Turkey. The support given to financial institutions and SMEs in Turkey will be increased in Istanbul and rural areas. In Turkey, IFC also plans to conduct studies on renewable energy with Akenerji, along with EnerjiSa. In the following period, works related to hydroelectric plants and wind power are expected to follow.

World Bank (WB) started the second leg of the Private Sector Renewable Energy and Energy Efficiency Project in 2009. The project will provide credit lines to TSKB and TKB to be given to private investors in order to finance investments in renewable energy and energy efficiency.

Agance Française de Development (AFD) started to implement a pilot project which aims at developing The Regional Climate Plan with the Greater Municipality of Gaziantep in the fight against climate change as part of its support to the municipality sector in Turkey.

The British Embassy has provided grants to projects, which had positive evaluations in themes of commerce, economy, energy safety and climate change in Turkey in the framework of Prosperity Fund Turkey Programme throughout the year 2011. Along with World Bank, British Council Ankara and Regional Environment Centre (REC), CDP Turkey was also entitled to receive support from the fund created with the aim of supporting sustainable development and improving welfare.

Centre for Regional Cooperation Turkey (REC Turkey) and Ministry of Environment and Forestry are the prime beneficiaries of the project entitled Capacity Building for Environmental Stakeholders which was created with the goal of increasing the capacity of all the stakeholders in issues of environmental management and sustainable development during the process of Turkey's accession to EU. The project, which will be carried on between the years 2009 and 2011, is supported by EU's Instrument for Pre-Accession Assistance (IPA) Programme.

WWF – Turkey (World Wildlife Fund) started a granted programme in September as part of Turkey's Life campaign aiming to create awareness about biological diversity and protect the country's natural heritage. Within this scope, the projects of the NGO's in Anatolia will be supported. In 2011, WWF-Turkey also started a project entitled Renewable Energy Project in order to evaluate renewable energy projects in Turkey and realise renewable energy potential.

The Activities of Sabanci University

Since 2010, Sabanci University continues the local partnership of **CDP Turkey Project**. Sabanci University's **Istanbul International Center for Energy and Climate Change** was founded under the honorary guidance of International Energy Agency (IEA)'s chief economist Dr. Fatih Birol. The centre is planned to make highest quality and objective economical and political research in the fields of energy and climate and to become a future-oriented independent research and policy centre. The centre, which will cooperate with governments in the region and across the globe, as well as companies, research institutions and international organisations, aims to inform government bodies and business sectors about central issues in energy and climate change. The Centre's International Guidance Committee is comprised of energy specialists.

Under the chairmanship of the Municipality of Energy in Turkey, a team comprised of members from Sabanci University, TÜBİTAK, TAI, İTÜ and Istanbul Transportation is about to found **National Wind Power System (MİLRES)**. Local production of wind tribunes is planned with a 50 billion lira budget on Wind Power Plants (RES). Conducting works on design and technology development with a staff of 121 academicians, the team is planning to operate the first 500 kilowatt National Wind Power System at the end of the next year. Since the whole production will be carried out by local industrialists, the aim is to build a local wind tribune sub-industry. The coordination of MİLRES project and the whole design of tribunes' mechanical components is undertaken by Sabanci University. Moreover, Sabanci University also started a civic initiative entitled **Wind Power Technology Platform (RETEP)** in order build cooperation with the sector, in addition to research and development. 11 local and foreign industrialists, who take part in this platform, will undertake the production of necessary parts.

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2011 Carbon Disclosure Leadership

Introduction to the Carbon Disclosure Scoring

This year for the first time in Turkey, company responses to the Investor CDP information request are scored according to the scoring methodology that CDP has developed with guidance from PricewaterhouseCoopers LLP (PwC), in its capacity as CDP's Global Advisor. This results in a disclosure score that reflects the comprehensiveness of a company's response.

Disclosure scores

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

More information related to scoring can be found in the CDP information request, supporting methodology and guidance documents, as well as within individual company responses at www.cdproject.net.

Analysis of the responses which score highly on disclosure provides insights into the characteristics and common trends among the leading companies on carbon disclosure, and highlights good practices in reporting, governance, risk management and other areas.

What does a CDP carbon disclosure score represent?

Generally, companies scoring within a particular range exhibit similar levels of commitment to, and experience of, carbon disclosure. The indicative description of each level is provided below for guidance only; investors should read individual company responses to understand the context for each business. Companies with disclosure scores over 70, in alphabetical order on the right hand side.

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 organisation
- 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

2011 is the first year that company responses are scored for disclosure in Turkey and five companies displayed leadership on disclosure achieving a score of 70 or higher.

Carbon Disclosure Leaders in Turkey (in alphabetical order)

- Akbank
- Coca-Cola Içecek
- T. Garanti Bankası
- Türk Telekomünikasyon
- Zorlu Enerji Elektrik Üretim

Company Responses Overview & Key Findings - Turkey 2011

"CDP was an important turning point in the efforts to systematically address the sustainability transformation that had been brought to life within Türk Telekom. During the CDP process, which was started in 2010, all business processes leading to carbon emissions were reviewed and a high level of awareness was raised within the company on carbon emissions. We believe that the awareness raised by the CDP process shall also demonstrate the importance of communication technologies in reducing carbon emissions. Accordingly, we believe that the significance of products and services offered by Turkey's leading convergence and communication technologies company Türk Telekom shall be better understood."

Gökhan Bozkurt
CEO, Türk Telekom

In 2011, CDP Turkey - the result of collaboration between Sabancı University and CDP - targeted the 100 largest companies listed on the Istanbul Stock Exchange (ISE), to solicit information regarding:

- 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, and
- Direct and indirect GHG emissions with emission intensity, energy consumption and costs thereof.

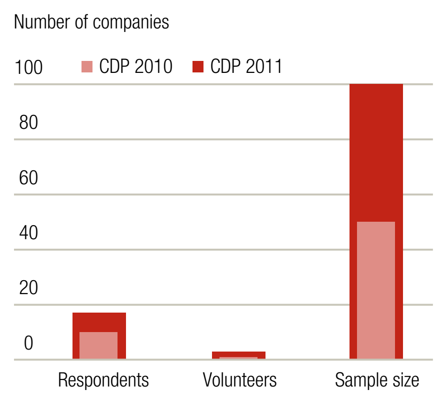
As of February, 2011, the ISE-100 companies' combined market capitalisation is around US$ 48.3 billion, ISE-100 - includes companies from various sectors; consumer discretionary, consumer staples, energy, financials, health care, industrials, materials, telecommunication services, utilities. This section of the report analyses responses to CDP Information Request in 2011, with a specific focus on sectors when possible.

Response Rates

The number of invitees increased from 50 largest companies constituting the ISE-50 index of ISE in 2010 to 100 largest companies constituting ISE-100 index in 2011. The response rate from companies is influenced by a range of factors including company's perception and awareness of climate related issues, as well as available resources within the company.

