

Carbon Disclosure Project 2010 Turkey 50 Report

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



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Carbon Disclosure Project 2010

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CARBON DISCLOSURE PROJECT
MEMBER 2010

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CCLA Investment Management Ltd	Russell Investments
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Ethos Foundation	Sompo Japan Insurance Inc.
Generation Investment Management	Standard Chartered PLC
HSBC Holdings plc	Sun Life Financial Inc.
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	Zurich Cantonal Bank

Carbon Disclosure Project 2010

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

Aberdeen Asset Managers	Bank Vontobel	Climate Change Capital Group Ltd
Aberdeen Immobilien KAG	Bankhaus Schelhammer & Schattera Kapitalanlagegesellschaft m.b.H.	Close Brothers Group plc
Active Earth Investment Management	BANKINTER S.A.	The Collins Foundation
Acuity Investment Management	BankInvest	Colonial First State Global Asset Management
Addenda Capital Inc.	Banque Degroof	Comite syndical national de retraite Bâtirente
Advanced Investment Partners	Barclays Group	Commerzbank AG
Advantage Asset Managers (Pty) Ltd	BBC Pension Trust Ltd	CommInsure
AEGON Magyarország Befektetési Alapkezelő Zrt.	BBVA	Companhia de Seguros Aliança do Brasil
Aegon N.V.	Bedfordshire Pension Fund	Compton Foundation, Inc.
AEGON-INDUSTRIAL Fund Management Co., Ltd	Beutel Goodman and Co. Ltd	Connecticut Retirement Plans and Trust Funds
Aeneas Capital Advisors	BioFinance Administração de Recursos de Terceiros Ltda	Co-operative Asset Management
AGF Management Limited	BlackRock	Co-operative Financial Services (CFS)
AIG Asset Management	Blue Marble Capital Management Limited	The Co-operators Group Ltd
Akbank T.A.S.	Blue Shield of California Group	Corston-Smith Asset Management Sdn. Bhd.
Alberta Investment Management Corporation (AIMCo)	Blumenthal Foundation	Crédit Agricole S.A.
Alberta Teachers Retirement Fund	BMO Financial Group	Credit Suisse
Alcyone Finance	BNP Paribas Investment Partners	Daegu Bank
Allianz Global Investors AG	BNY Mellon	Daiwa Securities Group Inc.
Allianz Group	Boston Common Asset Management, LLC	The Daly Foundation
Altshuler Shahan	BP Investment Management Limited	de Pury Pictet Turrettini & Cie S.A.
AMP Capital Investors	Brasilprev Seguros e Previdência S/A.	DekaBank Deutsche Girozentrale
AmpegaGerling Investment GmbH	British Columbia Investment Management Corporation (bcIMC)	Deutsche Asset Management
Amundi Asset Management	BT Investment Management	Deutsche Bank AG
ANBIMA - Brazilian Financial and Capital Markets Association	The Bullitt Foundation	Deutsche Postbank Vermögensmanagement S.A., Luxemburg
APG Asset Management	Busan Bank	Development Bank of Japan Inc.
Aprionis	CAAT Pension Plan	Development Bank of the Philippines (DBP)
ARIA (Australian Reward Investment Alliance)	Cadiz Holdings Limited	Dexia Asset Management
Arma Portföy Yönetimi A.S.	Caisse de dépôt et placement du Québec	DnB NOR ASA
ASB Community Trust	Caisse des Dépôts	Domini Social Investments LLC
ASM Administradora de Recursos S.A.	Caixa de Previdência dos Funcionários do Banco do Nordeste do Brasil (CAPEF)	Dongbu Insurance Co., Ltd.
ASN Bank	Caixa Econômica Federal	DWS Investment GmbH
Assicurazioni Generali Spa	Caixa Geral de Depósitos	Earth Capital Partners LLP
ATP Group	Caja de Ahorros de Valencia, Castellón y Valencia, BANCAJA	East Sussex Pension Fund
Australia and New Zealand Banking Group Limited	Caja Navarra	Ecclesiastical Investment Management
Australian Central Credit Union incorporating Savings & Loans Credit Union	California Public Employees' Retirement System	Economus Instituto de Seguridade Social
Australian Ethical Investment Limited	California State Teachers' Retirement System	The Edward W. Hazen Foundation
AustralianSuper	California State Treasurer	EEA Group Ltd
AVANA Invest GmbH	Calvert Group	Element Investment Managers
Aviva Investors	Canada Pension Plan Investment Board	ELETRA - Fundação Celg de Seguros e Previdência
Aviva plc	Canadian Friends Service Committee (Quakers)	Environment Agency Active Pension Fund
AvivaSA Emeklilik ve Hayat A.S.	CAPESESP	Epworth Investment Management Ltd
AXA Group	Capital Innovations, LLC	Equilibrium Capital Group
Baillie Gifford & Co.	CARE Super Pty Ltd	Erste Group Bank AG
Bakers Investment Group	CARLSON Investment Management	Essex Investment Management, LLC
Banco Bradesco S.A.	Carmignac Gestion	Ethos Foundation
Banco de Crédito del Perú BCP	Catherine Donnelly Foundation	Eureko B.V.
Banco de Galicia y Buenos Aires S.A.	Catholic Super	Eurizon Capital SGR
Banco do Brazil	Cbus Superannuation Fund	Evangelical Lutheran Church in Canada Pension Plan for Clergy and Lay Workers
Banco Santander	CCLA Investment Management Ltd	Evli Bank Plc
Banco Santander (Brasil)	Celeste Funds Management Limited	F&C Management Ltd
Banesprev Fundo Banespa de Seguridade Social	The Central Church Fund of Finland	FAELCE - Fundação Coelce de Seguridade Social
Banesto (Banco Español de Crédito S.A.)	Central Finance Board of the Methodist Church	FASERN Fundação Cosern de Previdência Complementar
Bank of America Merrill Lynch	Ceres, Inc.	Fédéris Gestion d'Actifs
Bank Sarasin & Co, Ltd	Cheyne Capital Management (UK) LLP	FIDURA Capital Consult GmbH
	Christian Super	FIM Asset Management Ltd
	Christopher Reynolds Foundation	Financière de Champlain
	CI Mutual Funds' Signature Advisors	FIRA - Banco de Mexico
	CIBC	First Affirmative Financial Network
	Clean Yield Group, Inc.	First Swedish National Pension Fund (AP1)
	ClearBridge Advisors	FirstRand Ltd.

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

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

Foreword by Paul Dickinson, CEO Carbon Disclosure Project

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

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

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

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

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

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

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

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



CEO, Carbon Disclosure Project

Foreword by Climate Change Department, Republic of Turkey Ministry of Environment and Forestry (MoEF)

Climate change is one of the most urgent and greatest challenges that humankind faces today. We are facing a problem that will ultimately affect everyone and future generations. Combating climate change is a long term responsibility that requires the international community as a whole to take efficient measures to ensure sustainable development and prosperity around the globe.

Since green growth is directly linked to the development of new green industries, jobs and technologies as well as greening the more traditional sectors, the costs of transformation in the economic sectors and the time that countries will need to develop new technologies products and demand patterns should be taken into account in the future work. We should have a clear understanding of the size of such transition.

Turkey aims to integrate low carbon development principles into its development policies and plans to build resilience through managing impacts of climate change and encourage mitigation and adaptation through realistic commitments to international agreements in order to create more sustainable, less greenhouse gas intensive development paths. With this intention, Turkey became a party to the United Nations Framework Convention on Climate Change as of 24 May 2004 with the ratification by the Turkish Grand National Assembly. As least development Turkey will be a party to the Kyoto Protocol on 26 August 2009.

We believe Turkey will be a part of the new regime and make important steps with her new generation, governmental organizations and dynamic private sector for an effective and constructive cooperation. Biggest corporations in Turkey committing to do greenhouse gas emission reporting in global standards to the only global climate change reporting system under the Carbon Disclosure Project, aimed to gather the information needed for governments and investors to act against climate change, is a major step forward for private sector to take a part of this global challenge.

All activities are being closely followed by the Ministry of Environment and Forestry and we would like to express that we are open for any collaboration.

Key Sponsor Foreword by Suzan Sabancı Dinçer The Chairman and Executive Board Member, Akbank

The history of civilization has gone through a period of outstanding development in the last 100 years. Scientific, social and cultural leaps, as well as increasing technological innovation, testify that we are experiencing perhaps the most advanced period in our history.

However, the cost of this rapid and intense development has been high, particularly over the last 30 years.

As the industrial and technological development continues, the natural resources of our world are being adversely affected and the results threaten the future of our planet. The latest scientific research is increasingly showing alarming data about resource deficiency and climate change.

According to the results of a survey of 100 countries conducted by the acclaimed international think tank, the Global Footprint Network, the speed of resource consumption and CO₂ production by human beings is 44% above the production and CO₂ absorption capacity of the Earth. (1)

The urgency of the matter has elevated the importance of finding climate change solutions higher in the political agenda. The activities that are led by the initiatives of scientists, volunteer organisations and non-governmental organisations for raising environmental awareness with the aim of making our world habitable in the longer term, are now being conducted under the responsibility of states, governments, international institutions and adopted within their legal frameworks.

The Carbon Disclosure Project (CDP), is the only global climate change reporting system requesting climate change information from companies on behalf of 534 institutional investors with US\$64 trillion dollars-in assets under management.

Through the CDP, some 3,000 organisations measure their greenhouse gas emissions in approximately 60 countries all over the world and then disclose their climate change mitigation and adaption strategies.

We are all delighted to be part of Turkey's involvement in such a giant project and believe that it should be our utmost priority to take responsibility for Global Climate Change, which threatens our near future and poses a great danger for the future generations.

We consider this responsibility a duty and Akbank is proud to support and pioneer the implementation of the Carbon Disclosure Project in Turkey. I believe that the steps which are taken in this area are not only very important but also very urgent for our country and for our world.

I thank everyone for taking part in this invaluable project and for the dedicated efforts of those working hard to make our planet a habitable place.

We hope that the important research to mitigate environmental destruction and the negative impact of Global Climate Change continues and that our planet is as clean and healthy tomorrow as it was yesterday.

Resources:

1 <http://www.footprintnetwork.org/en/index.php/GFN/>

Executive Summary

Introduction

The Carbon Disclosure Project, launched in 2000 in London, aims to accelerate solutions to climate change by putting relevant information at the heart of business, policy and investment decisions. To achieve such a mission, CDP requests carbon and climate change information from the largest companies globally, as measured by market capitalisation, and suppliers of major purchasing organisations.

As climate change is a global problem, CDP was established as an international initiative, which collects data from organisations all around the world and develops international carbon reporting standards. It is currently the only global climate change reporting system in place.

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 global reach expanded to some 60 countries and 3000 organisations around the world.

CDP Turkey

Sabancı University became the local partner of CDP in Turkey with the sponsorship of Akbank. The project was launched in January 2010. The range of programmes carried out within the CDP framework includes Supply Chain, Cities, Water Disclosure, Public Procurement, and Investor CDP. Currently, Turkey is implementing the Investor CDP programme, which provides climate change data from the world's largest corporations to inform the global market place on investment risk and commercial opportunity.

In the first year of the Project in Turkey, the companies that are included in the Istanbul Stock Exchange 50 (ISE-50) index representing 50 of the largest companies by market capitalisation in Turkey were invited to respond to the CDP information request.

