

## Contributing to a Sustainable Stock Exchange

### CDP Turkey 100 Climate Change Report 2013

November 2013



CDP Partner



Scoring Partner



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## The evolution of CDP

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With great pleasure, CDP announced an exciting change this year.

Over ten years ago CDP pioneered the only global disclosure system for companies to report their environmental impacts and strategies to investors. In that time, and with your support, CDP has accelerated climate change and natural resource issues to the boardroom and has moved beyond the corporate world to engage with cities and governments.

The CDP platform has evolved significantly, supporting multinational purchasers to build more sustainable supply chains. It enables cities around the world to exchange information, take best practice action and build climate resilience. We assess the climate performance of companies and drive improvements through shareholder engagement.

Our offering to the global marketplace has expanded to cover a wider spectrum of the earth's natural capital, specifically water and forests, alongside carbon, energy and climate.

For these reasons, we have outgrown our former name of the Carbon Disclosure Project and rebranded to CDP. Many of you already know and refer to us in this way. Our rebrand denotes our progress as we continue to catalyze action and respond to business, finance, investment and environmental needs globally.

We now have a bolder, more dynamic look and logo that reflects the scale of the work we must undertake in the coming years to move the markets ahead of where they would otherwise be on these issues and realize truly sustainable economies.

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- ▼ **Over 5,000 companies from all over the world have been asked to report on climate change through CDP this year;**
  - ▼ **81% of the world's 500 largest public companies listed on the Global 500 engage with CDP to enable effective measurement of their carbon footprint and climate change action;**
  - ▼ **CDP is a not-for-profit organization. If you would like to support our vital work through donations or sponsorship opportunities, please email [paul.robins@cdp.net](mailto:paul.robins@cdp.net) or telephone +44 (0) 7703 184 312.**
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## David Pitt-Watson

### Chair of the UN Environment Programme's Finance Initiative



*Turkey, and Turkish companies are becoming ever more significant in our global economy - that is why it is such welcome news to all investors, that they are progressing towards measuring and disclosing carbon emissions and climate change risks.*



Congratulations are due to all those Turkish companies who have participated in CDP.

Those congratulations are due not just because it is a 'good thing' to be part of this initiative. Not even because it is responding to the growing calls from shareholders that such reports be made. It is because companies, which disclose their carbon usage, simply turn out to be better companies. Not just better environmentally, but better financially as well. Let me explain.

For some years now, there has been a growing call from investors that companies should report their carbon impact. That allows international fund managers to choose those whom they feel are more socially conscious, and also those who are more 'future proof'. With concentrations of CO<sub>2</sub> in the Earth's atmosphere reaching their highest levels since mankind first appeared on the planet, the urgency of making the transition to a low-carbon economy has never been so strong. So, at some stage, carbon emissions will be regulated. Those companies, which have prepared for this will prosper. Those which have not will fall behind.

But there was another, more important reason why investors were interested in carbon disclosure. That is because many believe the old

adage to be true; that you get what you measure. So those companies which disclosed their environmental performance, would take note. As a result they would introduce systems which were less carbon intensive. Producing the information would change the behaviour of the company, not just allow outsiders to measure its performance. The question was the extent to which that was true.

Therefore, in 2007, some researchers from Iowa State University and elsewhere decided that they would survey a group of companies which disclosed their social and environmental performance, and compare them with those which did not. As we might hope, those companies which made disclosures had a better social and environmental performance. So that supported the hypothesis that if you disclose your performance, you take an interest in your performance.

But the researchers also found something which was much more surprising. The companies which disclosed their social and environmental performance were not only better on those measures. They were also financially more successful. There was no trade off between good environmental and financial performance. Quite the reverse. Those companies which took note of social and

environmental issues were also more successful financially.

Why might this be? One reason is because research suggests that much of the environmental damage which we do is simply not profitable. For example, up to 25% of the energy used on heating, lighting and constructing buildings could be saved and give a return greater than the cost of capital. So companies which are environmentally aware manage their costs better.

But there is a larger reason. In our globalised multi-media world, companies need to respond to the many challenges they face. They are employers, customers, suppliers, and citizens in the civil economy. Those who understand that and manage accordingly will be more successful. And one of the things implied by being a good corporate citizen is that you are aware of, and manage externalities, such as carbon emissions. It's not just that it is a good thing in itself. It is that it is an indicator of modern, progressive and successful management.

Turkey, and Turkish companies are becoming ever more significant in our global economy - that is why it is such welcome news to all investors, that they are progressing towards measuring and disclosing carbon emissions and climate change risks.

## CEO Foreword



*As countries around the world seek economic growth, strong employment and safe environments, corporations have a unique responsibility to deliver that growth in a way that uses natural resources wisely. The opportunity is enormous and it is the only growth worth having.*

This year we passed a significant landmark of 400ppm of carbon dioxide in the atmosphere and are rapidly heading towards 450ppm, accepted by many governments as the upper limit to avoid dangerous climate change. The Intergovernmental Panel on Climate Change (IPCC) 5th assessment report (AR5) strengthens the scientific case for action.

Fears are increasing over future climate change impacts as we see more extreme weather events, Hurricane Sandy the most noted with damages totalling some \$42 billion<sup>1</sup>. The unprecedented melting of the Arctic ice is a clear climate alarm bell, while the first 10 years of this century have been the world's hottest since records began, according to the World Meteorological Organization.

The result is a seismic shift in corporate awareness of the need to assess physical risk from climate change and to build resilience.

For investors, the risk of stranded assets has been brought to the fore by the work of Carbon Tracker. They calculate around 80 % of coal, oil and gas reserves are unburnable, if governments are to meet global commitments to keep the temperature rise below 2°C. This has serious implications for institutional investors' portfolios and valuations of companies with fossil fuel reserves.

The economic case for action is strengthening. This year, we published the 3% Solution<sup>2</sup> with WWF showing that the US corporate sector could reduce emissions by 3% each year between 2010 and 2020 and deliver \$780 billion in savings above costs as a result. 79% of US companies responding to CDP report higher ROI on emission reductions

investments than on the average business investment. Meanwhile, governments are taking new action: The US Administration has launched its Climate Action Plan, with a new emphasis on reducing emissions from utilities; China is developing air pollution measures and moving toward pilot cap and trade schemes; the UK Government has mandated greenhouse gas emissions reporting for all large listed companies; the EU is looking at improving environmental and other reporting.

The pressure on corporations, investors and governments to act continues. At CDP, we have broadened our work to add forests to climate and water so our programs now extend to an estimated 79% of natural capital, by value<sup>3</sup>. To reflect this, we rebranded at the start of the year from the Carbon Disclosure Project to CDP and are increasing our focus on projects to accelerate action. One explores how corporations influence public policy on climate change both positively and negatively. Some corporations are still acting – both directly and through trade associations – to prevent the inevitable: nations need sensible climate regulation that protects the public interest over the long term.