Out of the 100 companies invited to respond to the CDP 2011 information request, 17 accepted the invitation and 83 did not. Although the absolute number of the companies (7) increased, the contribution from the second tier

Figure 4: Respondents CDP 2011 and CDP 2010



(the 50 companies that received the information request for the first time in 2011) of the ISE-100 was low. As a result, CDP 2011 Turkey achieved an overall response rate of 17% which represents a slight decrease (3%) from CDP 2010, and ranks Turkey in the middle in terms of response rates observed in developing and emerging countries in 2011. And also the response rate of ISE-50 increased to 30% in 2011, from 20% in 2010.

The response rate is likely to improve in the coming years as companies become more aware of and sensitive to the issue of climate change, and gain familiarity with the CDP questionnaire. The depth and the quality of responses have been mixed which is understandable since one third of the participating companies (excluding the voluntary respondents) are new to CDP request in Turkey.

In addition to the 17 ISE 100 respondents, there were three voluntary responses in CDP 2011 from companies that are not included in the ISE 100: Akçansa Çimento Sanayi ve Ticaret A.Ş., Brisa Bridgestone Sabancı Lastik Sanayi ve Ticaret A.Ş., Yünsa Yünlü Sanayi ve Ticaret A.Ş. The increase in voluntary responses from one in 2010 (Yünsa Yünlü Sanayi

Table 4: Respondent companies

Respondents both in 2010 & 2011	New Respondents in 2011
Akbank T.A.Ş.	Akenerji Elektrik Üretim A.Ş.
Bağfaş Bandırma Gübre Fabrikaları A.Ş.	Akçansa Çimento Sanayi ve Ticaret A.Ş. (v)
Kardemir Karabük Demir Çelik Sanayi ve Ticaret A.Ş.	Brisa Bridgestone Sabancı Lastik Sanayi ve Ticaret A.Ş. (v)
Petkim Petrokimya Holding A.Ş.	Coca-Cola Içecek A.Ş.
Sabancı Holding A.Ş.	Mondi Tire Kutsan Kağıt ve Ambalaj Sanayi A.Ş. **
Şekerbank T.A.Ş.	T.Şişe ve Cam Fabrikalari A.Ş.
T. Garanti Bankası A.Ş.	Tesco Kipa**
Tav Hava Limanları Holding A.Ş.	Türk Telekomünikasyon A.Ş.
Türk Ekonomi Bankası A.Ş.	
T. Sınai Kalkınma Bankası A.Ş.	
Yünsa Yünlü Sanayi ve Ticaret A.Ş.(v)	
Zorlu Enerji Elektrik Üretim A.Ş.*	

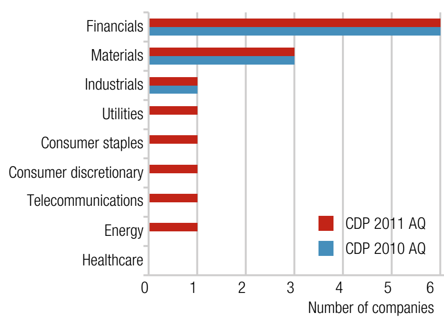
(*) Responded as part of the Global Electric Utilities 250 sample
(**) Respondents via their parent company
(v) Volunteer

ve Ticaret A.Ş) to three in 2011 is an encouraging development. These voluntary respondents are publicly listed companies consolidated to Sabancı Holding, a ISE 100 constituent and a respondent itself. However, as the voluntary respondents are not included in the ISE 100 index, their inputs are excluded from our analysis.

Two companies in the Turkey Top 100 sample, namely Mondi Tire Kutsan and Tesco Kipa, are subsidiaries of global companies that are invited by and responded to CDP directly. Since their Turkey emissions are consolidated to the parent companies' emissions, we consider those companies as responding, but exclude them from our analysis.

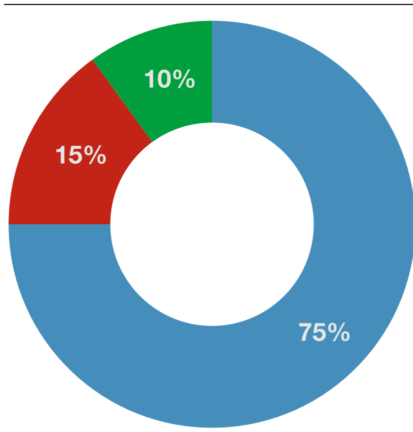
There are variations in the response rates of sectors. While none of the companies in the health care sector have accepted CDP's invitation to disclose, 50% of the utility companies have responded.

Figure 5: Number of respondents by sector



(*) Excluding the voluntary responses and two companies responded through their parents.
(AQ) Answered questionnaire

Figure 6: Number of respondents



- ISE-100 direct responses
- Non ISE-100 respondents
- ISE-100 companies whose responses were incorporated in the response of their international parent companies

"As Akenerji, being aware of our responsibility towards society, we are deeply committed to preventing environmental pollution and protecting the natural resources. Within this scope, we are supporting a clean and sustainable energy future by investing in renewable energy and we are evaluating the impacts on the environment and natural life, as much as we consider the energy we produce and the service we provide. We believe we have highlighted our sensitivity in this field by announcing our policies related to greenhouse gas emissions and climate change through Carbon Disclosure Project. We are proud of leading the sector and other companies in order to leave a more habitable world to the next generations."

Ahmet Ümit Danışman, General Manager, Akenerji

Highlights of 2011 disclosures

"Rather than being just an environmental issue, climate change has become one of the leading issues of today's sustainable development concept. On account of the increasing risks and –also-opportunities, development and integration of a sustainable carbon and energy strategy which is a necessity of low carbon economy, should be the prior action of a long term sustainability policy. Apart from being a financial guide for investors, it can be said that, the projects such as Carbon Disclosure Project, raise awareness in the global market and encourage the companies for developing sustainable strategies on climate change and source utilization."

Ahmet Kırman, General Manager, Şişecam

The key trends and responses to CDP 2011 questionnaire are analysed with respect to companies' governance, strategy, targets and initiatives, communication, climate change risks, climate change opportunities and emissions and reported accordingly in the following sections.

Governance

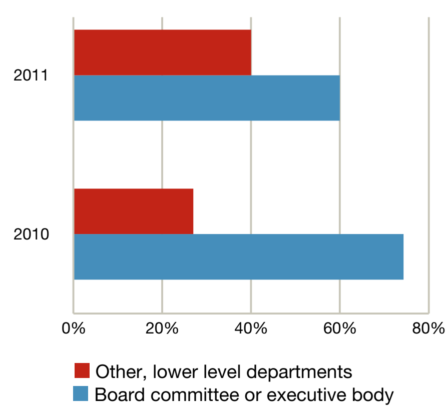
Companies are asked the following questions about climate change,

1. Who is responsible for climate change issues in their company,
2. What type of incentives are offered to the management for climate change management performance

As displayed in the chart below, 60% of the responding companies assign such responsibilities to a board committee or other high level executive body whereas 40% of the responding companies assign the responsibility to lower level departments in 2011, compared to 73% and 27% respectively in 2010.