Since CDP acts on behalf of 534 institutional investors, holding US\$64 trillion in assets under management, CDP Turkey respondents have the unique opportunity to communicate their climate change policies to international institutional investors through a proper platform, together with some 60 countries, including both developing and developed countries. Such an opportunity will enable responding companies to be more visible to international investors and increase investments in Turkey.

CDP Turkey is an attempt to fill-in the current information gap and vague atmosphere regarding Turkey's climate change policies. Such information is crucial to investors for assessing a company's commitment and performance in dealing with the implications of climate change and thus should be integrated within a company's risk management strategies.

The information request sent out to ISE-50 companies through CDP 2010 included five major aspects:

- Governance
- Risks and Opportunities
- Strategy
- GHG Accounting
- Communications

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

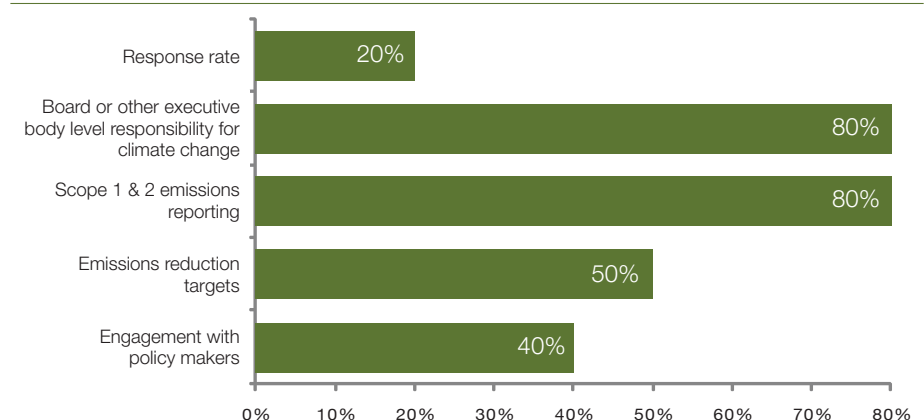
Most of the invited companies were not yet fully aware of the consequences of climate change for their businesses. The reasons for such unawareness include:

- The uncertainty of Turkey's position with respect to international agreements
- The absence of a national climate change response strategy.
- The absence of emissions calculation standards for Turkey.

Unique mission for CDP Turkey

In addition to being a data and information broker, CDP Turkey had to facilitate a dialogue between companies, help the emerging consulting firms to become more visible, help the government's efforts to be communicated, educate and inform companies about the likely benefits of responding to the CDP's invitation and share good practices.

Table 1: Summary of CDP 2010 Responses of ISE-50 Companies (calculated over 10 responding companies excluding the voluntary responses)



Key Findings

The ISE-50 2010 response rate is 20%. A total of 10 ISE-50 companies respond to CDP 2010. There is one voluntary response from a non-ISE-50 company. There are also companies in which CDP's questionnaire triggered climate change projects and who have committed to report in 2011 even though they could not this year.

Response rates to CDP 2010 across developing countries:

Even though the number might seem low at a first glance, it actually is a successful rate compared to the CDP 2010 response rates of other developing countries, especially considering 2010 is Turkey's first year with CDP. When we look at CDP 2010 response rates, Russia has an 8% response rate in its 2nd year, China has 11% in its 3rd year, India has 21% in its 4th year, Asia excluding JICK has 32% in its 5th year, and Brazil has 72% in its 6th year.

Furthermore, unlike Turkey, most of the developing countries within CDP have already established climate change policies and national emissions targets, as well as emissions measurement standards. A rapid increase in the response rates is expected in Turkey once rigorous national policies are implemented.

ISE-50 companies see climate change regulation as an opportunity. 70% of the respondents see regulation as a way to increase demand and to benefit from their achievements in energy efficiency.

80% of the respondents assign board or other executive level responsibility for climate change. Assignment of board or other executive level responsibility for climate change issues proves that companies take the issue seriously. Despite such interest and support, the lack of action in Turkey points to the huge need for nation-wide policies, improved communication within the climate change community, and increased

awareness.

80% of the respondents have emissions reduction targets either in place or in the development phase. Among ISE-50 respondents, five already have emissions targets in place, and three reports that they are in the development phase for setting targets. Such high rates are satisfying given the lack of regulatory obligations. Targets are mostly defined as percentage reductions from base year emissions. Low-carbon policies focus primarily on energy efficiency and renewable energy options.

Relatively low engagement levels with policy makers. 40% of the respondents engage with policy makers on possible responses to climate change. Such levels highlight the importance of CDP Turkey's role as a dialogue facilitator.

50% (5) of the respondents already publish information about their company's response to climate change and GHG emissions.

Turkey's Carbon Performance Leadership: Banks

The response rate for banks in the ISE-50 is 50% (5). Board or other executive level responsibility for climate change issues drives leadership in governance for climate change related issues. **The number of responding banks with climate change as board or other executive level responsibility is 4.** Communication is also closely connected to governance and **4 of the banks do publish their climate change policies.** Such high performance in the financial sector is a reflection of their high sensitivity for investor concerns. Furthermore **3 engages with policy makers.**

20%

A total of 10 ISE-50 Companies responded to CDP 2010. There is one voluntary response from a non ISE-50 Company.

Of the 10 banks that were included in ISE-50, 5 responded to CDP 2010.

Outlook for 2011

We have doubled our work for 2011: we will expand our invitation to include ISE-100 and increase our awareness-raising programmes in order to reach out to more companies for Turkey to become increasingly visible to international institutional investors.

The CDP Scoring Methodology

The CDP scoring methodology (previously known as the Carbon Disclosure Leadership Index (CDLI) methodology) has been developed by PricewaterhouseCoopers and CDP and is applied in most of the CDP reports. The methodology scores companies separately for disclosure and performance. However, Turkish Respondents were not scored in 2010, since more respondents from each sector are needed for healthy assessment and ranking. It is intended that CDP Disclosure and Performance scores will be incorporated in the CDP 2011 Turkey Report.

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1

Overview of CDP Turkey

Carbon Disclosure Project- The Beginning in Turkey

In many cases, the causes of environmental problems lie in a market failure brought about by information asymmetries reflecting the cognitive defects of the market participants. Our interest in the Carbon Disclosure Project (CDP) is rooted in our deep appreciation of the importance of corporate disclosure and transparency in curing market failures; externalities can only be managed if the nature and the magnitude of their effects are known. CDP complements our previous research and advocacy programmes focused on corporate disclosure and transparency and relies on the founding philosophy of Sabanci University which puts the societal needs at the centre of all of our activities.

We launched the CDP in Turkey as the local partner of CDP on 11 of January 2010 with a press conference organised by the British Embassy in support of the project. The press conference was followed by the official launch at which Professor Nicholas Stern delivered an eye opening speech highlighting the far reaching consequences of climate change for the global economy, the quality of life on earth and more specifically for Turkey. The overwhelming interest in the conference reassured us that the project was very timely. Since then, CDP Turkey has been covered many times by the daily press, sector magazines and news bulletins of various civil society organisations.

In the first year of the project, we invited the companies that are included in ISE-50 index to respond to the CDP information request. Despite the overwhelming support by all of the stakeholders to the project, we did face serious challenges; most of the invitee companies were not yet fully aware of the consequences of climate change for their businesses. In our view, the most important reason for this ignorance was the uncertainty of Turkey's position with respect to international agreements

and the absence of a national climate change response strategy. Furthermore, companies were puzzled because Turkey had not yet developed emissions calculation standards. This was a major concern for the companies since reports based on different emissions factors and different calculation methods would not be comparable.

Turkey's business group structures posed another challenge for the project. Boundary selection and consolidation of emissions within business groups which include both listed and unlisted companies was a novelty for the emissions reporting standard setters.

These issues assigned a new and unique mission to the project in Turkey; in addition to being a data and information broker, CDP Turkey had to facilitate a dialogue between the companies, help the emerging consulting firms become more visible, help the government's efforts to be communicated, educate and inform the companies about the likely benefits of responding to CDP's information request and share good practices.

- We organised a workshop on 27 February 2010. It attracted 50 participants and focused on the reporting process and the technicalities of reporting through CDP. Included in the programme was a training session on generally accepted global emissions calculation standards and methodologies. That workshop convinced us that we had to focus on the opportunities rather than the risks which were perceived to be unpredictable and unquantifiable by many companies.
- We organised our second workshop on 28 April 2010 with 80 participants. Representatives from the Ministry of Environment-Climate Change Department clarified Turkey's commitments stemming from international treaties and the EU accession process and assured the participants that any void in national policy or standards would be short

lived. Companies who have benefited from Voluntary Mechanisms presented their experiences.

- We issued three newsletters to share our progress with the project.
- We collected information on service firms that offer training, consulting and certification services related to emissions reporting and climate change response. We shared the information and the contact details of the firms with the invitee companies, helping the emerging companies to become visible.
- We drafted a guideline for boundary selection and consolidation to help business groups organised as Holdings to make sense of global consolidations standards.
- We participated in workshops, conferences and seminars organised by other initiatives and shared our knowledge, experience and thoughts with the public.
- 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 and helped the internal advocates to be heard by their top managers. On numerous occasions, we have seen our alumni in positions responsible for investor relations, corporate communications, and risk management. They were the transformational managers in their organisations.

At the end of the 'beginning', we have 11 companies who reported their emissions and climate change response strategies through CDP. We have four investors who became signatories to CDP Turkey. We have triggered projects in other companies that could not report through CDP this year, but are committed to do so in 2011. We are encouraged by the pioneering companies to expand our invitation to include ISE-100 in 2011. We will double our work in 2011, but with more confidence, more partners, more allies and more insight.

2

Key trends in Turkey

“F&C actively evaluates its investment portfolios to determine where climate change may present a material risk, or opportunity, to its investments. As an investor supporter of the GDP, we value the clear disclosure and comparability responses to the survey provided. We are disappointed by the low level of participation in Turkey and would like to see many more Turkish companies respond to the survey in future, particularly those involved in high emission industries. Given F&C’s long-standing commitments to both emerging market investing and ESG investing, we encourage Turkish companies to evaluate the impact climate change will have on their business and develop a strategy to respond. The CDP is a useful tool for achieving this goal.”

Alexis Krajewski,
Associate Director of F&C

Global Frameworks for Climate Change

In 1992 the Framework Convention on Climate Change (UNFCCC) was adopted as an international environmental Treaty in the United Nations Conference on Environment and Development (Rio Summit). The objective of this treaty is the ‘stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system’. Since the UNFCCC was adopted, its Parties have held annual meetings, known as the Conference of the Parties (COP), to assess their progress in dealing with climate change, and to establish legally binding ‘Protocols’ to set emissions reduction targets.

Parties to UNFCCC are classified under three groups:

- Annex I countries: industrialised countries and economies in transition
- Annex II countries: a subgroup of Annex I countries which pay for the costs of climate change mitigation and the adaptation strategies of developing countries
- Non-Annex I countries: Developing and least developed countries.

Annex I countries are required to adopt policies and measures to limit their emissions to less than their 1990 levels. Annex II countries, composed of the Organisation for Economic Cooperation and Development (OECD) members and the EU, are further required to provide funding and technology to ‘developing countries’ to reduce their emission levels and adapt to climate change.