As countries around the world seek economic growth, strong employment and safe environments, corporations have a unique responsibility to deliver that growth in a way that uses natural resources wisely. The opportunity is enormous and it is the only growth worth having.

**Paul Simpson**  
CEO CDP

1 New York State Hurricane Sandy Damage Assessment; Governor Andrew Cuomo; November 12, 2012 <http://www.governor.ny.gov/press/11262012-damageassessment>  
2 <https://www.cdproject.net/CDPResults/3-percent-solution-report.pdf>

3 Based on findings from the report Natural Capital at Risk: The Top 100 Externalities of Business, published by TEEB for Business Coalition in April 2013

## Suzan Sabancı Dinçer

### Chairman, Akbank



*The increasing commitment and participation of more and more corporations to the CDP every year leads us to hope that business practices which respect the environment will become the new norm.*



Climate change is undisputedly a global problem. We know full well that the carbon emissions rising from countries thousands of kilometers far from each other affect all countries across the world to the same extent. Emissions know no geographical or political boundary.

The last meeting of the United Nations Climate Change Conference was held in Doha, capital of Qatar. The warnings about high levels of carbon emissions and the threat which they represent to the international system, to national economies and our world in general - raised by this cooperation platform, widely recognized as the most important in the quest for sustainable development - must be taken seriously. The latest report submitted by the United Nations Environment Program (UNEP) at the conference should be the reason for universal alarm. It warned that a failure to reduce carbon emissions to acceptable levels will cause the sea level to rise up to one meter resulting over the next hundred years in the complete inundation of many areas of human settlement and otherwise wreak damage that will be impossible or near impossible to reverse.

The crucial point is that there is an urgency to arrive at internationally accepted, practicable, strong and consistent policies to effect a rapid transition to lower carbon economy.

We all know that there exists a sensitive balance between the needs of nature and the environment and

society and the world of business. Even though the impact of the climate change on our lives is minimal at the moment, the risks in the medium and long term are real and serious. Therefore, the subject of climate change is of critical importance if we are to inhabit a cleaner and inhabitable world.

We at Akbank accept that, as in the many areas where we have exercised a leadership role, we have to assume our responsibilities and take charge of an issue as important as climate change. Akbank today is Turkey's most valuable banking brand. Our bank also remains one of the most valuable firms in our country. We are constantly evaluating how our strength and resources can be best used for the greater good of our own society and of the world. We believe that alongside the soundness of our financial performance, what will carry us to a brighter future is the priority we give to environmental, social and economic issues. We eagerly participate in projects to fight against climate change and against its impact on our planet and, indeed, we lead the field in these efforts. CDP represents a global effort to increase awareness of climate change and ameliorate its impact. We are proud to have pioneered and supported the implementation of the CDP in Turkey for the last four years. When we began our efforts, only 11 corporations from Turkey were submitting reports to the CDP; by 2013 this number rose to 39. The increasing commitment

and participation of more and more corporations to the CDP every year leads us to hope that business practices which respect the environment will become the new norm.

Another encouraging development has been in reporting on the performance in climate change with the agreement signed between the CDP and the Global Reporting Initiative (GRI), the most comprehensive provider of the tenets of sustainability reporting. Through this agreement, CDP and GRI aim to conduct joint efforts and to make the corporate sustainability reporting principle standards and rules more productive and effective. The standards introduced by the CDP on environmental reporting are becoming standard for other reporting as well. Akbank published the first Sustainability Report among commercial banks in Turkey based on the GRI standards in 2009. We have continued to make our Sustainability Reports publically available every year since then. We consider that cooperation between GRI and CDP in the reporting standards that we pioneered in our country represents a significant step in institutionalization of these reports.

We will continue to take an active part in the struggle to create a more habitable environment both for our country and at the global level. As Akbank, we are fully committed in our support for the CDP, which we pioneered for Turkey.

## Contents

|                                                                                          |    |
|------------------------------------------------------------------------------------------|----|
| Foreword - David Pitt-Watson, Chair of the UN Environment Programme's Finance Initiative | 3  |
| CDP Foreword - Paul Simpson, CEO                                                         | 4  |
| Sponsor Foreword - Suzan Sabancı Dinçer, Chairman, Akbank                                | 5  |
| Contents                                                                                 | 6  |
| Introduction                                                                             | 7  |
| CDP Investor Members                                                                     | 8  |
| CDP Investor Signatories                                                                 | 9  |
| Executive Summary                                                                        | 12 |
| Key Trends in Turkey                                                                     | 14 |
| 2013 Leaders                                                                             | 18 |
| Global Emissions Reporting                                                               | 20 |
| BIST-100 Snapshot                                                                        | 21 |
| Company Responses Overview                                                               | 22 |
| Key Findings                                                                             | 32 |
| EY Commentary - EY Turkey                                                                | 33 |
| Turkey 2013: Response Status Table                                                       | 34 |
| 2013 Global Key Trends                                                                   | 40 |

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## Introduction



*Turkey's largest companies have a unique responsibility to support a responsible and sustainable growth strategy by improving their resilience to climate change. CDP Turkey will continue its efforts to help those companies to be visible and attract long term investors.*

In the fourth year of CDP operation in Turkey, we report that 39 companies, and more than one in every four company included in BIST-100 Index, have disclosed their carbon emissions and climate change strategies through CDP. Banking sector once again had the highest response rate with Halk Bank, Vakıf Bank and Albaraka Türk joining the five major banks that have already been participating in CDP. In addition to the companies responding to CDP's climate change programme, more and more companies and cities from Turkey are invited to CDP's cities and forests programs.

While the regulations are tightening in the USA and Europe around carbon emissions, the Intergovernmental Panel on Climate Change (IPCC) 5th assessment report (AR5) presents the scientific case for stronger action. Stock exchanges have a unique opportunity to contribute by facilitating allocation of financial capital to corporations that use world's limited natural capital wisely. Many exchanges are coming up with innovative financial products that appeal to concerned investors who factor in climate change as an important material risk in investment analysis. Research outcome shows that transparency and resilience to climate change risks are reported to contribute to stronger returns. For example, CDP's recently published Global 500<sup>1</sup> report reveals that the companies that have achieved leadership positions on either the Climate Performance Leadership Index (CDLI) or the Climate Disclosure Leadership Index (CDLI) in the past generate superior stock performance<sup>2</sup>.

This year the percentage of Global 500 companies that took part in CDP reached 81%. Two companies from Turkey were included in the Global 500, and we are extremely pleased that both of them, namely Akbank and Garanti Bank, were a part of the 81%.

This brings us to Borsa Istanbul's exciting plans to launch a Sustainability Index in 2014. We actively support the efforts towards that end. We believe companies that have been participating in the CDP project are likely to get relatively higher scores in environmental criteria and hence to be included in the Index.

Meanwhile, the pressure on our government to act is increasing. Turkey's largest companies have a unique responsibility to support a responsible and sustainable growth strategy by improving their resilience to climate change. CDP Turkey will continue its efforts to help those companies to be visible and attract long term investors.