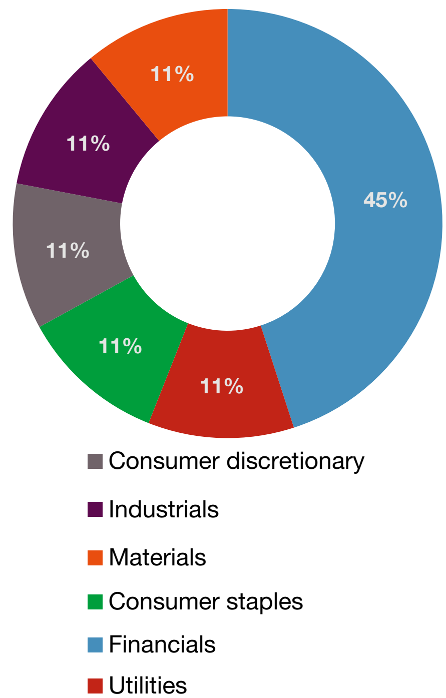
The responses defined high-level members as the members of the board of directors, the CEO and other senior officers who are responsible for dealing with sustainability issues related with their business.

Figure 7: The highest level of responsibility for climate change within the company



As presented in the figure below, 45% (7) of the companies who assign climate change management responsibility to a board member are financial institutions, whereas this figure is 11% for other sectors.

Figure 8: Sectoral distribution of the companies having executives on their Board for climate change management



The responses suggest a higher level of awareness of climate change risks in Turkey's financial sector which is reflected in their governance choices. 73 % (11) of the surveyed companies have incentives for the management on climate change issues, whereas four companies advise that they have "no incentive".

Figure 9 illustrates the types of incentives in those 11 companies. Four companies report that they have monetary incentives for climate change management performance.

Figure 9: Types of incentives for climate change issues

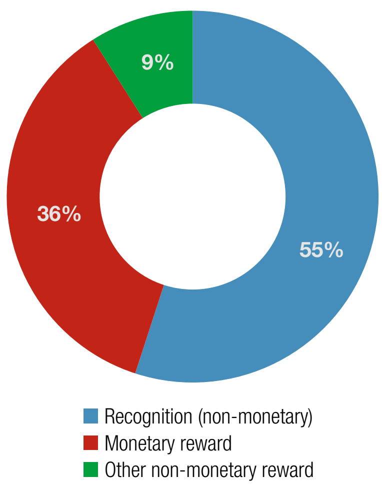
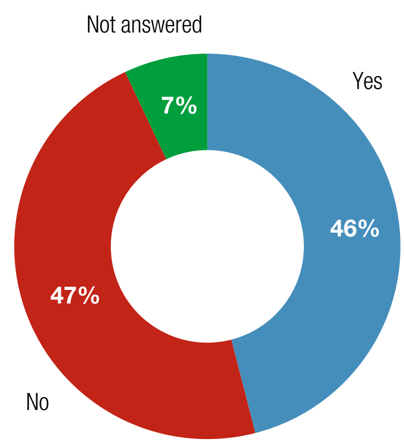


Figure 10: Engagement with policy makers



Strategy

The CDP questionnaire requests disclosure of information regarding risk management strategies related to climate change, and opportunities stemming from climate change. 11 companies report that they have either integrated multi-disciplinary risk management processes or that they have adopted a specific climate change risk management process. Four companies state that they do not have any documented policies or processes related with climate change management.

11 out of 15 respondents disclose that climate change is integrated into their business strategy, whereas four respondents state that it is not.

Figure 10 shows number of respondents who engage with policy makers to encourage further action on mitigation and/or adoption.

Targets and Initiatives

In the third section, companies are asked whether they had an emission reduction target for the reporting year. Companies answering that they have either “absolute” or ‘intensity’ targets are asked to provide more information about the target, as well as their progress against the target during the reporting year. If no targets are identified, the reasoning for not having a reduction target is requested. Responding companies report that they have set environmental goals to reduce their consumption of natural resources and carbon emissions. The majority of the responding companies set environmental goals of switching to low carbon energy, developing carbon free product designs and reducing overall energy consumption. They also highlight that they are working on raising employee awareness and that their environmental targets are observed periodically and revised as required.

“As Yünsa, we are extremely pleased to participate in the Carbon Disclosure Project, world’s leading initiatives implemented in Turkey under the leadership of Sabanci University. Yünsa being the first participant from textile sector, once again demonstrated its leading position in this matter. Today, we know that it is impossible to stay away from the effects of climate change. One of the leading indicators of being an environmentally friendly company is to measure our impacts on climate change and keep them under control as much as possible.Yünsa is moving towards becoming a world leader in its sector without ignoring the social responsibilities to its stakeholders. We will continue to maintain the internal discipline and keep on participating in the Carbon Disclosure Project.”

Cem Çelikoğlu, General Manager, Yünsa

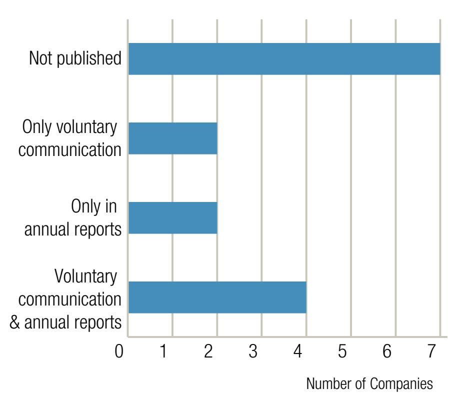
"The Carbon Disclosure Project is an important part of our on-going commitment to address global climate change. It has been an incredibly useful tool in challenging us to continually expand, deepen and accelerate our efforts. We are proud to be included in the CDP 2011 Global 500 Report and look forward to future participation."

Ergun Özen,
CEO, Garanti Bank

Communications

Within the communication section, the companies were asked whether they have published information about their companies' responses to climate change and Greenhouse Gas (GHG) emissions performance for this reporting year in places other than in their CDP submission. As illustrated in Figure 8 below, the majority of the companies (7) do not publish climate change related information through any other means than CDP platform. On the other hand, four respondents publish information in both their annual reports and in voluntary communications; two publish information only in annual reports and the remaining two only in voluntary communications. Out of six companies who publish climate change information in some voluntary communication, four have already completed their reports for the current year and attached the respective reports to their CDP responses, whereas two of the companies' reports are underway as of the response date of this questionnaire and as such they attached the previous year's report.