The convention sets no mandatory limits on the Parties’ greenhouse gas (GHG) emissions and there are no enforcement mechanisms under the treaty. Implementation of the Convention is through legally binding protocols. The principal protocol is the Kyoto Protocol (KP) which was signed in 1997 but only entered into force in 2005; it aims to mitigate global GHG emissions from Annex I countries supported by the use of flexibility mechanisms (Emissions Trading, Clean Development Mechanism and Joint Implementation). The Protocol sets emission limits or reduction commitments for Annex I Parties listed in its Annex B. Annex B consists of 39 industrialised countries as well as the members of the European Community. Furthermore, it sets a collective target for Annex B parties to reduce their aggregate GHG emissions by 5% below 1990 levels during the five-year commitment period between 2008 and 2012.

1 http://unfccc.int/essential_background/items/2877.php

International Developments and Turkey

June 1992	: The UNFCCC was adopted
December 1997	: The Kyoto Protocol was adopted
May 2004	: Turkey became a party to the Convention
February 2005	: The Kyoto Protocol entered into force
December 2007	: The Bali Action Plan was adopted by Decision 1/CP.13 of the COP-13
August 2009	: Turkey became a party to the Kyoto Protocol
December 2009	: The UN Climate Change Conference was held in Copenhagen - COP-15

Flexibility Mechanisms of the Kyoto Protocol

- Emissions Trading allows countries with emissions-reduction or emissions-limitation commitments under the Kyoto Protocol (Annex B Parties), which have emissions units to spare (emissions permitted to them but not used), to sell this excess capacity to countries that have exceeded their targets.
- The Clean Development Mechanism (CDM) allows a country with an emissions-reduction or emissions-limitation commitment under the Kyoto Protocol (Annex B Party) to implement an emissions-reduction project in Non-Annex I countries. Such projects can earn saleable certified emissions reduction (CER) credits, each equivalent to one metric ton of CO₂; these credits may be counted towards meeting that country's Kyoto targets.
- Joint Implementation allows a country with an emissions reduction or limitation commitment under the Kyoto Protocol (Annex B Party) to earn emissions reduction units (ERUs) from an emissions-reduction or emissions removal project in another Annex B Party; each ERU is equivalent to one metric ton of CO₂, which may be counted towards meeting its respective Kyoto target.

To participate in the Flexibility Mechanisms, Annex 1 Parties must meet the following eligibility requirements:

- They must have ratified the Kyoto Protocol.
- They must have calculated their assigned amount, as referred to in Articles 3.7 and 3.8 and Annex B of the Protocol in terms of tonnes of CO₂-equivalent emissions.
- They must have established a Designated National Authority (DNA) for estimating emissions and the removal of greenhouse gases within their territory.
- They must have established a national registry to record and track the creation and movement of Emission Reduction Units, Certified Emission Reductions, Assigned Amount Units and Removal Units (RMU's) and report such information to the secretariat annually.
- They must report information on emissions and removals to the secretariat annually.

“The CDP plays a key role in providing investors with access to information on how companies around the world are responding to climate-related risks and opportunities. Signatories to the Principles for Responsible Investment have supported investor engagement initiatives on CDP, including encouraging non-responding companies to participate, and encouraging better quality responses from those that do. We expect to see many more investor collaborations in the future around pressing companies to be more transparent in how they address climate change.”

**Dr James Gifford,
Executive Director,
Principles for Responsible
Investment (UNPRI)**

Turkey under the UNFCCC and the KP

- A Party to the UNFCCC since May 2004 as an Annex 1 Party subject to a specific COP Decision (Decision 26/CP.7, at COP7 in Marrakech, 2001) which classifies Turkey differently to the other Annex-I Parties and excludes Turkey's name from Annex-II Parties.
- A Party to the Kyoto Protocol as of 26 August 2009, but not included in Annex B Parties which have emission reduction commitments for the initial period ending at 2012.

Turkey was included both in the Annex I and Annex II countries when the UNFCCC was adopted in 1992; however, Turkey only ratified the Convention in 2004 after reaching an agreement in Marrakesh (2001) to remove Turkey from the Annex II list and recognise its unique condition as a 'developing' OECD country. Under the Convention Turkey is committed to implementing climate change mitigation, adaptation, research and education, training and public awareness measures; as well as to submitting an annual report of inventories of all anthropogenic GHG emissions from sources and removals from sinks, but has no obligation to provide financial support to developing countries.

Due to the delay in ratifying the Convention, Turkey was unable to participate in the Kyoto Protocol negotiations and hence it is not included in the Annex B list of countries which are obliged to have quantified emission limitations or reductions for the first five year commitment period. Although Turkey does not have obligations to reduce its emissions until the end of the initial commitment period, it cannot benefit from the Flexibility Mechanisms of the Kyoto protocol available to other developing countries.

Since the signing of the Kyoto Protocol in 1997, several regulatory and voluntary carbon markets have emerged. Currently Turkey can only participate in the voluntary carbon markets. The voluntary market refers to emissions reductions, and emissions trading between entities (companies, governments, NGOs, individuals), for purposes other than meeting regulatory targets.

In August 2010, the Ministry of Environment and Forestry (MoEF) took a key step to integrate the newly established 'National Carbon Registry System' with global carbon markets. Under the new registry system, projects developed and executed to reduce and contain GHG emissions can be registered. This will help to avoid double counting, ensure market transparency and integrity, and also help to increase the certificate's value through increased knowledge-sharing between parties regarding available projects.

EU Accession Process and Turkey

The EU is a leader in global efforts to protect the environment; it is one of the initiators of the United Nations Environment Program (UNEP), a signatory and active participant in the Kyoto Protocol and is also party to a number of international agreements and partnerships, including the UNFCCC.

Internally, the EU has established a comprehensive system of environmental protection; one of these is the EU Emission Trading Scheme (EU ETS) for CO₂ emissions from industrial installations. The EU ETS, introduced in 2005, rewards companies that reduce their CO₂ emissions and penalises those that exceed their limits. The European Commission has adopted a decision after the Kyoto Period which determines a ceiling on the number of emissions allowances that will be available under the EU ETS from 2013 (the first year of the 2013-2020 trading period).

In December 2008, EU leaders

approved a comprehensive package of emissions-cutting measures aimed at reducing greenhouse gases by at least 20% below 1990 levels by 2020, raising renewable energy's share of the market to 20% and cutting overall energy consumption by 20% (based on projected trends). On 20 June 2010, EU member states moved climate change policy one step forward with an ambitious action to adapt the 'Europe 2020' strategy for growth and jobs. The new strategy includes the '20/20/20' targets for GHG emission reductions and renewable energies, but also allows for a possible further increase in emission reductions (to 30%) if other developed countries take on similar responsibilities².

In terms of climate change policy, EU members and candidate countries are expected to largely meet the Kyoto Protocol targets with existing domestic policies and measures. In this respect, the goal of EU membership appears to be a major driving force behind Turkey's climate change response. Throughout the EU accession process, Turkey is expected to set an overall cap for national emissions. The Turkish environmental legal framework needs also to be harmonised with EU environmental directives and Turkey is required to develop a national strategy to combat climate change. This matter has increased in priority since Turkey opened the environmental chapter on 21 December 2009 in accession negotiations³.

The implementation of the EU environmental acquis is not only a precondition for each candidate country, but an unequivocal legal implementation, where the Commission requires that

Carbon Market Components

Market	Transaction Type	Credit type	Regime
Regulatory	Allowance-based	AAU (Assigned Amount Units)	International Emissions Trading
		EUA (EU Allowance)	EU-Emissions Trading Scheme
	Project-based	ERU (Emission Reduction Unit)	Joint Implementation
		CER (Certified Emission Reduction)	Clean Development Mechanism
Voluntary	Mainly project-based	VER (Verified Emission Reduction)	Voluntary projects

² http://ec.europa.eu/climateaction/eu_action/index_en.htm, Accessed at 12.09.2010

EU's '20/20/20' targets

- A reduction in EU greenhouse gas emissions of at least 20% below 1990 levels (30% if international agreement is reached)
- 20% of EU energy consumption to come from renewable resources.
- A 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency.

the appropriate administrative structures with adequate capacity are established. As part of the harmonisation process, Turkey's MoEF has prepared 'strategic documents' and 'implementation reports', with contributions from relevant organisations and institutions, based on EU legislation. The most comprehensive report, the EU Integrated Environmental Approximation Strategy (UÇES), was prepared in 2006. It includes information about technical and institutional infrastructures, and those environmental improvements that are required for the effective implementation of the legislation.

Government's response to Climate change

Turkey's 'National Climate Change Strategy' document entered into force in May 2010. This document explains how Turkey plans to contribute to global actions and sets Turkey's own goals for 2010-2020 while taking into account its own special circumstances and capacity.

The Strategy also includes guidance for tackling climate change during the period 2010-2020. The main strategies are; i) to actively participate in negotiations aimed at combating and adapting to global climate change; ii) to prepare the National Climate Change Action Plan; iii) to initiate organisational restructuring on climate change in concerned institutions; iv) to establish the necessary infrastructure for GHG inventories; and v) to develop climate change policies in cooperation with all stakeholders.

The Strategy document only defines a 7% limitation of GHG emissions compared to a business as usual (BAU)

scenario for the energy production sector until the year 2020; this makes Turkey the only Annex-I country that does not set mitigation targets for the post-2012 period and also the only OECD country that does not have a national emissions reduction target for 2020.

Since the Convention came into effect in 1994, all the signatories to the Convention have been actively prepared and issued National Communications as part of their contribution to the gathering and sharing of information regarding GHG emissions, national policies and best practices. With the coordination of the Ministry, the 'First National Communication' (FNC) of Turkey has been prepared by UNDP in collaboration with other stakeholders such as private sector representatives, academicians, experts and civil society organisations. The aim of the FNC was to prepare an inventory for greenhouse gases in Turkey for the period 1990-2004, to develop national capacities and to facilitate the process of mainstreaming climate change issues into national planning and policy. The inventory is already completed and was submitted to the UNFCCC in 2007.⁴

According to the FNC, Turkey's basic social and economic indicators place it in the category of middle income developing countries and Turkey is dissimilar to those developed countries listed as Annex I Parties on the grounds of the following indicators: with 3.3 tonnes of CO₂ per capita, Turkey possesses the lowest per capita fossil fuel-based CO₂ emissions amongst OECD countries whose average is 11.1, the world average is 4.0 and the EU 25 average is 9.0.

Turkey managed to produce 12.3% of its total primary energy supply from renewable sources in 2004. Despite this, since domestic resources are unable to meet demand, the country remains a net energy importer, with a high ratio of import dependency reaching 72%.⁴

Turkey also supports the idea that the funds for adaptation to climate change should be provided to parties on the basis of the principles of 'equity', 'common but differentiated responsibilities' and 'respective capabilities'. Turkey asserts that the current classification of countries in the climate change regime fails to reflect changing economic circumstances and that the post-2012 climate change regime must be a flexible one which gives Parties the right to undertake the most suitable commitment for them, referred to as Nationally Appropriate Mitigation Actions (NAMAs), a voluntary action where a country decides its own appropriate mitigation actions.

Current Emission Levels and Trends

Turkey's GHG emissions, in total and per capita, show a rising trend between 1990 and 2008, except during the period of financial crisis in 2001 and 2008. Turkey's growth has been the highest among Annex I countries⁵; in 1990 the total CO₂ emission in Turkey was 187 million tonnes CO₂, rising to 366 million tonnes CO₂ in 2008.