In this vein, we remain indebted to our host Sabancı University for the ongoing support to our project, to our main sponsor Akbank for their continuous generosity, and to EY Turkey for their rigorous analysis of CDP disclosures presented in this report. Their workload has increased considerably since we started. We hope they will have to work harder next year!

### Melsa Ararat

Director, CDP Turkey  
Director, Corporate Governance Forum  
School of Management, Sabancı University

<sup>1</sup> The Global 500 are the largest companies by market capitalization included in the FTSE Global Equity Index Series, as at 1 Jan 2013. The Global 500 report is based on the analysis of the 389 responses received by July 1st 2013.

<sup>2</sup> Since 2005, CDLI companies delivered total returns of 82.8%, outperforming the Global 500 (49.6%) whereas CPLI companies generated average total returns of 31.9% since 2010, outperforming the Global 500 (24.8%).

## Investor members

CDP works with investors globally to advance the investment opportunities and reduce the risks posed by climate change by asking over 5,000 of the world's largest companies to report their climate strategies, GHG emissions and energy use through CDP's

standardized format. To learn more about CDP's member offering and becoming a member, please contact us or visit the investor pages at <https://www.cdp.net/en-US/WhatWeDo/Pages/investors.aspx>

ABRAPP - Associação Brasileira das Entidades Fechadas de Previdência Complementar

ATP Group

Aviva Investors

Bank of America

Bendigo and Adelaide Bank

BlackRock

Boston Common Asset Management, LLC

California Public Employees' Retirement System (CalPERS)

California State Teachers' Retirement System (CalSTRS)

Calvert Group, Ltd.

Capricorn Investment Group

Catholic Super

CCLA Investment Management Ltd

Daiwa Asset Management Co. Ltd.

Generation Investment Management

Goldman Sachs Group Inc.

Henderson Global Investors

HSBC Holdings plc

Legg Mason, Inc.

KLP

London Pensions Fund Authority

Mobimo Holding AG

Mongeral Aegon Seguros e Previdência S.A.

Morgan Stanley

National Australia Bank

Neuberger Berman

Newton Investment Management Limited

Nordea Bank

Norges Bank Investment Management (NBIM)

Northwest and Ethical Investments L.P. (NEI Investments)

PFA Pension

Robeco

RobecoSAM AG

Rockefeller Asset Management

Royal Bank of Scotland Group

Sampension KP Livsforsikring A/S

Schroders

Scottish Widows Investment Partnership

Skandinaviska Enskilda Banken AB (SEB AB)

Sompo Japan Insurance Inc.

Standard Chartered

Sun Life Financial Inc

Sustainable Insights Capital Management

TD Asset Management

The Wellcome Trust

### 2013 INVESTOR SIGNATORY BREAKDOWN - REGION

Africa (15)



America - Latin & Caribbean (71)



America - North (174)



Asia (71)



Australia and New Zealand (61)



Europe - North & Western (294)



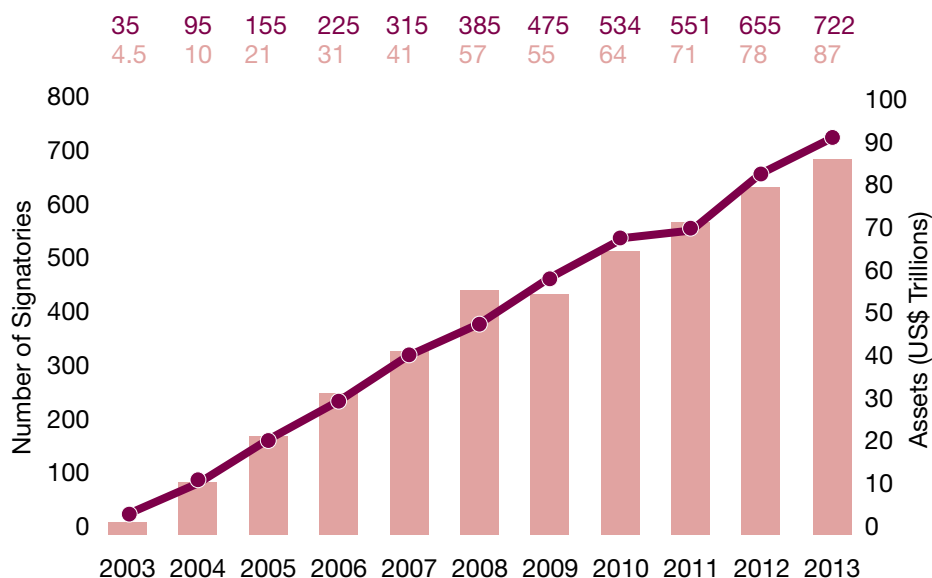
Europe - Southern & Eastern (39)



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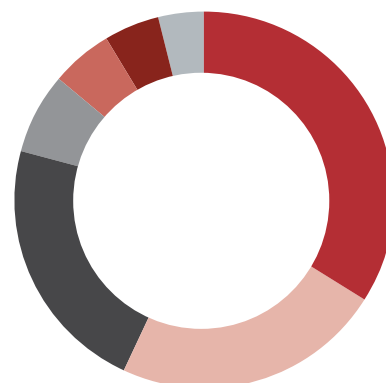
### INCREASING NUMBER OF INVESTORS REQUESTING CLIMATE DATA THROUGH CDP

- Investor signatory assets
- Number of investor signatories



### 2013 INVESTOR SIGNATORY BREAKDOWN - TYPE

|     |                           |
|-----|---------------------------|
| 247 | Mainstream Asset Managers |
| 167 | Pension funds             |
| 160 | Banks                     |
| 51  | Insurance                 |
| 39  | SRI Asset Managers        |
| 34  | Foundations               |
| 27  | Other                     |



# Investor signatories

**722 financial institutions  
with assets of US\$87 trillion  
were signatories to the  
CDP 2013 climate change  
information request dated  
February 1<sup>st</sup> 2013**