Figure 11: Information related to climate change in places other than the CDP responses



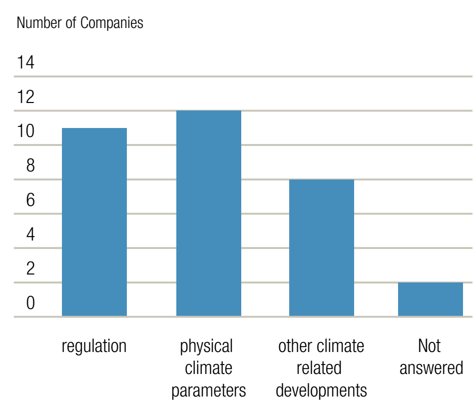
Climate Change Risks

Climate Change Risks are divided into three categories in CDP questionnaire: Regulatory, Physical and Other Risks. Company responses related to those risks are analysed separately below.

Similar to other developing countries, climate change poses several potential risks for companies in Turkey. These risks may be regulatory or physical and may be faced directly by companies themselves or indirectly through their business partners, suppliers and customers and their operations elsewhere.

In 2011 companies report that "risks driven by changes in physical climate parameters" are the most significant risk related with climate change. This is in line with responses in 2012.

Figure 12: Companies' perception of significant risks related to climate change



As presented in Figure 12, 11 companies state that regulatory requirements related to climate change pose significant risks for their industries. Climate change related regulatory risks generally arise from current and expected national, global and multilateral policies agreed by the governments. Respondents also indicate that regulatory uncertainty presents a key challenge for many companies in Turkey. Furthermore, majority of the respondents note that the main regulatory risk is related to Turkey's ratification of Kyoto Protocol (international agreements) and possible use of carbon taxes.

12 companies state that physical requirements related to change in precipitation extremes and droughts are the most significant risks for them. Damage, disruption and displacement resulting on account of unpredictable extreme weather events directly lead to physical risks. Most companies also highlight the risk of increased frequency in extreme weather events - resulting in increased operational cost, reduced demand for goods and disruption in production capacity.

Türk Telekomünikasyon A.Ş. states that one of the significant risk factors for their industry is the financial risk that might arise from a potential cap and trade scheme in Turkey. To mitigate this risk the company has implemented various emission reduction initiatives, such as installation of high efficiency rectifiers, and on-site electricity production using renewable sources.

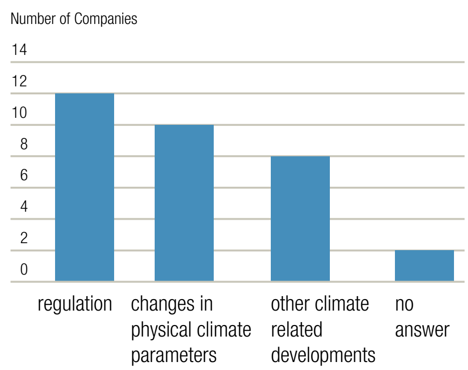
Eight companies also list a variety of other risks such as reputational risk, change in customer behaviours and uncertainty in market signals which would result in changes in the demand for goods and services. As a result, companies that do not take actions against the climate change and do not adapt to the regulations, may be exposed to reputational risks.

Climate Change Opportunities

While climate change poses several risks, it also presents opportunities for the business community. In general, the impact of climate change on a company will depend upon the nature of its business activities, its geographic location, the regulatory environment to which it is subject to, the market in which steps have been taken to proactively respond to and/or mitigate climate change related issues.

As displayed in Figure 13 below, the most significant opportunity is reported to be the "regulatory opportunity" by the respondents.

Figure 13: Types of climate change opportunities



12 respondents indicate that regulatory decisions related to climate change present significant opportunities for their industries.

Regulatory opportunities generally arise from capacity to respond better to the current and expected local or international governmental policies on climate change. The responses of the companies underline the fact that local regulation related to climate change, if imposed, will be seen as an opportunity as well as a threat.

"Creating long-lasting value that nurtures the welfare of future generations as well as respecting the sensitive balance between nature and society is an indispensable part of Akbank's corporate culture. Focusing on creating sustainable value since its inception, Akbank has pioneered initiatives that enhance all stakeholders' and future generations' quality of life with its operations, business processes and the social responsibility projects it undertakes and supports. With this vision, Akbank participates actively in endeavors for sustainable development on both domestic and international platforms. We continue our support to Carbon Disclosure Project (CDP), launched in Turkey for the first time in 2010 with Akbank's sponsorship and known as the most extensive and prestigious corporate environmental Project. Ranking among the global leaders in Carbon Disclosure Project (CDP) – one of the most significant global projects – for two years in a row reinforces our efforts and commitment for a more sustainable environment goal."

Ziya Akkurt,
General Manager,
Akbank

Opportunities driven by changes in physical climate parameters arise from the physical effects of climate change, such as changing weather patterns. Examples for these opportunities include increased demand for particular products and services, or improved conditions for production and other business. Financial institutions identify opportunities such as increased demand for appropriate products and services (for example insurance products), as well as reduced operational cost.

Eight companies report that there might be other significant opportunities regarding climate change.
For example, Coca Cola İçecek A.Ş. considers their energy and water efficiency as a competitive advantage.

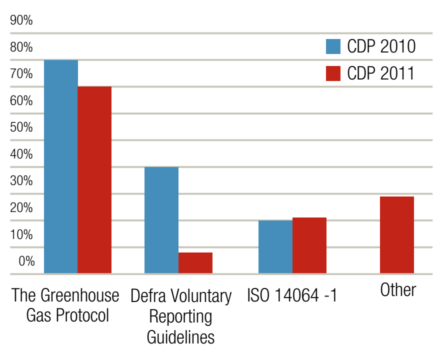
Other opportunities, identified by the other responding companies, include reputational opportunities, changes in human and cultural environment, increasing humanitarian demands and changing consumer behaviour.

Emissions

The responses indicate that all sectors have begun to put systems in place for GHG emission tracking and strategies for implementing low-carbon strategies. However, protocols or methodologies used to collect emission data and calculate Scope 1 and Scope 2 emissions vary from company to company. The majority of the companies have a base year of 2009-2010, which indicates an increased attention to the GHG emission in recent years. Another notable trend is verification. 40% (six) of the CDP-Turkey respondents have reported to have verified their Scope 1 or Scope 2 emissions.

The CDP questionnaire requests information on the methodology of GHG emissions data collection and the GHG measuring tools used which are comparable across businesses including accounting procedures, global warming potentials, and use of emission factors. As shown in Figure 14 below, the most preferred methodology is the Greenhouse Gas Protocol. Some companies collect activity data and calculate Scope 1 and Scope 2 emission with more than one method such as World Resources Institute (WRI) Transport tool.

Figure 14: Methodology used to collect activity data and calculate Scope 1 and Scope 2 emissions



Direct GHG emissions (Scope 1) are generated in companies' production process. Scope 2 GHG emissions do not physically occur within the organization's reporting boundary and therefore are considered to be "indirect emissions". Other indirect GHG emissions (Scope 3) are from sources that are not owned or controlled by an organization, but which occur as a result of its activities, e.g. the manufacturing, production and transport of purchased fuels, goods or raw materials, or the use of product and services sold, and business travels in vehicles not belonging to or managed by the company.