The European Economic Area (EEA) provides useful insights in terms of Turkey's emission facts:

Between 1990 and 2007, Turkey experienced the largest per capita GHG emissions increase of 75%. The increase in the total emissions from Turkey is mainly attributable to the country's important demographic growth (+ 25 % over the period) and economic development Turkey has, however, the lowest GHG emissions per capita among all EEA member countries. This can be explained by low levels of final energy use per capita.

3 MOEF – Strategic plan 2010- 2014

4 First National Communication of Turkey on Climate Change (2007)

5 Climate Investment Funds (2009) Clean Technology Fund Investment Plan for Turkey -CTF/TFC.2/9

Indicators for Turkey's Greenhouse Gas Emissions

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Emission Per Capita (tons/person)	2.6	2.6	2.7	2.8	2.7	1.9	3.2	3.3	3.3	3.2	3.5	3.2	3.3	3.5	3.6	3.8	4.0	4.4	4.2
Total Emission (million Tons)	187.0	199.1	210.2	221.7	217.2	237.5	258.6	271.9	274.0	274.8	297.0	278.1	286.1	302.8	312.3	329.9	349.6	380.0	366.5

Source: TurkStat, Population and Development Indicators

Since Turkey has undergone rapid economic growth, population growth and industrialisation, its energy demand has risen steadily and is projected to continue rising in the future. High energy demand is the main factor behind the growth in emissions. Energy production and use is the largest contributor to emission with 77% of Turkey's total emissions.

Energy related CO₂ emissions have more than doubled since 1990 and are likely to continue to increase in parallel with significant growth in energy demand⁶. In line with economic growth, energy use in Turkey is expected to double again over the next decade⁷. Growth in the electricity and industrial sectors is expected to increase Turkey's overall CO₂ emissions because of rising electricity demand and a reliance on solid fuels. Since Turkey has large coal reserves, the use of coal is expected to multiply over the next decade in order to provide electricity for the growing population and expanding economy.

Turkey does not have significant domestic natural gas reserves and 99% of its gas is currently imported. Natural gas consumption has grown rapidly in Turkey over the past two decades (with an average annual growth rate of 24%) mainly as a means of reducing growth in the usage of the environmentally unsustainable domestic lignite.

In terms of the Transportation sector, Turkey has an unsustainable car and oil-based transport system. Improvements in fuel quality, shifts towards new technology vehicle engines, an expansion of the metro and light rail networks, as well as extensions and improvements to the railway network are some of the significant measures taken in recent

years. Despite some ongoing projects, Turkey needs to improve its transport strategy to reduce transport related emissions⁶.

Another important sector where efficiency measures are needed is the Building sector. A significant cause of increased electricity demand may be attributed to heating and cooling systems. Electricity demand could be significantly reduced by improving insulation and introducing more energy efficient appliances. A recently introduced programme, involving the energy labelling of buildings in Turkey, is an important step towards improving energy efficiency in the Building sector⁶.

Turkey's low-carbon policies focus primarily on energy efficiency and renewable energy options. Turkey has an abundance of renewable energy sources including hydroelectric, wind, geothermal and solar power. Nuclear power is also expected to become one of the major options for diversifying Turkey's power generating capacity. Renewable energy sources are still far from being a sufficient energy resource considering the total energy demand.

The Role of Development Institutions, Private Sector and Civil Society in Combating Climate Change

The United Nations Development Fund (UNDP), International Finance Corporation (IFC), European Bank for Reconstruction and Development (EBRD), and Agence Francaise Developpement (AFD) contribute to Turkey's climate change response. UNDP works closely with governmental organisations to build support to address climate change and to integrate environmental concerns into development policies and

programmes. AFD offers financing to banks, municipalities or companies to finance the development of renewable and clean energies and the creation of infrastructure (transport, water and sanitation, household waste) that reduces the country's carbon emissions. EBRD aims to promote favourable market conditions for the development of energy efficiency and renewable energy through its investments. IFC's investments aim to lower energy costs to consumers and industry and to reduce environmental emissions by displacing more polluting fuels. Some examples are listed below:

- UNDP, together with the British Embassy and the MoEF collaborated for the project: 'Developing Turkey's National Climate Change Action Plan'(June 2009 - September 2010). The objective of the project is to prepare Turkey's National Climate Change Strategy and Action Plan. Another UNDP initiated project is 'Enhancing the Capacity of Turkey to Adapt to Climate Change'. This UN Joint Programme, funded by Spain through the Millennium Development Goals Achievement Fund, aims to establish strategies necessary to combat and manage the effects of climate change in Turkey and to enhance the capacity necessary to manage climate change risks that threaten Turkey's rural and coastal area development.
- AFD made €11 million of finance available to a cement plant to install an incineration unit that uses sludge from Izmit municipality. This project meets the dual target of mitigating pollution and promoting energy efficiency by replacing traditional fuel with sludge.
- EBRD extended a €45 million loan to Rotor Elektrik for the construction

6 Energy Policies of IEA Countries - Turkey- 2009 Review

and development of an on-shore wind farm in order to increase Turkey's wind generation capacity by around 30%. The bank extended a local currency loan worth €60 million to Izgaz, Turkey's third-largest gas distributor, to help finance capital investments following the company's privatisation in early 2009.

- IFC signed an eight year US\$75 million loan agreement with Akenerji to support development of Akenerji's renewable energy projects. IFC is also planning to invest up to €25 million in the Green for Growth Fund Southeast Europe to stimulate the financing of sustainable energy projects within the region including Turkey.

There are several civil society organisations which actively work on climate change issues such as the World Wide life Fund (WWF) Turkey, Greenpeace Mediterranean, Doga Dernegi (the Nature Society), TEMA (The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats), Turkish Association for Energy Economics (EED). There are also many institutions which represent or work with the private sector:

- TÜSIAD (Turkish Industrialists' and Businessmen's Association) has an Environmental Working Group. TÜSIAD is also the first Turkish establishment to be accredited by the Secretariat of the UNFCCC in the field of 'Business and Industry Non-Governmental Organisation' (BINGO). TÜSIAD established the 'Climate Platform' together with REC's (Regional Environmental Centre) Turkey office in 2009. The Climate Platform supports the effective participation of Turkish businesses in international processes.
- BCSD's (Business Council for Sustainable Development) Turkey chapter facilitates business leadership as a catalyst for change toward sustainable development.

Turkey's universities are actively engaged in research activities around climate change:

- Istanbul Technical University's Eurasia Institute of Earth Sciences Climate Research Group researches scientific approaches to climate change adaptation. The aim of the research

group is to stimulate multi disciplinary studies in earth sciences including geology, ecology, climatology and oceanography.

- 'The Institute of Environmental Sciences' of Bogaziçi University is the first environmental research organisation in Turkey to be established by law in 1983. The Institute's research areas are not limited to environmental engineering but also include pure environmental sciences, ecology, and social environmental sciences.
- Another organisation working on environmental issues is Bogaziçi University's 'Sustainable Development and Cleaner Production Centre'. This Centre aims to support research into sustainable development and to provide technical support to the production and service sectors for cleaner and more effective methods of production that reduce the amount of waste and mitigate emissions. Bogaziçi University (Energy Policies Research Group) together with the Centre for Economics and Foreign Policy Studies (EDAM) prepared Turkey's first comprehensive economic impact assessment study related to Turkey's accession to the Kyoto Protocol which is ordered by the State Planning Organisation (SPO).
- Sabancı University is the Carbon Disclosure Project's local partner in Turkey. Through its research centre the Corporate Governance Forum of Turkey hosted by the Faculty of Management, undertakes research in the areas of sustainable investments, corporate accountability and corporate disclosure.
- 'The Centre for Energy, Environment and Economy' (CEEE) established in 2009 at Özyegin University aims to study issues related to energy, the environment and the economy.
- Marmara University's Research Centre for International Relations (MURCIR) is accredited as Observer Organisation to the UNFCCC and is engaged in climate change related research.

“As Sekerbank, we have launched our new product, EKOkredi in 2009 as a result of our studies on environmental sensitivity and environmental efficiency. Combining 57 years of our experience in Community Banking with our expertise in SME and agriculture business, we have also worked to create social awareness on the negative effects of global warming and pollution. With the optimum resources that we have provided for the projects aimed at renewable energy use, which allow efficient use of natural resources and reduce CO₂ emissions we introduced more than 9000 people to this energy saving concept. Our studies in this area were also well received internationally; and the Green for Growth Fund, founded by institutions of the European Union, selected Sekerbank as the first bank to provide credits in the entire Southern European region. We shall continue to create awareness among all of our social partners to contribute to the preservation of natural resources”

**Meriç Ulusahin, CEO,
Sekerbank T.A.S.**

Conclusions

Turkey needs to synchronize its policy decisions in implementing the UNFCCC with the EU accession process. The Coordination Board on Climate Change (CBCC), established in 2001 and the Climate Change Department in the MoEF, founded in 2010 are the main institutions charged with supporting this difficult task. Effective coordination between these institutions and their cooperation with other public institutions, international development institutions, the private sector, academia and NGOs, is crucial for the preparation of national climate change strategies and their effective implementation.

References:

- Bonn Climate Change Talks, http://unfccc.int/files/kyoto_protocol/application/pdf/turkey.pdf, 1 April 2009.
- Clean Technology Fund (2009) Investment Plan for Turkey, CTF/TFC.2/9.
- Climate Investment Funds (2009) Clean Technology Fund Investment Plan for Turkey -CTF/TFC.2/9, 16 January 2009.
- Council of the European Union (2009) EU Position for the Copenhagen Climate Conference – Council Conclusions, (Doc. 14790/09), 21 October 2009.
- EEA (2009) Greenhouse gas emission trends and projections in Europe 2009: Tracking progress towards Kyoto targets.
- IEA (2009) Energy Policies of IEA Countries- Turkey, 2009 Review.
- Kumbaroglu, G., N. Karali and Y. Arkan (2008). "COI, GDP and RET: An aggregate economic equilibrium analysis for Turkey." *Energy Policy* 36(7): 2694-2708.
- MoEF (2009) National Report on Special Circumstances of Turkey, Ankara: MoEF.
- MoEF (2010) Strategic Plan 2010-2014, Ankara: MoEF.
- MoEF (2009) Post-2012 Climate Change Negotiations Guidebook – Turkey, Ankara: MoEF.
- New Horizons (2010) UN DP Turkey Monthly Newsletter, Issue 54, June 2010
- New Horizons (2010) UNDP Turkey Monthly Newsletter, Issue 50, February 2010
- UÇES (2006) Ministry of Environment and Forestry, Environment Policies of Turkey in The EU Accession Process.
- Republic of Turkey (2007) First National Communication of Turkey on Climate Change, Ankara: MoEF.
- Republic of Turkey (2010) National Climate Change Strategy Document 2010-2020, Ankara: MoEF
- TURKSTAT (2010) Green House Gas Emission Inventory 2008, News Bulletin.
- UN, SPO (2010) Millennium Development Goals Report Turkey. <http://www.aciktoplumvakfi.org.tr/pdf/Turkiyenin-CO2-salimlari.pdf> , Accessed at 04.10.2010.
- http://unfccc.int/essential_background/items/2877.php , Accessed at 15.09.2010.
- http://ec.europa.eu/climateaction/eu_action/index_en.htm , Accessed at 12.09.2010.
- <http://www.undp.org.tr/Gozlem2.aspx?WebSayfaNo=112> , Accessed at 07.09.2010.