3Sisters Sustainable Management LLC  
Aberdeen Asset Management  
Aberdeen Immobilien KAG mbH  
ABRAPP - Associação Brasileira das Entidades  
Fechadas de Previdência Complementar  
Achmea NV  
Active Earth Investment Management  
Acuity Investment Management  
Addenda Capital Inc.  
Advanced Investment Partners  
Advantage Asset Managers (Pty) Ltd  
Aegon N.V.  
AEGON-INDUSTRIAL Fund Management Co., Ltd  
AFP Integra  
AIG Asset Management  
AK PORTFÖY YÖNETİMİ A.Ş.  
AKBANK T.A.Ş.  
Alberta Investment Management Corporation  
(AIMCO)  
Alberta Teachers Retirement Fund  
Alcyone Finance  
AllenbridgeEpic Investment Advisers  
Alliance Trust  
Allianz Elementar Versicherungs-AG  
Allianz Global Investors AG  
Allianz Group  
Altira Group  
Amalgamated Bank  
Amlin  
AMP Capital Investors  
AmpegaGerling Investment GmbH  
Amundi AM  
ANBIMA – Associação Brasileira das Entidades dos  
Mercados Financeiro e de Capitais  
Antera Gestão de Recursos S.A.  
APG Group  
AQEX LLC  
Aquila Capital  
Arisaig Partners  
Arkx Investment Management  
ARMA PORTFÖY YÖNETİMİ A.Ş.  
Armstrong Asset Management  
ASM Administradora de Recursos S.A.  
ASN Bank  
Assicurazioni Generali  
ATI Asset Management  
Atlantic Asset Management  
ATP Group  
Auriel Capital Management  
Australia and New Zealand Banking Group  
Australian Ethical Investment  
AustralianSuper  
Avaron Asset Management AS  
Aviva  
Aviva Investors  
AXA Group  
Baillie Gifford & Co.  
BaltCap  
Banco Bradesco S/A  
Banco Comercial Português SA  
Banco de Credito del Peru BCP  
Banco de Galicia y Buenos Aires S.A.  
Banco do Brasil Previdência  
Banco do Brasil S/A  
Banco Espírito Santo SA  
Banco Nacional de Desenvolvimento Economico e  
Social (BNDES)  
Banco Popular Espanol  
Banco Sabadell  
Banco Santander  
Banesprev – Fundo Banespa de Seguridade Social  
Banesto  
BANIF SA

Bank Handlowy w Warszawie SA  
Bank Leumi Le Israel  
Bank of America Merrill Lynch  
Bank of Montreal  
Bank of Nova Scotia (Scotiabank)  
Bank Sarasin & Cie AG  
Bank Vontobel  
Bankhaus Schelhammer & Schattera  
Kapitalanlagegesellschaft m.b.H.  
Bankia  
Bankinter  
BankInvest  
bankmecu  
Banque Degroof  
Banque Libano-Francaise  
Barclays  
Basellandschaftliche Kantonalbank  
BASF Sociedade de Previdência Complementar  
Basler Kantonalbank  
Bâtirente  
Baumann and Partners S.A.  
Bayern LB  
BayernInvest Kapitalanlagegesellschaft mbH  
BBC Pension Trust Ltd  
BBVA  
Bedfordshire Pension Fund  
Beetle Capital  
Befimmo SA  
Bendigo and Adelaide Bank  
Bentall Kennedy  
Berenberg Bank  
Berti Investments  
BioFinance Administração de Recursos de Terceiros  
Ltda  
BlackRock  
Blom Bank SAL  
Blumenthal Foundation  
BNP Paribas Investment Partners  
BNY Mellon  
BNY Mellon Service Kapitalanlage-Gesellschaft  
mbH  
Boston Common Asset Management, LLC  
Brasilprev Seguros e Previdência S/A.  
Breckinridge Capital Advisors  
British Airways Pensions  
British Coal Staff Superannuation Scheme  
British Columbia Investment Management  
Corporation (bcIMC)  
Brown Advisory  
BT Financial Group  
BT Investment Management  
Busan Bank  
CAAT Pension Plan  
Cadiz Holdings Limited  
CAI Corporate Assets International AG  
Caisse de dépôt et placement du Québec  
Caisse des Dépôts  
Caixa de Previdência dos Funcionários do Banco  
do Nordeste do Brasil (CAPEF)  
Caixa Econômica Federal  
Caixa Geral de Depósitos  
CaixaBank  
California Public Employees' Retirement System  
(CalPERS)  
California State Teachers' Retirement System  
(CalSTRS)  
California State Treasurer  
Calvert Investment Management, Inc  
Canada Pension Plan Investment Board (CPPIB)  
Canadian Imperial Bank of Commerce (CIBC)  
Canadian Labour Congress Staff Pension Fund  
CAPESESP  
Capital Innovations, LLC  
Capricorn Investment Group  
CARE Super  
Carmignac Gestion  
Caser Pensiones E.G.F.P  
Cathay Financial Holding  
Catherine Donnelly Foundation  
Catholic Super  
CBF Church of England Funds  
CBRE Group, Inc.  
Cbus Superannuation Fund  
CCLA Investment Management Ltd  
Celeste Funds Management  
Central Finance Board of the Methodist Church

Ceres  
CERES-Fundação de Seguridade Social  
Change Investment Management  
Chinatrust Financial Holding Co Limited  
Christian Brothers Investment Services Inc.  
Christian Super  
Christopher Reynolds Foundation  
Church Commissioners for England  
Church of England Pensions Board  
CI Mutual Funds' Signature Global Advisors  
City Developments Limited  
ClearBridge Investments  
Climate Change Capital Group Ltd  
CM-CIC Asset Management  
Colonial First State Global Asset Management  
Comerica Incorporated  
Comgest  
Commerzbank AG  
CommInsure  
Commonwealth Bank of Australia  
Commonwealth Superannuation Corporation  
Compton Foundation, Inc.  
Concordia Versicherungs-Gesellschaft a.G.  
Connecticut Retirement Plans and Trust Funds  
Conser Invest  
Co-operative Asset Management  
Co-operative Financial Services (CFS)  
Credit Suisse  
Daegu Bank  
Daesung Capital Management  
Daiwa Asset Management Co. Ltd.  
Daiwa Securities Group Inc.  
Dalton Nicol Reid  
Danske Bank A/S  
de Pury Pictet Turrettini & Cie S.A.  
DekaBank Deutsche Girozentrale  
Delta Lloyd Asset Management  
Desjardins Financial Security  
Deutsche Asset Management  
Investmentgesellschaft mbH  
Deutsche Bank AG  
Deutsche Postbank AG  
Development Bank of Japan Inc.  
Development Bank of the Philippines (DBP)  
Dexia Asset Management  
Dexus Property Group  
DLM INVISTA ASSET MANAGEMENT S/A  
DNB ASA  
Domini Social Investments LLC  
Dongbu Insurance  
Doughty Hanson & Co.  
DWS Investments  
DZ Bank  
Earth Capital Partners LLP  
East Sussex Pension Fund  
Ecclesiastical Investment Management  
Ecofi Investissements - Groupe Credit Cooperatif  
Edward W. Hazen Foundation  
EEA Group Ltd  
Eko  
Elan Capital Partners  
Element Investment Managers  
ELETRA - Fundação Celg de Seguros e Previdência  
Environment Agency Active Pension fund  
Epworth Investment Management  
Equilibrium Capital Group  
equinet Bank AG  
Erik Penser Fondkommission  
Erste Asset Management  
Erste Group Bank AG  
Essex Investment Management Company, LLC  
ESSSuper  
Ethos Foundation  
Etica SGR  
Eureka Funds Management  
Eurizon Capital SGR S.p.A.  
Evangelical Lutheran Church in Canada Pension  
Plan for Clergy and Lay Workers  
Evangelical Lutheran Foundation of Eastern Canada  
Evli Bank Plc  
F&C Asset Management  
FACEB – Fundação de Previdência dos  
Empregados da CEB  
FAELCE – Fundacao Coelce de Seguridade Social