Companies were asked about their energy expenses as a percentage of their total operational expenses. The

"Akçansa, being aware of the utmost importance of the climate change adaptation and mitigation actions, shows persistence to integrate sustainability and carbon management aspects in its business strategy. Our strategy includes innovative and low carbon investments such as alternative fuel usage, reduction in clinker rate in cement and energy efficienc. In this content, Waste Heat Power Generation Plant and Sewage Sludge Plant projects have been best in their class and very important examples that other companies in the sector also followed. Waste Heat Power Generation Plant has been the first industrial application in Turkey, and has been qualified to be verified as a VER Project by Gold Standard. Being a pioneer player in the sector, in 2010 we declared our environmental, social and economical performance and commitments in our sustainability report 2007-2009. CDP report has been a great opportunity to share our performance and targets on carbon management"

Hakan Gürdal,
General Manager,
Akçansa

"As Zorlu Energy Group, we act with the responsibility of the critical relationship between climate change and the energy production; focus on fair energy production with our growth strategy which prioritize clean energy resources to make energy supply safe and sustainable. Carbon Disclosure Project, is the significant indicator of our determination and transparency. As the first Turkish energy company participated in the project, we exposed our strategies related to climate change and greenhouse effect to public and investors. We will be protecting our transparency principle about this subject in the near future. We carry on our preparations about developing tools for risk management and invigorate our corporate structure related to climate change. We will not be compromising our harmony and the struggle targeted responsible way of action that have an eye on our ecological and social justice with our ethical sense of business towards climate change."

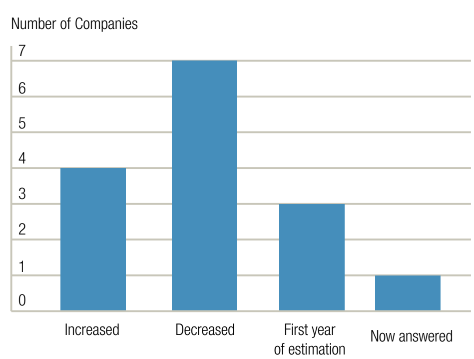
Arif Özozan,
General Manager,
Zorlu Energy

responses are within a wide range of percentages starting from 'more than 0% but less than or equal to 5%' to 'more than 95%, but less than or equal to 100%' with an average of 25-30% for the 13 companies who responded to this question.

As illustrated in Figure 15 below, companies were asked about the changes in their absolute emissions. Of the 14 companies responding to this question, three stated that it is the first year of their emissions estimation. Excluding these companies, 64% of the respondents' report that their absolute emissions (Scope 1 and Scope 2 combined) have decreased compared to the previous year, which demonstrates significant improvement for the emission reduction strategies.

Finally, many of the companies do not anticipate participating in any emission trading schemes in the next two years, with the exception of one company who is already participating and two others which expect to participate in the next two years.

Figure 15: Change in absolute emissions (Scope 1 & 2 combined)



Conclusions

As mentioned within the introduction section above, in 2010 ISE-50 index companies were invited to disclose their climate change policies and carbon emissions through CDP. In 2011, the sample was expanded to ISE-100 companies, however; many large industrial companies in Turkey are not listed. This situation leads to unwillingness of listed companies to disclose since they perceive additional disclosure as a competitive disadvantage against unlisted companies. Nevertheless, the number of respondents increased from 10 to 17 companies with a slight decrease in the overall response rate due to increased sample size. This makes it clear that there is increased awareness on the climate change and carbon emissions in the corporate world with room for improvement.

Finally, in undertaking the analysis for the second year's report, we have sought to find a balance between these two objectives; identifying the actions taken by the companies on climate issues in order to encourage these activities, while striving to highlight the nature and the extent of the remaining challenge.

Ernst & Young Turkey commentary
Mustafa Çamlıca, Country Leader

We, as Ernst &Young Turkey, are proud to be the report writing sponsor of CDP 2011 Turkey report. The report incorporates responses from companies among IMKB 100 compared to IMKB 50 of prior year.

Since this is the second year of CDP Turkey report, it includes comparative information unlike last year. In addition, this is the first year that the responses are scored for the quality of carbon disclosure. The scoring was done based on the Global Scoring Methodology. It should be noted that disclosure scoring does not measure companies' climate change management performance rather assesses the quality and completeness of response. 25% of the respondents got scores in the high range (>70) as defined by Global Scoring Methodology. Although total number of respondents is still not at the desirable level compared to other markets where CDP reports are published, the percentage presenting the disclosure quality, 25%, is amazing.

In today's environment, sustainability and climate change strategies are not "nice to have" but "must to have" both for the risks and opportunities embraced and accordingly these are becoming boards' agenda. Results of a global survey[1] among 300 global executives across 16 countries, showed that executives and boards are strongly aware of the growing demand for more transparent reporting of climate change business strategies, initiatives and performance. It also revealed that executive leadership is critical to realizing the full potential of the business response to climate change. Responses to CDP 2011 questionnaire also supports the role of executives in IMKB 100 companies as majority of the respondents assigned board or high level executive body for climate change issues.

Being in the boards' agenda and having such awareness, we expect that non response rate, whether due to transparency matters or due to lacking the necessary information to respond, will decrease in the coming periods, as the stakeholder pressure will increase on the companies for more information on climate change regardless of regulations.

1 Action Amid Uncertainty business response to climate change www.ey.com/ccassexecutivesurvey.

The Way Forward

"I am very pleased to participate in CDP Turkey, particularly as the first company to do so in the food sector. Carbon emission reduction has a key management focus and we have been systematically decreasing our carbon emissions every year. Furthermore, we are the first company in Turkey to report emissions from our Turkish production facilities in 2007. We recognize that climate change has a serious impact on our company, our supply chain and our communities; thus we work relentlessly to fullfill our share of responsibility by using the optimum energy sources and by increasing energy efficiency in production and distribution channels."

Michael A. O'Neill, CEO, Coca-Cola İçecek

Allocation of financial resources, either through lending or through investments, to companies that manage climate change risks better, is one of the drivers of low carbon growth. Increasing awareness of Turkey's vulnerability to climate change within Turkey and growing sense of urgency on a global scale are the drivers for the Turkish private sector to consider climate change as a matter of sustainability of their existence. Turkey's strong growth projections and availability of development finance for adaptation provide ample opportunities for Turkey's private sector to invest in low carbon growth.

CDP's coverage of Turkey provides the opportunity for companies to assess their climate performance through a systematic framework. The following are Turkey-specific issues, which we need to address for ensuring that CDP-Turkey project reaches its potential for supporting Turkey's national climate strategy:

1. Turkish stock market is not representative of the Turkish business; bank finance is the main source of finance. Furthermore, most Turkish business owners prefer to keep physical assets (i.e. manufacturing companies) under private ownership. Often, marketing and sales functions are organized under a separate entity which is then listed in the stock exchange; while the plants and manufacturing facilities are privately held. As a result, climate-critical sectors are left out from CDP's Turkey sample. Therefore, there is a great need to (a) create incentives for non-listed companies in climate-critical sectors to join CDP (b) raise awareness within the banking sector as key source of finance in Turkey, and encourage use of CDP data in their financing decisions.