3

The Global Key Trends Table

This table outlines some of the key findings from CDP 2010 by geography or industry data-set.²

Sample: geography / number of companies	% of sample answering CDP 2010 ³	% of responders with Board or other executive level responsibility for climate change	% of responders with management incentives	% of responders with emissions reduction targets	% of responders taking actions to reduce emissions	% of responders indicating that their products and services help third parties to avoid GHG emissions	% of responders seeing regulatory risks	% of responders seeing regulatory opportunities	responders engaging policymakers on climate issues to encourage mitigation or adaptation	% of responders reporting the company's response to climate change in mainstream annual filings / CSR reports	% of responders independently verifying any portion of Scope 1 emissions data	% of responders independently verifying any portion of Scope 2 emissions data
Asia ex-J/CK 135 ⁴	32	80	46	56	73	41	65	70	60	80	48	40
Australia 200	47	83	46	40	73	55	69	76	73	88	43	43
US Bonds 180	82	78	62	70	87	55	60	71	88	91	54	46
Brazil 80	72	68	29	23	57	55	61	78	66	74	28	28
Canada 200	46	72	41	32	63	47	51	65	64	73	28	21
Central & Eastern Europe 100	12	85	57	57	71	43	71	100	85	57	57	57
China 100	11	57	57	57	57	43	71	71	57	86	43	29
Emerging Markets 800	29	77	50	47	74	49	70	84	68	78	39	37
Europe 300	84	94	62	81	88	71	87	87	77	96	69	60
FTSE All-World 800	74	83	61	70	77	65	69	78	85	92	57	49
France 250	30	89	48	69	79	60	72	86	62	93	57	46
Germany 200	61	70	33	47	50	57	43	68	42	66	35	23
Global 500	82	84	63	70	87	66	66	77	80	93	59	52
Global Electric Utilities 250	48	86	47	60	72	75	85	90	88	92	58	31
Global Transport 100	25	88	60	89	72	52	88	72	64	84	44	36
India 200	21	88	33	33	69	39	39	90	63	64	25	19
Ireland 40	50	80	26	60	80	33	66	53	46	80	33	33
Italy 60	35	66	57	76	85	71	76	80	66	90	62	62
Japan 500	41	89	61	91	84	73	81	81	60	94	28	28
Korea 200	42	60	52	46	61	44	70	73	50	56	29	29
Latin America 50	54	72	25	15	50	53	68	84	40	78	31	32
Netherlands 50	66	93	63	70	76	71	66	86	70	97	61	65
New Zealand 50	46	78	21	39	39	16	60	43	60	52	22	22
Nordic 200	65	88	44	69	77	67	68	79	62	93	45	37
Portugal 40	30	83	41	41	83	83	91	91	58	91	67	67
Russia 50	8	50	0	100	50	50	50	50	0	50	0	0
South Africa 100	74	95	50	42	82	42	77	85	80	92	39	41
Spain 85	40	87	53	71	84	72	81	84	62	97	69	63
Switzerland 100	58	77	26	52	59	56	38	63	42	82	40	35
Turkey 50	20	80	80	50	70	0	60	70	40	50	20	20
UK FTSE 600	51	96	49	61	73	48	68	74	59	87	41	39
US S&P 500	70	67	48	53	77	53	50	61	63	80	35	29

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

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

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

4 Asia excluding Japan, India, China and Korea.

4

Company Responses Overview and Key Findings

“We, as an integrated steel plant, take part in the production side of steel which is the world’s third largest commodity market and where 40% of steel is internationally traded. To produce sustainable steel we are dealing with the availability of raw material, competition and price fluctuation, CO₂ emissions- climate change, development of new generation products, a skilled-trained workforce and value creation for stakeholders. We believe that carbon trading in Turkey, will be a master key for the carbon market and world trading after 2012. Thanks to Sabancı Üniversitesi Kurumsal Yönetim Forumu and Ernst & Young’s Turkey Office for presenting our footprint in CDP.”

Fadıl Demirel,
General Manager, Kardemir
Karabük Demir Çelik Sanayi
ve Ticaret A.S.

In 2010, CDP Turkey invited the 50 largest companies listed in the Istanbul Stock Exchange (ISE-50) to disclose information regarding:

- Climate change management and governance at the corporate level,
- Perceived risks and opportunities related with climate change and strategies adopted to manage them
- GHG emissions and emission reduction strategies

The projects primary goals are to provide investors with information regarding both risks and opportunities represented by climate change, and at a corporate level, management with insights into stakeholder attitudes and concerns.

On August 30, 2010 the ISE-50 companies had a combined market capitalisation of around US\$207 billion representing various sectors such as Finance, Industrials and Materials. This report documents and summarises the responses received in CDP’s information request in 2010.

Response Rates

The response rate to CDP’s information request is influenced by a range of factors, including companies’ profile, resources, degree of the familiarity with the CDP process and the general

appreciation of climate change issues.

Out of 50 companies invited to respond to the CDP information request, **10 responded, 1 provided some explanation and 39 did not respond. Hence, the overall response rate for CDP Turkey 2010 was 20%**, ranking it in the middle of response rates for other developing and emerging countries in the project’s first year; e.g. India (35%), China (5%), Asia ex-Japan (Hong Kong, Malaysia, Taiwan, Indonesia, Thailand, Singapore and the Philippines) (26%). This response rate is likely to improve each year as companies become more aware of the issues of climate change, and gain familiarity with the CDP process.

There was one voluntary response from a company not included in the ISE-50 and this data has been used for the quantitative and qualitative analysis in the following sections.

The overall response rate of respondent companies across high impact sectors (materials and industrials, consumer discretionary) is 45%, whereas the response rate in low impact sectors (financials) is 55%.

Figure 1: Number of Invitees and Respondents to Turkey CDP 2010

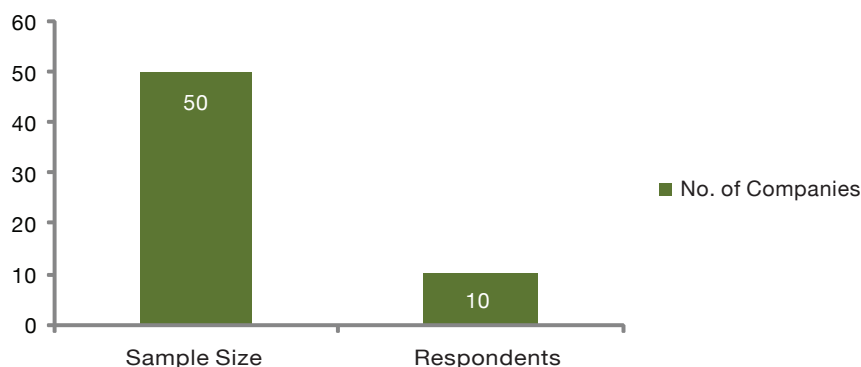
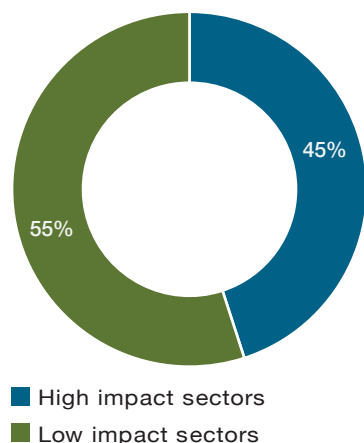


Figure 2: The response rates for high and low impact sectors



Within the overall response rate of 20%, there are variations in each sector. **A notable participation is shown by the banking sector with 50%.** The high response rate from banks might be attributable to stricter regulations which mandate banks to have effective risk management, audit and internal control functions.

Highlights of 2010 Disclosures

The key trends and responses to the CDP2010 information request are discussed in the following four sections: Climate Change Management and Governance, Risks and Opportunities, Strategies and GHG Accounting:

I. Climate Change Management and Governance

The companies questioned were asked several climate change related questions, including but not limited to, “where does responsibility for climate change issues lie in the organisation?”, “how does the mechanism work?” and “what are the types of management incentives given?”.

As shown in Figure 3 below, **73% of the responding companies have assigned such responsibilities to a board committee or other high level executive body.** Three companies assigned the responsibility to other lower level departments. The respondents defined “board committee or other executive body” as members of the board of directors, the CEO and/or other senior officers who are responsible for the business’ sustainability, including responsibility for operational efficiencies, disclosure, energy-efficiency and use of renewable energy.

Six companies report to have established a dedicated team or an internal mechanism to deal with environment and sustainability issues rather than merely assigning additional roles to their staff.

Regarding the respondent’s environmental goals for reducing their consumption of natural resources and carbon emissions, the majority set targets to reduce carbon emissions and the consumption of water, electricity, ink cartridges and paper.

Figure 3: The highest level of responsibility for climate change within the company

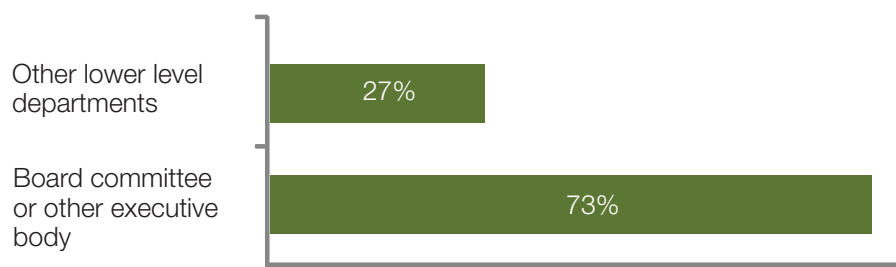
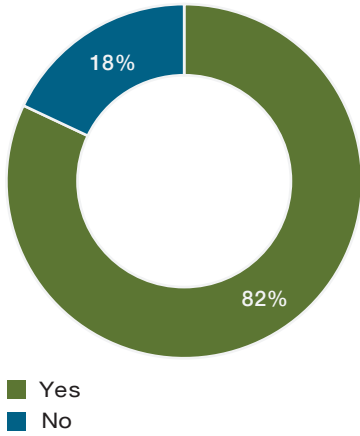


Figure 4: Providing incentives for climate change issues



“For Garanti, CDP is an important opportunity to communicate to our stakeholders. Increasingly, shareholders, customers and the community expect to see leadership on sustainability topics and climate change, in particular. Not only does CDP allow us to talk about our existing activities to reduce our carbon footprint, it has challenged us to comprehensively review all related risks and opportunities. We are emerging from the CDP process even more prepared to take action and create value for all our stakeholders. Taking action against climate change is a global imperative; and Garanti aspires to be a leader in this effort.”

Ergun Özen,
CEO, T. Garanti
Bankası A.S.

As illustrated by Figure 4, **82 % (9) of respondents provide their management with incentives for the management of climate change issues**, however, only 19% of the companies provide material incentives, whereas 69% of the companies claim to offer intangible incentives (primarily recognition and appreciation).

II. Risks & Opportunities

Risks and opportunities are divided into three categories in the information request: Regulatory, Physical and Other Risks and Opportunities which are examined separately in the following sections:

A. Risks

In common with other developing countries, climate change poses both risks and opportunities for Turkey. These risks may be regulatory or physical and may be either direct or indirect (e.g. impacting business partners, suppliers and/or customers).

Figure 5 below illustrates that the respondents considered “Physical Risk” to be the most significant risk presented by climate change.