## Investor signatories *continued*

|                                                                                                      |                                                           |                                                                          |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------|
| FAPERS- Fundação Assistencial e Previdenciária da Extensão Rural do Rio Grande do Sul                | Hang Seng Bank                                            | Living Planet Fund Management Company S.A.                               |
| FASERN - Fundação COSERN de Previdência Complementar                                                 | Hanwha Asset Management Company                           | Lloyds Banking Group                                                     |
| Fédérés Gestion d'Actifs                                                                             | Harbour Asset Management                                  | Local Authority Pension Fund Forum                                       |
| FIDURA Capital Consult GmbH                                                                          | Harrington Investments, Inc                               | Local Government Super                                                   |
| FIM Asset Management Ltd                                                                             | Hauck & Aufhäuser Asset Management GmbH                   | LOGOS PORTFÓY YÖNETIMI A.Ş.                                              |
| FIM Services                                                                                         | Hazel Capital LLP                                         | London Pensions Fund Authority                                           |
| Financiere de l'Echiquier                                                                            | HDFC Bank Ltd                                             | Lothian Pension Fund                                                     |
| FIPECq - Fundação de Previdência Complementar dos Empregados e Servidores da FINEP, do IPEA, do CNPq | Healthcare of Ontario Pension Plan (HOOPP)                | LUCRF Super                                                              |
| FIRA. - Banco de Mexico                                                                              | Helaba Invest Kapitalanlagegesellschaft mbH               | Macquarie Group                                                          |
| First Affirmative Financial Network, LLC                                                             | Henderson Global Investors                                | MagNet Magyar Közösségi Bank Zrt.                                        |
| First Commercial Bank                                                                                | Hermes Fund Managers                                      | MainFirst Bank AG                                                        |
| First State Investments                                                                              | HESTA Super                                               | Malakoff Médéric                                                         |
| First State Superannuation Scheme                                                                    | HIP Investor                                              | MAMA Sustainable Incubation AG                                           |
| First Swedish National Pension Fund (AP1)                                                            | Holden & Partners                                         | Man Group plc                                                            |
| Firststrand Limited                                                                                  | HSBC Global Asset Management (Deutschland) GmbH           | Mandarine Gestion                                                        |
| Five Oceans Asset Management                                                                         | HSBC Holdings plc                                         | MAPFRE                                                                   |
| Florida State Board of Administration (SBA)                                                          | HSBC INKA Internationale Kapitalanlagegesellschaft mbH    | Maple-Brown Abbott                                                       |
| Folketrygdfondet                                                                                     | Humanis                                                   | Marc J. Lane Investment Management, Inc.                                 |
| Folksam                                                                                              | Hyundai Marine & Fire Insurance Co., Ltd.                 | Maryland State Treasurer                                                 |
| Fondaction CSN                                                                                       | Hyundai Securities Co., Ltd.                              | Matrix Asset Management                                                  |
| Fondation de Luxembourg                                                                              | IBK Securities                                            | Matrix Group                                                             |
| Forma Futura Invest AG                                                                               | IDBI Bank Ltd                                             | McLean Budden                                                            |
| Fourth Swedish National Pension Fund, (AP4)                                                          | IDFC Ltd                                                  | MEAG MUNICH ERGO Asset Management GmbH                                   |
| FRANKFURT-TRUST Investment Gesellschaft mbH                                                          | Illinois State Board of Investment                        | Mediobanca                                                               |
| Friends Fiduciary Corporation                                                                        | Ilmarinen Mutual Pension Insurance Company                | Meeschaert Gestion Privée                                                |
| Fubon Financial Holdings                                                                             | Impax Group plc                                           | Meiji Yasuda Life Insurance Company                                      |
| Fukoku Capital Management Inc                                                                        | Independent Planning Group                                | Mendesprev Sociedade Previdenciária                                      |
| FUNCEF - Fundação dos Economizários Federais                                                         | Indusind Bank                                             | Merck Family Fund                                                        |
| Fundação AMPLA de Seguridade Social - Brasileiros                                                    | Industrial Alliance Insurance and Financial Services Inc. | Mercy Investment Services, Inc.                                          |
| Fundação Atlântico de Seguridade Social                                                              | Industrial Bank                                           | Mergence Investment Managers                                             |
| Fundação Atilio Francisco Xavier Fontana                                                             | Industrial Bank of Korea                                  | MetallRente GmbH                                                         |
| Fundação Banrisul de Seguridade Social                                                               | Industrial Development Corporation                        | Metrus - Instituto de Seguridade Social                                  |
| Fundação BRDE de Previdência Complementar - ISBRE                                                    | Industry Funds Management                                 | Metzler Investment GmbH                                                  |
| Fundação Chef de Assistência e Seguridade Social - Fachesf                                           | Inflection Point Partners                                 | MFS Investment Management                                                |
| Fundação Corsan - dos Funcionários da Companhia Riograndense de Saneamento                           | ING Group                                                 | Midas International Asset Management                                     |
| Fundação de Assistência e Previdência Social do BNDES - FAPES                                        | Insight Investment Management (Global) Ltd                | Miller/Howard Investments                                                |
| FUNDAÇÃO ELETROBRÁS DE SEGURIDADE SOCIAL - ELETROS                                                   | Instituto Infraero de Seguridade Social - INFRAPREV       | Mirae Asset Global Investments Co. Ltd.                                  |
| Fundação Forluminas de Seguridade Social - FORLUZ                                                    | Instituto Sebrae De Seguridade Social - SEBRAEPREV        | Mirae Asset Securities                                                   |
| Fundação Itaipu BR - de Previdência e Assistência Social                                             | Insurance Australia Group                                 | Mirvac Group                                                             |
| FUNDAÇÃO ITAUBANCO                                                                                   | IntReal KAG                                               | Missionary Oblates of Mary Immaculate                                    |
| Fundação Itaúsa Industrial                                                                           | Investec Asset Management                                 | Mistra, Foundation for Strategic Environmental Research                  |
| Fundação Promon de Previdência Social                                                                | Investing for Good                                        | Mitsubishi UFJ Financial Group, Inc.                                     |