2. Global corporations are increasingly interested in reducing their supply chain footprint, and over 50 of them, including Wal-Mart, Dell, and PepsiCo, currently requests climate information from their suppliers through CDP to manage their supply chain emissions. There are already a significant number of Turkish companies, who are requested to disclose to CDP as suppliers of these global corporations. CDP's operation in Turkey is an opportunity for companies to realize their climate risks and opportunities; and gain competitive advantage. Therefore, there is a need to (a) prioritize sectors with respect to their share and importance within global supply chains and national export potentials (b) build capacity and create awareness of climate-related risks and opportunities in selected sectors, (c) support them in implementing measurement and management strategies addressing climate-issues, and (d) encouraging their disclosure through CDP, which will eventually increase their visibility and competitiveness in the global market place.

Given Investor CDP's established presence in Turkey thanks to our sponsors Akbank and Ernst & Young Turkey Office, and additional funding resources from the British Embassy - Prosperity Fund to address the challenges explained above (with a project called 'Expanding CDP'), we will continue to expand our activities in the years to come.

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

Please refer to the Key on page 35 for further explanation of the abbreviations used.

Company	Sector	2011 Response status	2010 Response status	Permission Status	Scope 1	Scope 2	Scope 3
ADVANSA SASA POLYESTER SANAYİ A.Ş.	Materials	NR	X				
AFYON ÇİMENTO SANAYİ T.A.Ş.	Materials	NR	X				
AKBANK T.A.Ş.	Financials	AQ	AQ	NP	Disclosed	Disclosed	Disclosed
AKENERJİ ELEKTRİK ÜRETİM A.Ş.	Utilities	AQ	NR	NP	Disclosed		
AKSA AKRİLİK KİMYA SANAYİİ A.Ş.	Materials	DP	X				
AKSİGORTA A.Ş.	Financials	DP	DP				
ALARKO HOLDİNG	Financials	NR	X				
ALBARAKA TÜRK	Financials	DP	X				
ANADOLU ANONİM TÜRK SİGORTA ŞİRKETİ	Financials	NR	DP				
ANADOLU EFES BİRACILIK VE MALT SANAYİİ A.Ş.	Consumer Staples	DP	DP				
ANADOLU HAYAT EMEKLİLİK	Financials	NR	X				
ARÇELİK A.Ş.	Consumer Discretionary	NR	DP				
ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.	Industrials	NR	X				
ASYA KATILIM BANKASI A.Ş.	Financials	NR	NR				
AYGAZ A.Ş.	Utilities	NR	DP				
BAGFAŞ BANDIRMA GÜBRE FABRİKALARI A.Ş.	Materials	AQ	AQ		Disclosed	Disclosed	Disclosed
BANVİT BANDIRMA VİTAMİNLİ YEM SANAYİİ A.Ş.	Consumer Staples	DP	X				
BİM BİRLEŞİK MAĞAZALAR A.Ş.	Consumer Staples	NR	NR				
BSH EV ALETLERİ SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	DP	X				
ÇELEBİ HAVA SERVİSİ A.Ş.	Industrials	NR	X				
COCA-COLA İÇECEK A.Ş.	Consumer Staples	AQ	DP		Disclosed	Disclosed	Disclosed
DEVA HOLDİNG A.Ş.	Health Care	NR	X				
DOĞAN GAZETECİLİK	Consumer Discretionary	NR	X				
DOĞAN ŞİRKETLER GRUBU HOLDİNG A.Ş.	Industrials	DP	DP				
DOĞAN YAYIN HOLDİNG A.Ş.	Consumer Discretionary	DP	DP				
DOĞUŞ OTOMOTİV	Consumer Discretionary	DP	X				
ECZACIBAŞI YATIRIM HOLDİNG ORTAKLIĞI A.Ş.	Financials	DP	X				
EGE GÜBRE SANAYİİ A.Ş.	Materials	NR	X				
EGE SERAMİK SANAYİ VE TİCARET A.Ş.	Materials	NR	X				
EİS ECZACIBAŞI İLAÇ, SINAİ VE FİNANSAL YATIRIMLAR SANAYİ VE TİCARET A.Ş.	Health Care	DP	DP				
ENKA İNŞAAT VE SANAYİ A.Ş.	Industrials	NR	NR				
EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.	Materials	DP	DP				
FENERBAHÇE SPORTİF HİZMETLER SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	DP	X				
FİNANS FİNANSAL KİRALAMA A.Ş.	Financials	NR	X				
FORD OTOMOTİV SANAYİ A.Ş.	Consumer Discretionary	DP	DP				
FORTIS BANK A.Ş.	Financials	NR	X				
GALATASARAY SPORTİF SINAİ VE YATIRIMLAR A.Ş.	Consumer Discretionary	NR	X				
GLOBAL YATIRIM HOLDİNG A.Ş.	Financials	NR	X				
GOLDAŞ KUYUMCULUK SANAYİ İTHALAT İHRACAT A.Ş.	Materials	NR	X				
GÖLTAŞ GÖLLER BÖLGESİ ÇİMENTO SAN. VE TİC.A.Ş.	Materials	NR	X				
GSD HOLDİNG A.Ş.	Financials	NR	X				
GÜBRE FABRİKALARI T.A.Ş.	Materials	NR	NR				
HÜRRİYET GAZETECİLİK VE MATBAACILIK A.Ş.	Consumer Discretionary	NR	NR				
İHLAS EV ALETLERİ İMALAT SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	NR	NR				