Risk perceptions vary for different sectors. For example, companies in the Materials or Industrials sectors tend to stress the physical risks such as the increasing costs of fossil fuels and electricity, and the insufficiency of raw materials. On the other hand, companies in the financial sector emphasise regulatory risks such as measures to take emissions inventories and national mitigation action plans, potential cap-and-trade laws, and other regulations that would impact

their customers.

a) Regulatory Risks:

The respondents indicated that regulatory uncertainty presents a key challenge for many companies in Turkey. Seven of the companies questioned stated that regulatory requirements related to climate change are the most significant risk for their industries. The sectoral distribution of these responding companies is as follows:

The majority of respondents stated that they have already developed, or are in the process of developing strategies and programmes to manage risks associated with the regulation of climate change despite the uncertainties posed by Turkish legislation. Such strategies include Legal and Regulatory tracking, including cross-functional efforts to stay informed of new legislation and regulations related to climate change and energy.

b) Physical Risks

Physical risks are related to damage, disruption and displacement from unpredictable extreme weather events. Most of the respondents expressed physical risks of increased air pollution, reduced rainfall, water shortages, and alterations in weather patterns.

Eight of the responding companies state that physical risks related to climate change are the most significant risks for their industries, the consequences ranging from increased frequency of weather events, damage to infrastructure to disruptions to supply chains and logistic activities.

Figure 5: Companies’ perception of significant risks related to climate change

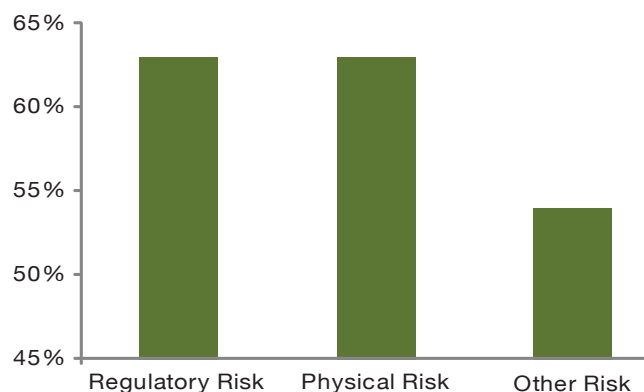
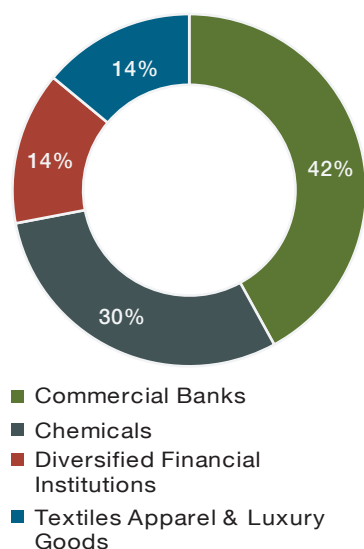


Figure 6: Sectoral distribution of the companies seeing regulatory risks as the most significant risks for their industries



Some companies tend not to take action to avoid physical risks associated with climate change. Three of the respondent companies have taken no action and have no plans to do so for minimising the effects of these physical risks because they do not see it as an urgent threat for their business.

c) Other Risks

Responding companies listed different climate change-related risks. Some companies state that poor environmental and social company standards may result in negative publicity and public pressure for change, which can be the source of reputational risks.

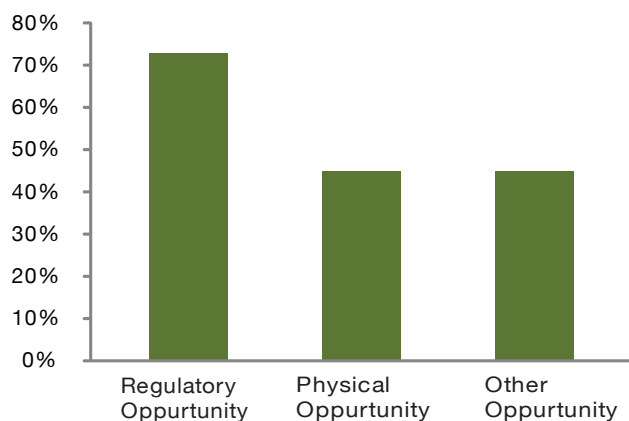
Banks are conscious of credit risks related to companies they extend loans to, and have developed policies to integrate climate change risks into their credit risk assessments.

B. Opportunities

While climate change causes several risks it also presents opportunities for businesses.

As illustrated in Figure 7 below, the most significant opportunity is perceived to be “regulatory opportunity”, arising from companies’ ability to adapt to current and expected local or international governmental policies on climate change better than their rivals.

Figure 7: Types of opportunities related to climate change according to the respondents



“Our response to CDP has been a strong step to pledge our firm commitment to taking an active role in combating climate change and assure our investors that PETKIM pursues a clear understanding of the profound correlation between global warming and sustainable business growth. PETKIM is committed to sustainable business growth that would address the environmental and social impacts of such growth and take active measures to mitigate the impact at the highest level. As being part of a carbon intensive industry, the company is aware of its position in reducing global emission reductions to maintain its position in a low-carbon economy. We are very glad to have become a CDP respondent and our engagement with CDP will continue. This journey has been a very useful tool for explicating how PETKIM systematically integrates its long-term business strategy with climate change by establishing some solid action plans to identify and manage sector specific risks.”

**Hayati Öztürk,
General Manager,
Petkim Petrokimya
Holding A.S.**

“We all know that sustainability has social, economical and environmental dimensions. As a global corporate company, TAV Airports has scrutinized and very well understood all these dimensions of sustainability and have added to its management strategies. We are all aware that our stakeholders expect companies to be transparent and accountable, and this accountability goes beyond financial statements to cover social and environmental aspects. We have openly declared our activities to the whole world in a transparent manner and disclosed all the actions that we have completed in 2010 to CDP. By applying to ACI Airport Council International, TAV Airports Holding has accredited CO₂ levels on mapping level for TAV Izmir (2009), TAV Istanbul (2010) and TAV Ankara (2010). TAV has also received the ‘Green initiative of the year by an airport’ award at Doha aviation summit at 2009 and the ‘Eco-innovation’ award by ACI at 2010. TAV Holding will continue to take very strong sustainability actions. We are proud to be a disclosing company of CDP, and will continue to disclose all of our activities in the worldwide database.”

Dr. M. Sani Sener,
CEO/Executive Board Member,
TAV Havalimanları Holding A.S.

The reported actions to exploit the opportunities presented by climate change include increasing the awareness of employees, investments in renewable energy and energy efficiency projects, market for low-carbon products, and management appreciation of the need to develop a sustainability strategy for the company.

a) Regulatory Opportunities:

The responses of the companies from high impact and low impact sectors underline the fact that local climate change regulations, if imposed, are seen as an opportunity as well as a threat for the respondents. Examples include savings resulting from reduced energy consumption, better resource utilisation, use of energy-efficient appliances, and use of energy efficient technologies.

Notable respondent comments on regulatory opportunities include the common view that the Kyoto Protocol and the EU accession process are expected to launch a number of regulatory efforts creating new market opportunities. Any new legislation leading to participation in or creation of a cap-and-trade scheme would grow the market for carbon credits and investments into renewable energy and create energy-efficiency opportunities. Current and future regulations are also expected to increase the use of renewable energy and energy-efficient technologies in Turkey.

b) Physical Opportunities:

Physical opportunities arise from the physical effects of climate change, such as changing weather patterns e.g. increased demand for particular products and services, or improved conditions for production and other businesses.

Banks identified opportunities (specifically related to the occurrence of large sudden events) due to climate change, such as increased demand for appropriate insurance products or financial derivatives for hedging purposes.

c) Other Opportunities:

Five of the companies that responded to the information request stated that there might be other significant opportunities regarding climate change.

According to the respondents, climate change can shift the mind-set of consumers in favour of eco-friendly products and services, and consumer awareness may trigger more investments in clean technologies, renewable energy projects and carbon funds.

Other opportunities which were identified by the others include differentiation, market segmentation, market share enlargement, access to finance, and demand for new products and services.

III. Strategies and GHG Accounting

Nine out of eleven respondents disclosed their carbon emissions. These companies calculate their current energy consumption to provide a basis for new energy conservation targets, fuel switching and the reduction of GHG emissions. GHG emissions reduction/energy saving plans and straightforward emissions reduction targets are the basis and starting point for companies to address climate change.

Figure 8 indicates that five companies targeted a reduction in their current emissions. All respondents reported established targets for direct reductions in their GHG emissions and that knowledge-based solutions have been deployed in production processes to help achieve emissions reductions. It is encouraging to see that most participants have adopted GHG accounting and have provided detailed descriptions of their emission reduction strategies in their CDP responses.

The CDP questionnaire requests information regarding the process of GHG emissions data collection and applied GHG measuring tools and standards which are comparable across businesses including accounting procedures, global warming potentials, and use of emission factors. The below chart indicates that the most preferred methodology is the Greenhouse Gas Protocol. Additionally, there are respondents that collect activity data and calculate Scope 1 and Scope 2 emissions using more than one method such as the IPCC and the WRI-Transport tool .

Figure 8: Targets for emissions reductions

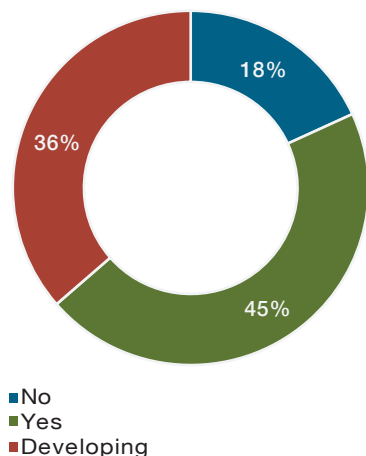
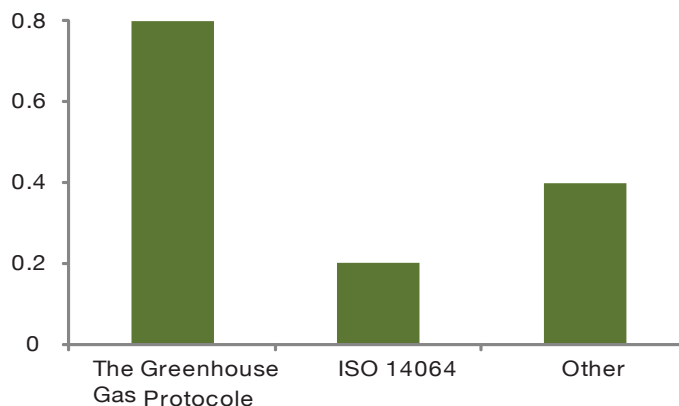


Figure 9: Methodology used to collect activity data and calculate Scope 1 and Scope 2 emissions

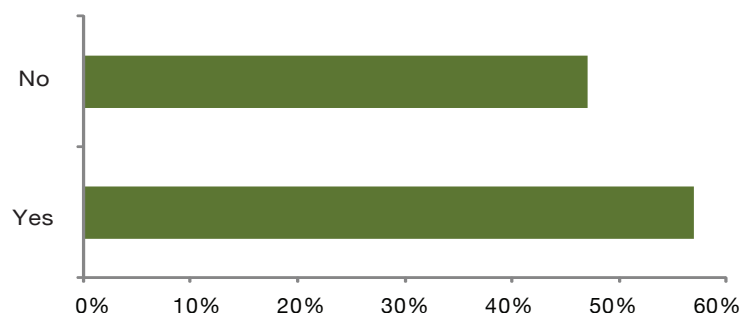


There is significant variation among companies in their level of emissions data disclosure. Despite the deficiencies in national calculation standards, six companies disclosed their Scope 3 emissions. Scope 1 emissions are the Direct GHG emissions generated in companies' production process. Scope 2 GHG emissions do not physically occur within the organisation's reporting boundary and are therefore "indirect emissions". Scope 3 emissions are from sources that are not owned or controlled by an organisation but

which occur as a result of its activities, e.g. the manufacturing, production and transportation of purchased fuels, goods or raw materials, or the use of products and services sold, and business travels in vehicles not belonging to or managed by the company.