| Fundação Rede Ferroviária de Seguridade Social - Refer                                               | Irish Life Investment Managers                            | Mitsui Sumitomo Insurance Co., Ltd                                       |
| FUNDAÇÃO SANEPAR DE PREVIDÊNCIA E ASSISTÊNCIA SOCIAL - FUSAN                                         | Itaú Asset Management                                     | Mizuho Financial Group, Inc.                                             |
| Fundação Sistel de Seguridade Social (Sistel)                                                        | Itaú Unibanco Holding S.A.                                | Mn Services                                                              |
| Fundação Vale do Rio Doce de Seguridade Social - VALIA                                               | Janus Capital Group Inc.                                  | Momentum Manager of Managers (Pty) Ltd                                   |
| FUNDIÁGUA - FUNDAÇÃO DE PREVIDENCIA COMPLEMENTAR DA CAESB                                            | Jarislowsky Fraser Limited                                | Monega Kapitalanlagegesellschaft mbH                                     |
| Futuregrowth Asset Management                                                                        | Jessie Smith Noyes Foundation                             | Mongeral Aegon Seguros e Previdência S.A.                                |
| GEAP Fundação de Seguridade Social                                                                   | JOHNSON & JOHNSON SOCIEDADE PREVIDENCIARIA                | Morgan Stanley                                                           |
| General Equity Group AG                                                                              | JPMorgan Chase & Co.                                      | Mountain Cleantech AG                                                    |
| Generali Deutschland Holding AG                                                                      | Jubitz Family Foundation                                  | MTAA Superannuation Fund                                                 |
| Generation Investment Management                                                                     | Jupiter Asset Management                                  | Mutual Insurance Company Pension-Fennia                                  |
| Genus Capital Management                                                                             | Kaiser Ritter Partner Privatbank AG (Schweiz)             | Nanuk Asset Management                                                   |
| German Equity Trust AG                                                                               | KB Kookmin Bank                                           | Natcan Investment Management                                             |
| Gjensidige Forsikring ASA                                                                            | KBC Asset Management NV                                   | Nathan Cummings Foundation, The                                          |
| Global Forestry Capital S.a.r.l.                                                                     | KBC Group                                                 | National Australia Bank                                                  |
| GLS Gemeinschaftsbank eG                                                                             | KCPS and Company                                          | National Bank of Canada                                                  |
| Goldman Sachs Group Inc.                                                                             | KDB Asset Management Co., Ltd.                            | National Bank Of Greece                                                  |
| GOOD GROWTH INSTITUT für globale Vermögensentwicklung mbH                                            | KDB Daewoo Securities Co. Ltd.                            | National Grid Electricity Group of the Electricity Supply Pension Scheme |
| Governance for Owners                                                                                | KEPLER-FONDS Kapitalanlagegesellschaft m. b. H.           | National Grid UK Pension Scheme                                          |
| Government Employees Pension Fund ("GEPF"), Republic of South Africa                                 | KEVA                                                      | National Pensions Reserve Fund of Ireland                                |
| GPT Group                                                                                            | KeyCorp                                                   | National Union of Public and General Employees (NUPGE)                   |
| Greater Manchester Pension Fund                                                                      | KfW Bankengruppe                                          | Nativus Sustainable Investments                                          |
| Green Cay Asset Management                                                                           | Killik & Co LLP                                           | Natixis SA                                                               |
| Green Century Capital Management                                                                     | Kiwi Income Property Trust                                | Natural Investments LLC                                                  |
| GROUPAMA EMEKLİLİK A.Ş.                                                                              | Kleinwort Benson Investors                                | Nedbank Limited                                                          |
| GROUPAMA SIGORTA A.Ş.                                                                                | KlimainVEST                                               | Needmor Fund                                                             |
| Groupe Crédit Coopératif                                                                             | KLP Insurance                                             | Nelson Capital Management, LLC                                           |
| Groupe Investissement Responsable Inc.                                                               | Korea Investment Management                               | Nest Sammelstiftung                                                      |
| GROUPE OFI AM                                                                                        | Korea Technology Finance Corporation                      | Neuberger Berman                                                         |
| Grupo Financiero Banorte SAB de CV                                                                   | KPA Pension                                               | New Alternatives Fund Inc.                                               |
| Grupo Santander Brasil                                                                               | La Banque Postale Asset Management                        | New Amsterdam Partners LLC                                               |
| Gruppo Bancario Credito Valtellinese                                                                 | La Financiere Responsable                                 | New Forests                                                              |
| Gruppo Monte Paschi                                                                                  | Lampe Asset Management GmbH                               | New Mexico State Treasurer                                               |
| Guardians of New Zealand Superannuation                                                              | Landsorganisationen i Sverige                             | New York City Employees Retirement System                                |
|                                                                                                      | LaSalle Investment Management                             | New York City Teachers Retirement System                                 |
|                                                                                                      | LBBW - Landesbank Baden-Württemberg                       | New York State Common Retirement Fund (NYSCRF)                           |
|                                                                                                      | LBBW Asset Management Investmentgesellschaft mbH          | Newton Investment Management Limited                                     |
|                                                                                                      | LD Lonmodtagernes Dyrtidsfond                             | NGS Super                                                                |
|                                                                                                      | Legal & General Investment Management                     | NH-CA Asset Management                                                   |
|                                                                                                      | Legg Mason, Inc.                                          | Nikko Asset Management Co., Ltd.                                         |
|                                                                                                      | LGT Capital Management Ltd.                               | Nipponkoa Insurance Company, Ltd                                         |
|                                                                                                      | LIG Insurance Co., Ltd.                                   | Nissay Asset Management Corporation                                      |
|                                                                                                      | Light Green Advisors, LLC                                 | NORD/LB Kapitalanlagegesellschaft AG                                     |
|                                                                                                      |                                                           | Nordea Bank                                                              |
|                                                                                                      |                                                           | Norfolk Pension Fund                                                     |