Company	Sector	2011 Response status	2010 Response status	Permission Status	Scope 1	Scope 2	Scope 3
İHLAS HOLDİNG	Financials	NR	X				
İPEK MATBAACILIK SANAYİ VE TİCARET A.Ş.	Materials	NR	X				
İŞ FİNANSAL KİRALAMA A.Ş.	Financials	NR	X				
İŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	NR	X				
IŞIKLAR YATIRIM HOLDİNG A.Ş.	Financials	NR	X				
İTTİFAK HOLDİNG	Financials	NR	X				
KARDEMİR KARABÜK DEMİR ÇELİK SANAYİ VE TİCARET A.Ş.	Materials	AQ	AQ	NP	Disclosed	Disclosed	
KARSAN OTOMOTİV SANAYİİ VE TİCARET A.Ş.	Consumer Discretionary	NR	X				
KARTONSAN KARTON SANAYİ VE TİCARET A.Ş.	Materials	NR	X				
KOÇ HOLDİNG A.Ş.	Industrials	NR	DP				
KONYA ÇİMENTO SANAYİİ A.Ş.	Materials	NR	X				
KOZA ALTIN İŞLETMELERİ A.Ş.	Materials	NR	X				
KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.	Industrials	NR	NR				
MARTI OTEL İŞLETMELERİ A.Ş.	Consumer Discretionary	NR	X				
METRO TİCARİ VE MALİ YATIRIMLAR A.Ş.	Financials	NR	X				
MİGROS TİCARET A.Ş.	Consumer Staples	NR	X				
MONDİ TİRE KUTSAN KAĞIT VE AMBALAJ SANAYİ A.Ş.	Materials	AQ(SA)	X				
NET HOLDİNG A.Ş.	Consumer Discretionary	NR	NR				
NET TURİZM TİCARET VE SANAYİ A.Ş.	Consumer Discretionary	NR	X				
NORTEL NETWORKS NETAŞ TELEKOMÜNİKASYON A.Ş.	Telecommunication Services	NR	X				
OTOKAR OTOMOTİV VE SAVUNMA SANAYİ A.Ş.	Consumer Discretionary	NR	X				
PARK ELEKTRİK ÜRETİM MADENCİLİK SANAYİ VE TİCARET A.Ş.	Energy	NR	X				
PERA GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	NR	X				
PETKİM PETROKİMYA HOLDİNG A.Ş.	Materials	AQ	AQ	NP	Disclosed	Disclosed	
PETROL OFİSİ A.Ş.	Energy	NR	DP				
PINAR SÜT MAMULLERİ SANAYİİ A.Ş.	Consumer Staples	DP	X				
REYSAŞ TAŞIMACILIK VE LOJİSTİK TİCARET A.Ş.	Industrials	NR	X				
SABANCI HOLDİNG A.Ş.	Financials	AQ	AQ	NP	Disclosed	Disclosed	Disclosed
ŞEKERBANK T.A.Ş.	Financials	AQ	AQ	NP	Disclosed	Disclosed	
SELÇUK ECZA DEPOSU TİCARET VE SANAYİ A.Ş.	Health Care	NR	NR				
SİNPAŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	Financials	NR	DP				
T.GARANTİ BANKASI A.Ş.	Financials	AQ	AQ		Disclosed	Disclosed	Disclosed
T.İŞ BANKASI A.Ş.	Financials	DP	DP				
T.SINAİ KALKINMA BANKASI A.Ş.	Financials	AQ	AQ		Disclosed	Disclosed	Disclosed
T.ŞİŞE VE CAM FABRİKALARI A.Ş.	Consumer Discretionary	AQ	NR	NP	Disclosed	Disclosed	
TAT KONSERVE SANAYİİ A.Ş.	Consumer Staples	NR	X				
TAV HAVA LİMANLARI HOLDİNG A.Ş.	Industrials	AQ	AQ		Disclosed	Disclosed	
TEKFEN HOLDİNG A.Ş.	Industrials	NR	DP				
TEKSTİL BANKASI A.Ş.	Financials	DP	X				
TESCO KİPA	Consumer Discretionary	AQ(SA)	X				
TOFAŞ TÜRK OTOMOBİL FABRİKASI A.Ş.	Consumer Discretionary	NR	DP				
TRAKYA CAM SANAYİİ A.Ş.	Industrials	NR	NR				
TÜPRAŞ-TÜRKİYE PETROL RAFİNERİLERİ A.Ş.	Energy	NR	DP				

Company	Sector	2011 Response status	2010 Response status	Permission Status	Scope 1	Scope 2	Scope 3
TURCAS PETROL A.Ş.	Energy	DP	DP				
TÜRK EKONOMİ BANKASI A.Ş.	Financials	AQ	AQ		Disclosed	Disclosed	Disclosed
TÜRK HAVA YOLLARI A.O.	Industrials	NR	NR				
TÜRK TELEKOMÜNİKASYON A.Ş.	Telecommunication Services	AQ	IN		Disclosed	Disclosed	Disclosed
TURKCELL İLETİŞİM HİZMETLERİ A.Ş.	Telecommunication Services	NR	DP				
TÜRKİYE HALK BANKASI A.Ş.	Financials	NR	DP				
TÜRKİYE VAKIFLAR BANKASI T.A.O.	Financials	NR	NR				
ÜLKER BİSKÜVİ SANAYİ A.Ş.	Consumer Staples	NR	NR				
VESTEL BEYAZ EŞYA SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	DP	X				
VESTEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.	Consumer Discretionary	DP	DP				
YAPI KREDİ SİGORTA A.Ş.	Financials	NR	X				
YAPI VE KREDİ BANKASI A.Ş.	Financials	NR	DP				
ZORLU ENERJİ ELEKTRİK ÜRETİM A.Ş.	Energy	AQ	X		Disclosed	Disclosed	Disclosed
AKÇANSA ÇİMENTO SANAYİ VE TİCARET A.Ş.	Materials	VAQ	X		Disclosed	Disclosed	Disclosed
BRİSA BRIDGESTONE SABANCI LASTİK SANAYİ VE TİCARET A.Ş.	Materials	VAQ	X	NP	Disclosed	Disclosed	Disclosed
YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş.	Materials	VAQ	VAQ	NP	Disclosed	Disclosed	Disclosed

Key to Appendix I

Key:

AQ Answered questionnaire

AQ(SA) Company is a subsidiary, and disclosed through the parent company.

DP Declined to participate

IN Provided information

NP Answered questionnaire but response not made publicly available

NR No response

VAQ Voluntary - answered questionnaire

Appendix II: Global Key Trends Summary[1]

This table outlines some of the key findings from CDP 2011 by geography or industry data-set.[2]