Many of the respondents publish their climate change related disclosure through different means in addition to CDP. Annual reports and sustainability reports, for example, are used as forums for the communication of climate change strategies.

Figure 10: Use of multiple means to publish climate change strategies



IV. Conclusion

The results for the first CDP Turkey information request represent a good start to measure, report and manage carbon emissions of the listed companies in Turkey. Although some companies are already engaged with this important issue and are well prepared, the absence of a response from 80% of the companies to CDP's 2010 questionnaire suggests that some companies do not yet have this issue on their agenda or do not want

to disclose their stand on the subject.

For many companies climate change issues have significant potential to impact financial performance and long-term investments. Climate change will create both risks and opportunities. These risks may be physical, regulatory, and reputational in nature and can have a negative impact on a company's valuations through higher costs, damaged reputation and associated eroding customer loyalty and lower growth forecast.

5

Closing and Observations

“Climate change is one of the most pressing realities of our age. Reduction of carbon emissions, which are a critical contributor to climate change, are the focus of wide international debate. As the scientific evidence of the global impact of climate change gradually gains momentum, so too is the number of public and private institutions that now feel the urge to take responsibility for this widely recognised global concern. We are certainly pleased to witness this rise in awareness and increase in efforts to respond to the negative impact of climate change. Akbank’s principles of social responsibility and its commitment to being an active player in mitigating climate change meant that deciding to take part in the launch of the ‘Carbon Disclosure Project’ in Turkey was a natural choice for us. We are delighted and honoured to be supporting the local implementation of a now globally recognized project. I believe that our participation clearly reflects our pioneering role. As one of the first companies in Turkey to commit to disclose its greenhouse gas emissions in accordance with international standards, it is a source of great pride for Akbank to be a part of the ‘Carbon Disclosure Project’”

**Ziya Akkurt, CEO,
Akbank T.A.S.**

Climate change presents potentially material risks for some businesses, and hence for their investors.

Proper assessments of those risks depend on the quality of disclosure. While the scope and depth of mandatory disclosure change from country to country, the level of disclosure is usually insufficient in emerging markets. This limits the investments in emerging market companies. CDP provides a platform for informing the investors as well as informing the companies on investors’ need for a proper assessment of climate change risks. Furthermore, availability of information encourages asset owners to request investment managers to factor in climate change risks into their investment models.

Allocation of financial resources, either through lending or through investments, to companies that manages climate change risks better, is one of the drivers of low carbon growth. CDP Turkey demonstrates that the banking industry in Turkey is aware of their potential role in promoting sustainable growth. We also observe that companies that adopt a strategic approach to disclosure recognise the opportunities and potential benefits despite the apparent challenges.

While the response rate for CDP Turkey is 20% for 2010, many of the companies that did not participate in the Project have already launched projects in preparation for CDP 2011. Emerging consulting firms play an important role by supporting this process. Encouraged by the number of ongoing projects within the ISE-50 and the interest of the banking sector in the Project, Turkey CDP will expand its coverage to ISE-100 in 2011.

Appendix I: Company Response Status Table

An overview of the response status of each company covered is provided in the table below;

Sector	Company	2010 Response Status	Permission Status	Scope1	Scope2	Scope3
Brewers	ANADOLU EFES BİRACILIK VE MALT SANAYİİ A.Ş.	DP				
Financials	AKBANK T.A.Ş.	AQ	NP	Disclosed	Disclosed	Disclosed
Utilities	AKENERJİ ELEKTRİK ÜRETİM A.Ş.	NR				
Financials	AKSİGORTA A.Ş.	DP				
Financials	ANADOLU ANONİM TÜRK SİGORTA ŞİRKETİ	DP				
Consumer Discretionary	ARÇELİK A.Ş.	DP				
Financials	ASYA KATILIM BANKASI A.Ş.	NR				
Utilities	AYGAZ A.Ş.	DP				
Materials	BAGFAŞ BANDIRMA GÜBRE FABRİKALARI A.Ş.	AQ* (S)				
Consumer Staples	BİM BİRLEŞİK MAĞAZALAR A.Ş.	NR				
Consumer Staples	COCA-COLA İÇECEK A.Ş.	DP				
Industrials	DOĞAN ŞİRKETLER GRUBU HOLDİNG A.Ş.	DP				
Consumer Discretionary	DOĞAN YAYIN HOLDİNG A.Ş.	DP				
Health Care	EİS ECZACIBAŞI İLAÇ, SINAI VE FINANSAL YATIRIMLAR. SANAYİ TİCARET A.Ş.	DP				
Industrial Conglomerates	ENKA İNŞAAT VE SANAYİ A.Ş.	NR				
Materials	EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.	DP				
Consumer Discretionary	FORD OTOMOTİV SANAYİ A.Ş.	DP				
Financials	T.GARANTİ BANKASI A.Ş.	AQ		Disclosed	Disclosed	Disclosed
Materials	GÜBRE FABRİKALARI T.A.Ş.	NR				
Financials	TÜRKİYE HALK BANKASI A.Ş.	DP				
Consumer Discretionary	HÜRRİYET GAZETECİLİK VE MATBAACILIK A.Ş.	NR				
Consumer Discretionary	İHLAS EV ALETLERİ İMALAT SANAYİ VE TİCARET A.Ş.	NR				
Financials	İŞ BANKASI T.A.Ş.	DP				
Industrials	KOÇ HOLDİNG A.Ş.	DP				
Industrials	KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.	NR				
Materials	KARDEMİR KARABÜK DEMİR ÇELİK SANAYİ VE TİCARET A.Ş.	AQ* (S)		Disclosed	Disclosed	
Consumer Discretionary	NET HOLDİNG A.Ş.	NR				
Materials	PETKİM PETROKİMYA HOLDİNG A.Ş.	AQ	NP	Disclosed	Disclosed	
Energy	PETROL OFİSİ A.Ş.	DP				
Financials	SABANCI HOLDİNG A.Ş.	AQ* (S)	NP	Disclosed	Disclosed	Disclosed
Consumer Discretionary	T.ŞİŞE VE CAM FABRİKALARI A.Ş.	NR				
Financials	ŞEKERBANK T.A.Ş.	AQ* (S)				
Financials	SINPAŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.	DP				
Industrials	TAV HAVA LİMANLARI HOLDİNG A.Ş.	AQ		Disclosed	Disclosed	
Telecommunication Services	TURKCELL İLETİŞİM HİZMETLERİ A.Ş.	DP				
Financials	TÜRK EKONOMİ BANKASI A.Ş.	AQ* (S)		Disclosed	Disclosed	Disclosed
Industrials	TÜRK HAVA YOLLARI A.O.	NR				
Materials	TİRE KUTSAN OLUKLU MUKAVVA KUTU VE KAĞIT SAN.A.Ş.	NR				
Industrials	TEKFEN HOLDİNG A.Ş.	DP				
Consumer Discretionary	TOFAŞ TÜRK OTOMOBİL FABRİKASI A.Ş.	DP				
Energy	TURCAS PETROL A.Ş.	DP				
Industrials	TRAKYA CAM SANAYİİ A.Ş.	NR				
Financials	T.SINAI KALKINMA BANKASI A.Ş.	AQ		Disclosed	Disclosed	Disclosed
Telecommunication Services	TÜRK TELEKOMÜNİKASYON A.Ş.	IN				
Energy	TÜPRAŞ-TÜRKİYE PETROL RAFİNERİLERİ A.Ş.	DP				
Consumer Staples	ÜLKER BİSKÜVİ SANAYİ A.Ş.	DP				
Financials	TÜRKİYE VAKIFLAR BANKASI T.A.O.	NR				
Consumer Discretionary	VESTEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.	DP				
Financials	YAPI VE KREDİ BANKASI A.Ş.	DP				
Health Care	SELÇUK ECZA DEPOSU TİCARET VE SANAYİ A.Ş.	NR				
Consumer Discretionary	YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş.	VAQ		Disclosed	Disclosed	Disclosed

(AQ) Answered questionnaire

(NR) No response

(DP) Declined to Participate

(VAQ) Voluntarily responded the questionnaire

(IN)

Provided some information but did not answer the CDP questions.

(NP)

Information provided is not disclosed as not permitted.

(AQ*S)

Answered short version of questionnaire

Appendix II: CDP Information Request (Questionnaire)

Governance

1. Group and Individual Responsibility: (CDP 2009 Q25)

1.1 Where is the highest level of responsibility for climate change within your company?

If it is at board committee or other executive body level:

1.2 What is the mechanism by which the board committee or other executive body reviews the company's progress and status regarding climate change?

If it is at a lower level:

1.3 Please explain how overall responsibility for climate change is managed within your company.

Individual Performance: (CDP 2009 Q26)

1.4 Do you provide incentives for the management of climate change issues, including the attainment of greenhouse gas (GHG) targets?

If so,

1.5 Please complete the table.

Who is entitled to benefit from those incentives?	The type of incentives

Risks and Opportunities

2. Process to Identify Risks and Opportunities: (CDP 2009 Q1-6)

2.1 Describe your company's process for identifying significant risks and/or opportunities from climate change and assessing the degree to which they could affect your business, including the financial implications.

3. Regulatory Risks: (CDP 2009 Q1)

3.1 Do current and/or anticipated regulatory requirements related to climate change present significant risks to your company?

4. Physical Risks: (CDP 2009 Q2)

4.1 Do current and/or anticipated physical impacts of climate change present significant risks to your company?

5. Other Risks: (CDP 2009 Q3)

5.1 Does climate change present other significant risks – current and/or anticipated – for your company?

6. Regulatory Opportunities: (CDP 2009 Q4)

6.1 Do current and/or anticipated regulatory requirements related to climate change present significant opportunities for your company?

7. Physical Opportunities: (CDP 2009 Q5)

7.1 Do current and/or anticipated physical impacts of climate change present significant opportunities for your company?

8. Other Opportunities: (CDP 2009 Q6)

8.1 Does climate change present other significant opportunities – current and/or anticipated – for your company?

Where the answer to any of questions 3-8 is yes, please provide individual answers to the following questions, as you will be prompted to do so in the ORS.

- What are the current and/or anticipated significant risks/ opportunities and their associated countries/ regions and timescales?
- Describe the ways in which the identified risks/ opportunities affect or could affect your business and your value chain.
- Are there financial implications associated with the identified risks/opportunities?
- If so, please describe them.
- In the case of risks: describe any actions the company has taken or plans to take to manage or adapt to the risks that have been identified, including the cost of those actions.
- In the case of opportunities: describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

Where the answer to any of questions 3-8 is no, please answer the following question:

- In the case of risks: explain why you do not consider your company to be exposed to significant risks – current or anticipated.
- In the case of opportunities: explain why you do not consider your company to be presented with significant opportunities – current or anticipated.