|                                                                                |                                                                               |                                                                                     |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Norges Bank Investment Management (NBIM)                                       | Rose Foundation for Communities and the Environment                           | TfL Pension Fund                                                                    |
| North Carolina Retirement System                                               | Rothschild                                                                    | The ASB Community Trust                                                             |
| Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC) | Royal Bank of Canada                                                          | The Brainerd Foundation                                                             |
| Northern Star Group                                                            | Royal Bank of Scotland Group                                                  | The Bullitt Foundation                                                              |
| Northern Trust                                                                 | RPMI Railpen Investments                                                      | The Central Church Fund of Finland                                                  |
| Northward Capital                                                              | RREEF Investment GmbH                                                         | The Children's Investment Fund Foundation                                           |
| Northwest and Ethical Investments L.P. (NEI Investments)                       | Russell Investments                                                           | The Clean Yield Group                                                               |
| Nykredit                                                                       | Sampension KP Livsforsikring A/S                                              | The Collins Foundation                                                              |
| OceanRock Investments Inc.                                                     | Samsung Fire & Marine Insurance                                               | The Co-operators Group Limited                                                      |
| Oddo & Cie                                                                     | Samsung Life Insurance                                                        | The Daly Foundation                                                                 |
| oeco capital Lebensversicherung AG                                             | Samsung Securities                                                            | The Environmental Investment Partnership LLP                                        |
| ÖKOWORLD                                                                       | Sanlam                                                                        | The Hartford Financial Services Group, Inc.                                         |
| Old Mutual plc                                                                 | Santa Fé Portfolios Ltda                                                      | The Joseph Rowntree Charitable Trust                                                |
| OMERS Administration Corporation                                               | Santam Ltd                                                                    | The Korea Teachers Pension                                                          |
| Ontario Pension Board                                                          | Sarasin & Partners                                                            | The New School                                                                      |
| Ontario Teachers' Pension Plan                                                 | SAS Trustee Corporation                                                       | The Oppenheimer Group                                                               |
| OP Fund Management Company Ltd                                                 | Sauren Finanzdienstleistungen GmbH & Co. KG                                   | The Pension Plan For Employees of the Public Service Alliance of Canada             |
| Oppenheim & Co Limited                                                         | Schroders                                                                     | The Pinch Group                                                                     |
| Oppenheim Fonds Trust GmbH                                                     | Scottish Widows Investment Partnership                                        | The Presbyterian Church in Canada                                                   |
| Opplýsningsvesenets fond (The Norwegian Church Endowment)                      | SEB Asset Management AG                                                       | The Russell Family Foundation                                                       |
| OPSEU Pension Trust (OP Trust)                                                 | Second Swedish National Pension Fund (AP2)                                    | The Sandy River Charitable Foundation                                               |
| Oregon State Treasurer                                                         | Seligson & Co Fund Management Plc                                             | The Sisters of St. Ann                                                              |
| Orion Energy Systems                                                           | Sentinel Funds                                                                | The Standard Bank Group                                                             |
| Osmosis Investment Management                                                  | SERPROS - Fundo Multipatrocinado                                              | The Sustainability Group                                                            |
| Panahpur                                                                       | Service Employees International Union Benefit Funds                           | The United Church of Canada - General Council                                       |
| Park Foundation                                                                | Servite Friars                                                                | The University of Edinburgh Endowment Fund                                          |
| Parnassus Investments                                                          | Seventh Swedish National Pension Fund (AP7)                                   | The Wellcome Trust                                                                  |
| Pax World Funds                                                                | Shiga Bank, Ltd.                                                              | Third Swedish National Pension Fund (AP3)                                           |
| Pensioenfonds Vervoer                                                          | Shinhan Bank                                                                  | Threadneedle Asset Management                                                       |
| Pension Denmark                                                                | Shinhan BNP Paribas Investment Trust Management Co., Ltd                      | Tobam                                                                               |
| Pension Fund for Danish Lawyers and Economists                                 | Shinkin Asset Management Co., Ltd                                             | Tokio Marine & Nichido Fire Insurance Co., Ltd.                                     |
| Pension Protection Fund                                                        | Siemens Kapitalanlagegesellschaft mbH                                         | Toronto Atmospheric Fund                                                            |
| Pensionsmyndigheten                                                            | Signet Capital Management Ltd                                                 | Trillium Asset Management, LLC                                                      |
| Perpetual Investments                                                          | Skandia                                                                       | Triodos Bank                                                                        |
| PETROS - Fundação Petrobras de Seguridade Social                               | Skandinaviska Enskilda Banken AB (SEB AB)                                     | Tri-State Coalition for Responsible Investment                                      |
| PFA Pension                                                                    | Smith Pierce, LLC                                                             | Tryg                                                                                |
| PGGM                                                                           | SNS Asset Management                                                          | Turner Investments                                                                  |
| Phillips, Hager & North Investment Management Ltd.                             | Social(k)                                                                     | UBS                                                                                 |
| PhiTrust Active Investors                                                      | Sociedade de Previdência Complementar da Dataprev - Prevdta                   | Unibail-Rodamco                                                                     |
| Pictet Asset Management SA                                                     | Socrates Fund Management                                                      | UniCredit                                                                           |
| Pinstripe Management GmbH                                                      | Solaris Investment Management                                                 | Union Asset Management Holding AG                                                   |
| Pioneer Investments                                                            | Sompo Japan Insurance Inc.                                                    | Union di Banche Italiane S.c.p.a                                                    |
| Piraeus Bank                                                                   | Sonen Capital LLC                                                             | Union Investment Privatfonds GmbH                                                   |
| PKA                                                                            | Sopher Investment Management                                                  | Unionen                                                                             |
| Pluris Sustainable Investments SA                                              | Soprise! LLP                                                                  | Unipension                                                                          |
| PNC Financial Services Group, Inc.                                             | SouthPeak Investment Management                                               | UNISON staff pension scheme                                                         |
| Pohjola Asset Management Ltd                                                   | SPF Beheer bv                                                                 | UniSuper                                                                            |
| Polden Puckham Charitable Foundation                                           | Spring Water Asset Management, LLC                                            | Unitarian Universalist Association                                                  |
| Portfolio 21 Investments                                                       | Sprucegrove Investment Management Ltd                                         | United Methodist Church General Board of Pension and Health Benefits                |
| Porto Seguro S.A.                                                              | Standard Chartered                                                            | United Nations Foundation                                                           |
| POSTALIS - Instituto de Seguridade Social dos Correios e Telégrafos            | Standard Chartered Korea Limited                                              | Unity Trust Bank                                                                    |
| Power Finance Corporation                                                      | Standard Life Investments                                                     | Universities Superannuation Scheme (USS)                                            |
| PREVHAB PREVIDÊNCIA COMPLEMENTAR                                               | State Bank of India                                                           | Vancity Group of Companies                                                          |
| PREVI Caixa de Previdência dos Funcionários do Banco do Brasil                 | State Street Corporation                                                      | VCH Vermögensverwaltung AG                                                          |
| PREVIG Sociedade de Previdência Complementar                                   | StatewideSuper                                                                | Ventas Inc                                                                          |
| Prologis                                                                       | Stockland                                                                     | Veris Wealth Partners                                                               |
| Provinzial Rheinland Holding                                                   | Storebrand ASA                                                                | Veritas Investment Trust GmbH                                                       |
| Prudential Investment Management                                               | Strathclyde Pension Fund                                                      | Vermont State Treasurer                                                             |
| Prudential PLC                                                                 | Stratus Group                                                                 | Vexiom Capital, L.P.                                                                |
| Psagot Investment House Ltd                                                    | Sumitomo Mitsui Financial Group                                               | VicSuper                                                                            |
| PSP Investments                                                                | Sumitomo Mitsui Trust Holdings, Inc.                                          | Victorian Funds Management Corporation                                              |
| Q Capital Partners Co. Ltd                                                     | Sun Life Financial Inc.                                                       | VIETNAM HOLDING ASSET MANAGEMENT LTD.                                               |
| QBE Insurance Group                                                            | Superfund Asset Management GmbH                                               | Vinva Investment Management                                                         |
| Rabobank                                                                       | SUSI Partners AG                                                              | Voigt & Collegen                                                                    |
| Raiffeisen Fund Management Hungary Ltd.                                        | Sustainable Capital                                                           | VOLKSBANK INVESTMENTS                                                               |
| Raiffeisen Kapitalanlage-Gesellschaft m.b.H.                                   | Sustainable Development Capital LLP                                           | Waikato Community Trust                                                             |
| Raiffeisen Schweiz                                                             | Sustainable Insight Capital Management                                        | Walden Asset Management, a division of Boston Trust & Investment Management Company |
| Rathbone Greenbank Investments                                                 | Svenska Kyrkan, Church of Sweden                                              | WARBURG - HENDERSON                                                                 |
| RCM (Allianz Global Investors)                                                 | Svenska Kyrkans Pensionskassa                                                 | Kapitalanlagegesellschaft für Immobilien mbH                                        |
| Real Grandeza Fundação de Previdência e Assistência Social                     | Swedbank                                                                      | WARBURG INVEST                                                                      |
| REI Super                                                                      | Swift Foundation                                                              | KAPITALANLAGEGESELLSCHAFT MBH                                                       |
| Reliance Capital Ltd                                                           | Swiss Re                                                                      | Water Asset Management, LLC                                                         |
| Representative Body of the Church in Wales                                     | Swisscanto Holding AG                                                         | Wells Fargo & Company                                                               |
| Resolution                                                                     | Sycomore Asset Management                                                     | West Yorkshire Pension Fund                                                         |
| Resona Bank, Limited                                                           | Syntrus Achmea Asset Management                                               | WestLB Mellon Asset Management (WMAM)                                               |
| Reynders McVeigh Capital Management                                            | T. Rowe Price                                                                 | Westpac Banking Corporation                                                         |
| River Twice Capital Advisors, LLC                                              | T.GARANTI BANKASI A.Ş.                                                        | WHEB Asset Management                                                               |
| RLAM                                                                           | T.SINAI KALKINMA BANKASI A.Ş.                                                 | White Owl Capital AG                                                                |
| Robeco                                                                         | Tata Capital Limited                                                          | Woori Bank                                                                          |
| RobecoSAM AG                                                                   | TD Asset Management                                                           | Woori Investment & Securities                                                       |
| Robert & Patricia Switzer Foundation                                           | Teachers Insurance and Annuity Association - College Retirement Equities Fund | YES BANK Limited                                                                    |
| Rockefeller Asset Management                                                   | Telluride Association                                                         | York University Pension Fund                                                        |
|                                                                                | Tempis Capital Management Co., Ltd.                                           | Youville Provident Fund Inc.                                                        |
|                                                                                | Terra Forvaltning AS                                                          | Zegora Investment Management                                                        |
|                                                                                | TerraVerde Capital Management LLC                                             | Zevin Asset Management                                                              |
|                                                                                |                                                                               | Zurich Cantonal Bank                                                                |
|                                                                                |                                                                               | Zurich Cantonal Bank                                                                |