	Key Trends Indicators	Asia ex-JICK 170*[4]	Australia 200	Benelux 150**	Brazil 80	Canada 200	Central & Eastern Europe 100	China 100	Emerging Markets 800	Europe 300	FTSE All-World 800	France 250	Germany and Austria 250*	Global 500	Global Electric Utilities 250	Global Transport 100	Iberia 125
		Sample: geography/number of companies															
	% of sample answering CDP 2011[3]	**26**	**50**	**35**	**67**	**54**	**22**	**11**	**36**	**91**	**80**	**35**	**51**	**81**	**39**	**49**	**40**
	Number of companies answering CDP 2011[3]	45	101	52	53	108	22	11	287	272	625	87	128	405	98	49	50
Governance	% of responders with **Board or other executive level** responsibility for climate change	**65**	**76**	**79**	**78**	**57**	**33**	**64**	**71**	**85**	**72**	**77**	**63**	**73**	**78**	**69**	**79**
Governance	% of responders with **incentives** for the management of climate change issues	**49**	**53**	**60**	**46**	**44**	**25**	**82**	**55**	**70**	**71**	**63**	**38**	**72**	**62**	**69**	**56**
Strategy	% of responders with climate change **integrated into their business strategy**	**84**	**84**	**89**	**80**	**73**	**50**	**73**	**79**	**92**	**89**	**88**	**69**	**90**	**93**	**88**	**96**
Strategy	% of responders **engaging policymakers** on climate issues to encourage mitigation or adaptation	**67**	**75**	**79**	**70**	**63**	**17**	**36**	**67**	**84**	**81**	**76**	**54**	**84**	**91**	**84**	**71**
Targets & Initiatives	% of responders with **emissions reduction targets**	**67**	**46**	**68**	**30**	**34**	**50**	**27**	**55**	**81**	**77**	**69**	**48**	**76**	**62**	**73**	**65**
Targets & Initiatives	% of responders with **absolute** emissions reduction targets	**42**	**26**	**40**	**26**	**16**	**25**	**9**	**32**	**42**	**45**	**33**	**28**	**44**	**41**	**33**	**31**
Targets & Initiatives	% of responders with **active emissions reduction initiatives** in the reporting year	**91**	**89**	**91**	**83**	**88**	**50**	**82**	**83**	**97**	**95**	**95**	**73**	**97**	**87**	**94**	**94**
Targets & Initiatives	% of responders indicating that their products and services directly **help third parties to avoid GHG emissions**	**63**	**60**	**66**	**59**	**54**	**25**	**45**	**54**	**69**	**70**	**65**	**62**	**70**	**80**	**59**	**79**
Risks & Opportunities	% of responders seeing **regulatory risks**	**77**	**82**	**77**	**76**	**67**	**50**	**55**	**77**	**80**	**76**	**81**	**55**	**79**	**94**	**86**	**85**
Risks & Opportunities	% of responders seeing **regulatory opportunities**	**77**	**76**	**83**	**83**	**69**	**50**	**55**	**76**	**88**	**79**	**88**	**67**	**81**	**91**	**80**	**88**
Emissions Data	% of responders whose absolute emissions (Scope 1 & 2) have **decreased** compared to last year due to emissions reduction activities	**30**	**28**	**47**	**11**	**29**	**33**	**9**	**31**	**48**	**46**	**35**	**19**	**48**	**23**	**33**	**52**
Emissions Data	% of responders **independently verifying** any portion of **Scope 1** emissions data[6]	**47**	**45**	**70**	**43**	**34**	**33**	**9**	**48**	**74**	**62**	**64**	**40**	**67**	**68**	**61**	**77**
Emissions Data	% of responders **independently verifying** any portion of **Scope 2** emissions data[6]	**51**	**45**	**66**	**41**	**21**	**25**	**0**	**47**	**69**	**58**	**53**	**34**	**61**	**34**	**53**	**73**

Sample: geography/number of companies

India 200	Ireland 40	Italy 100*	Japan 500	Korea 200	Latin America 50	New Zealand 50	Nordic 260*	Russia 50	South Africa 100	Switzerland 100	Turkey 100	UK FTSE 350	US S&P 500	Overall[5]	Key Trends Indicators	
28	**49**	**34**	**41**	**47**	**58**	**42**	**55**	**8**	**83**	**59**	**17**	**69**	**68**	**N/A**	**% of sample answering CDP 2011[3]**	
56	19	34	205	94	29	21	143	4	83	59	17	240	340	2057	Number of companies answering CDP 2011[3]	
78	**68**	**59**	**91**	**62**	**73**	**60**	**65**	**67**	**90**	**69**	**60**	**93**	**49**	**68**	% of responders with **Board or other executive level** responsibility for climate change	Governance
49	**47**	**47**	**71**	**55**	**32**	**45**	**46**	**33**	**55**	**37**	**67**	**65**	**63**	**55**	% of responders with **incentives** for the management of climate change issues	Governance
87	**68**	**81**	**88**	**74**	**73**	**70**	**87**	**33**	**77**	**75**	**73**	**80**	**78**	**79**	% of responders with climate change **integrated into their business strategy**	Strategy
73	**53**	**66**	**77**	**65**	**68**	**45**	**73**	**33**	**77**	**61**	**47**	**73**	**70**	**68**	% of responders **engaging policymakers** on climate issues to encourage mitigation or adaptation	Strategy
49	**47**	**66**	**94**	**57**	**32**	**50**	**67**	**33**	**51**	**58**	**33**	**66**	**65**	**60**	% of responders with **emissions reduction targets**	Targets & Initiatives
7	**26**	**47**	**69**	**33**	**23**	**35**	**32**	**33**	**26**	**24**	**33**	**32**	**40**	**36**	% of responders with **absolute** emissions reduction targets	Targets & Initiatives
91	**89**	**91**	**94**	**59**	**86**	**70**	**89**	**67**	**94**	**88**	**73**	**93**	**90**	**87**	% of responders with **active emissions reduction initiatives** in the reporting year	Targets & Initiatives
56	**32**	**59**	**72**	**53**	**59**	**40**	**73**	**67**	**54**	**61**	**53**	**56**	**60**	**59**	% of responders indicating that their products and services directly **help third parties to avoid GHG emissions**	Targets & Initiatives
76	**68**	**75**	**90**	**70**	**73**	**70**	**77**	**33**	**96**	**58**	**73**	**80**	**63**	**73**	% of responders seeing **regulatory risks**	Risks & Opportunities
87	**58**	**78**	**82**	**63**	**73**	**50**	**80**	**67**	**91**	**68**	**80**	**77**	**63**	**73**	% of responders seeing **regulatory opportunities**	Risks & Opportunities
18	**32**	**41**	**40**	**40**	**9**	**25**	**39**	**33**	**40**	**31**	**33**	**40**	**38**	**33**	% of responders whose absolute emissions (Scope 1 & 2) have **decreased** compared to last year due to emissions reduction activities	Emissions Data
40	**63**	**72**	**35**	**53**	**59**	**40**	**51**	**33**	**49**	**39**	**33**	**49**	**42**	**45**	% of responders **independently verifying** any portion of **Scope 1** emissions data[6]	Emissions Data
42	**53**	**59**	**37**	**54**	**50**	**40**	**43**	**0**	**50**	**37**	**27**	**46**	**37**	**40**	% of responders **independently verifying** any portion of **Scope 2** emissions data[6]	Emissions Data

1. The key trends table provides a snapshot of response trends based on headline data. That is, responses given to main questions without assessment of detailed explanations in follow up questions. The numbers in this table are based on the online responses submitted to CDP as of 7 September 2011. They may therefore differ from numbers in the rest of the report which are based on the number of companies which responded by the applicable local deadline (e.g. 30 June 2011). Please refer to the CDP website and the local reports for an updated version of this table.
2. In some cases, the number of companies in a sample may differ slightly from the named sample size due to takeovers, mergers, acquisitions and duplicate share listings.
3. Includes offline responses to the CDP 2011 questionnaire and indirect answers submitted by parent companies. All other key trend indicators are based on direct and online company responses only.
4. Asia excluding Japan, India, China and Korea (ex-JICK).
5. Includes responses across all samples as well as responses submitted by companies not included in specific geographic or industry samples in 2011.
6. This takes into account companies reporting that data verification is either complete of underway.

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

**Denotes new sample for 2011.

Notes

Notes

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