Where the answer to any of questions 3-8 is "Don't know", please explain why not.

Oil and gas sector companies should include their estimated value of assets exposed to extreme weather events in table O&G2.1 and their financial contributions towards renewable and clean energy technologies in table O&G3.2.

Strategy

9. Strategy: (New for CDP 2010)

9.1 Please describe how your overall group business strategy links with actions taken on risks and opportunities (identified in questions 3 to 8), including any emissions reduction targets or achievements, public policy engagement and external communications.

Targets: (CDP 2009 Q23)

9.2 Do you have a current emissions reduction target?

If you do not have a target:

9.3 Please explain why not and forecast how your Scope 1 and Scope 2 emissions will change over the next 5 years.

If you are in the process of developing a target:

9.4 Please give details of the target(s) you are developing and when you expect to announce it/them.

If you have had a target and the date for completing it fell within your reporting year, please answer questions 9.5 and 9.6.

9.5 Please explain if you intend to set a new target.

If you have an emissions reduction target:

9.6 Please complete the table.

Target type	Value of the target	Unit	Base year	Emissions in base year (metric tonnes CO2-e)	Target year	GHGs and GHG sources to which the target applies	For recently completed targets only: was target met?

Emission Reduction Activities: (CDP 2009 Q23)

9.7 Please use the table below to describe your company's actions to reduce its GHG emissions. (9.8)

Actions	Achieved or anticipated annual energy savings (if relevant)	Achieved or anticipated annual emission reductions	Investment made or planned to enable actions (if relevant)	Achieved or anticipated annual monetary savings (if relevant)	Timescale of actions and associated investments (if relevant)

9.9 Please provide any other information you consider necessary to describe your emission reduction activities.

Engagement with Policy Makers: (CDP 2009 Q28)

9.10 Do you engage with policy makers on possible responses to climate change including taxation, regulation and carbon trading?

If so,

9.11 Please describe

GHG Emissions Accounting, Energy and Fuel Use, and Trading

10. Reporting Boundary: (CDP 2009 Q8)

10.1 Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

- Companies over which financial control is exercised – per consolidated audited financial statements;
- Companies over which operational control is exercised;
- Companies in which an equity share is held;
- Other – please provide details.

10.2 Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions within this boundary which are not included in your disclosure?

If so,

10.3 Please complete the following table.

Source	Scope	Explain why the source is excluded

11. Methodology: (CDP 2009 Q9)

11.1 Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions and/or describe the procedure you have used.

11.2 Please also provide the names of and links to any calculation tools used.

11.3 Please give the global warming potentials you have applied and their origin.

Gas	Reference	GWP

11.4 Please give the emission factors you have applied and their origin.

Fuel/material	Emission factor		Reference
	Number	Unit	

Information about how to respond to this section may be found in "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" developed by the World Resources Institute and the World Business Council for Sustainable Development ("the GHG Protocol"). For more information, see www.ghgprotocol.org and the CDP 2010 reporting guidance.

Please also provide CDP with responses to questions 10, 11, 12 and 13 for the three years prior to the current reporting year if you have not done so before or if this is the first time you have answered a CDP information request.

GHG Emissions Accounting, Energy and Fuel Use, and Trading

12. Scope 1 Direct GHG Emissions: (CDP 2009 Q10)

12.1 Please give your total gross global Scope 1 GHG emissions in metric tonnes of CO₂-e.

12.2 Please break down your total gross global Scope 1 emissions in metric tonnes CO₂-e by country/region. *¿(12.3)*

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by business division and/or facility. (Only data for the current reporting year requested.)

12.4. Business division

12.5 Facility

12.6 Please break down your total gross global Scope 1 emissions by GHG type. (Only data for the current reporting year requested.) *¿(12.7)*

GHG type	Scope 1 emissions (metric tonnes)	Scope 1 emissions (metric tonnes CO ₂ -e)

12.8 Fuel Consumption

Please use the table to give the total amount of fuel in MWh that your organization has consumed during the reporting year. *¿(12.9)*

12.10 Please complete the table by breaking down the total figure by fuel type. *¿(12.11)*

Fuels	MWh
Total	
<i>Individual fuels</i>	

12.12 Data Accuracy: (CDP 2009 Q19)

Please estimate the level of uncertainty of the total gross global Scope 1 figure that you have supplied in answer to question 12.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

	Scope 1
Uncertainty range	
Main sources of uncertainty in your data	
Expand on the main sources of uncertainty in your data	

When providing answers to questions 12 and 13, please do not deduct offset credits, Renewable Energy Certificates etc., or net off any estimated avoided emissions from the export of renewable energy, or from the use of goods and services. Opportunities are provided elsewhere in the information request to give details of activities that reduce or avoid emissions (please see guidance).

Carbon dioxide emissions from the combustion of biologically sequestered carbon i.e. carbon dioxide from burning biomass/ biofuels should be reported separately from emission Scopes 1, 2 and 3. If relevant, please report these emissions under question 17. However, please do include any nitrous oxide or methane emissions from biomass/biofuels in your emissions under the three scopes.

Electric utilities should report emissions by country/region using the table in question EU3.

Oil and gas sector companies should report group emissions by value chain in answer to table O&G1.1 and and O&G1.2.

GHG Emissions Accounting, Energy and Fuel Use, and Trading

13. Scope 2 Indirect GHG Emissions: (CDP 2009 Q11)

Important note about emission factors where zero or low carbon electricity is purchased:

The emissions factor you should use for calculating Scope 2 emissions depends upon whether the electricity you purchase is counted in calculating the grid average emissions factor or not – see below. You can find this out from your supplier.

Electricity that IS counted in calculating the grid average emissions factor:

Where electricity is sourced from the grid and that electricity has been counted in calculating the grid average emissions factor, Scope 2 emissions must be calculated using the grid average emissions factor, even if your company purchases electricity under a zero or low carbon electricity tariff.

Electricity that is NOT counted in calculating the grid average emissions factor:

Where zero or low carbon electricity is sourced from the grid or otherwise transmitted to the company and that electricity is not counted in calculating the grid average, the emissions factor specific to that method of generation can be used, provided that any certificates quantifying GHG-related environmental benefits claimed for the electricity are not sold or passed on separately from the electricity purchased. If certificates quantifying the GHG-related environmental benefits claimed for the electricity are sold or passed on separately from the electricity purchased, then you must report using the grid average emissions factor.

13.1 Please give your total gross global Scope 2 GHG emissions in metric tonnes of CO₂-e.

13.2 Please break down your total gross global Scope 2 emissions in metric tonnes of CO₂-e by country/region. ¿(13.3)

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by business division and/or facility. (Only data for the current reporting year requested.)

13.4 Business division

13.5 Facility

13.6 Purchased Energy

How much electricity, heat, steam, and cooling in MWh has your organization purchased for its own consumption during the reporting year? ¿(13.7)

Energy Type	MWh
Electricity	
Heat	
Steam	
Cooling	

13.8 Data Accuracy: (CDP 2009 Q19)

Please estimate the level of uncertainty of the total gross global Scope 2 figure that you have supplied in answer to question 13.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

	Scope 2
Uncertainty range	
Main sources of uncertainty in your data	
Expand on the main sources of uncertainty in your data	

GHG Emissions Accounting, Energy and Fuel Use, and Trading

14. Contractual Arrangements Supporting Particular Types of Electricity Generation: (CDP 2009 Q12)

14.1 Do you consider that the grid average factors used to report Scope 2 emissions in question 13 reflect the contractual arrangements you have with electricity suppliers?

If not,

14.2 You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO₂-e.

Please also,

14.3 Explain the origin of the alternative figure including information about the emission factors used and the tariffs.

14.4 Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

If so,

14.5 Please provide details including the number and type of certificates.

Type of certificate	Number of certificates	Comments

15. Scope 3 Other Indirect GHG Emissions: (CDP 2009 Q13)

15.1 Please provide data on sources of Scope 3 emissions that are relevant to your organization. ¿(15.2)

Sources of Scope 3 emissions	Emissions (in metric tonnes of CO ₂ -e)	Methodology	If you cannot provide a figure for a relevant source of Scope 3 emissions, please describe the emissions.

Auto manufacturers – please refer to the module for your sector before completing question 15.1.

16. Emissions Avoided Through Use of Goods and Services: (CDP 2009 Q14)

16.1 Does the use of your goods and/or services enable GHG emissions to be avoided by a third party?

If so,

16.2 Please provide details including the anticipated timescale over which the emissions are avoided, in which sector of the economy they might help to avoid emissions and their potential to avoid emissions.

17. Carbon Dioxide Emissions from Biologically Sequestered Carbon: (CDP 2009 Q15)

17.1 Please provide your total carbon dioxide emissions in metric tonnes CO₂ from the combustion of biologically sequestered carbon i.e. carbon dioxide emissions from burning biomass/biofuels. ¿(17.2)

18. Emissions Intensity: (CDP 2009 Q16)

18.1 Please describe a financial and an activity-related intensity measurement for the reporting year for your gross combined Scope 1 and Scope 2 emissions.

Type of emissions intensity measurement	Units	The resulting figure for Scope 1 and Scope 2 emissions	Please explain if not relevant. Alternatively provide any contextual details that you consider relevant to understand the units or figures you have provided.
Financial			
Activity-related			

Oil and gas – sector companies are also asked to report activity-related intensity metrics in answer to table O&G1.3.

GHG Emissions Accounting, Energy and Fuel Use, and Trading

19. Emissions History: (CDP 2009 Q17)

19.1 Do the absolute emissions (Scope 1 and Scope 2 combined) for the reporting year vary significantly compared to the previous year?

If so,

19.2 Please explain why they have varied and why the variation is significant.

20. External Verification/ Assurance: (CDP 2009 Q18)

20.1 Please complete the following table indicating the percentage of reported emissions that have been verified/assured and attach the relevant statement.

	Scope 1	Scope 2	Scope 3
Percentage of reported emissions that have been externally verified/assured			
Include the verification/assurance statement(s)			

Electric utilities should report allowances and emissions using the tables in questions EU5 and EU6.

21. Emissions Trading and Offsetting: (CDP 2009 Q21 and 22)

21.1 Do you participate in any emission trading schemes?

If so,

21.2 Please complete the following table for each of the emission trading schemes in which you participate.

Although some emission trading schemes may apply solely to the operators of facilities, the financial position of facility owners is also affected indirectly by the operation of the scheme. This question therefore applies to both owners and operators of facilities covered by trading schemes. Even if your company does not wholly own facilities, please give the total number of emissions and allowances.

Scheme name	Time period		Allowances allocated	Allowances purchased	Verified emissions		Details of ownership i.e. owned/operated/ or both
	Start date	End date			Number	Units	

21.3 What is your strategy for complying with the schemes in which you participate or anticipate participating?

21.4 Has your company originated any project-based carbon credits or purchased any within the reporting period?

If so,

21.5 Please complete the following table.

Credit origination/ credit purchase?	Project identification	Project documentation URL	Verified to which standard?	Number of credits (metric tonnes CO2-e)	Credits retired?	Purpose e.g. compliance

Climate Change Communications

22. Climate Change Communications: (CDP 2009 Q27)

22.1 Have you published information about your company's response to climate change/GHG emissions in other places than in your CDP response?

If so,

22.2 In your Annual Reports or other mainstream filing?
Please attach your latest publication(s).

22.3 Through voluntary communications such as CSR reports? Please attach your latest publication(s).

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