## Executive Summary

CDP works to transform the way the world does business to prevent dangerous climate change and protect our natural resources. CDP envisions a world where capital is efficiently allocated to create long-term prosperity rather than short-term gain at the expense of our environment. By leveraging market forces including shareholders, customers and governments, CDP has incentivized thousands of companies and cities across the world's largest economies to measure and disclose their greenhouse gas emissions, climate change risk and water strategies. This information is used in business, investment and policy decision-making.

CDP currently holds the largest collection globally of self reported climate change data. In 2013, CDP requested information on greenhouse gas emissions, energy use and the risks and opportunities from climate change from thousands of the world's largest companies on behalf of 722 institutional investors with US\$87 trillion in assets. It offers a unique opportunity for companies to make their climate related strategies and actions more visible to international investors.

### CDP Turkey

Sabancı University is the local partner of CDP in Turkey with the sponsorship of Akbank and report sponsorship and scoring partnership of EY Turkey. The project was launched in Turkey in January 2010. Since 2011, companies included in the Borsa Istanbul 100 (BIST-100) index are invited annually to respond to CDP's information request. In addition, CDP Turkey has been working to increase voluntary responses to extend its mission and cover more companies.

While Sabancı University is responsible for implementing the CDP Climate Change programme, Turkey is also covered by other CDP programmes. In 2013, 15 Turkish supplier companies received information requests as part of the CDP Supply Chain programme. Five companies received information requests in 2013 as part of CDP Forest programme, formerly known as the Forest Footprint Disclosure Project (FFD). Istanbul Municipality and Kadıoğlu Village were two responding cities to the CDP Cities questionnaire in 2013. No companies from Turkey received information requests as part of the CDP Water programme until now.

Among the 722 international investor signatories to CDP's Climate Change programme in 2013, there were eight from Turkey: Ak Asset Management, Akbank T.A.Ş., Arma Asset Management, T. Garanti Bank, Industrial Development Bank of Turkey (TSKB), Logos Asset Management, Groupama Pension Fund and Groupama Insurance Fund. Five of them, Ak Asset Management, TSKB, Logos Asset Management, Groupama Pension Fund and Groupama Insurance Fund are signatories to the CDP Water programme as well.

### Turkey Specific Challenges

In 2012, the Kyoto Protocol was extended until 2020. Under the new commitment period, Turkey is not bound by emissions reduction targets. Lack of commitment by the government poses challenges for the private sector companies to set targets to minimize their emissions.

# 65%

**Response rates from BIST-100 companies increased significantly by 65% from 17 in 2012 to 28 in 2013.**

Business group structures pose another challenge in Turkey in terms of emissions reporting. As most group companies functioning in emission intensive industries remain unlisted, listed companies are not fully representative of Turkey's private sector. Therefore, CDP Turkey aims to increase voluntary responses from non-BIST 100 companies and unlisted companies to encourage better disclosure in emission intensive industries. Moreover, CDP respondents are expected to stand out in Borsa Istanbul (BIST)'s new Sustainability Index which will be launched in 2014.

### Responses to CDP in 2013

In 2013, CDP requested climate change information from BIST-100 companies, and also extended invitations to companies that were included in BIST-100 and have responded to the questionnaire in previous years. CDP Turkey 2013 Climate Change report presents the progress achieved by responding companies in reducing emissions, responding to climate-related risks and opportunities, and mobilizing influence to manage climate change. Key findings are summarized on the right page.

In summary, in spite of growing interest and commitment from many of the leading companies in Turkey, overall, business needs to do more, and more quickly, to seek ways to reduce emissions whilst not jeopardizing future business growth. The more proactive Turkish companies will be best placed to take advantage of the opportunities and to mitigate the risks involved in making the transition to a low-carbon economy.

### Scoring in 2013

In 2013, company responses in Turkey were assessed by EY Turkey both for disclosure and performance, according to the CDP scoring methodology.

Climate Disclosure Leaders in Turkey are the companies that achieved a score within the top 10% of the total population of responding companies. Climate Performance Leaders in Turkey are the companies that are in Band B, as there are no companies in Band A. Further details of the scoring methodology and rankings are presented in Table 2 and 3 on pages 18 and 19.

**Improved disclosure:**

Companies in Turkey achieved significant progress in measuring and reporting their emissions.

**Expected progress in external verification and risk management.****Lack of substantial action to reduce emissions:**

Companies are falling short on taking action to cut emissions from business operations.

• **65% increase in BIST-100 response rate to CDP:** Response rates from BIST-100 companies increased significantly from 17 in 2012 to 28 in 2013. This year, 39 Turkish companies in total responded to CDP including non-BIST-100 respondents, marking the highest response rate to CDP Turkey since 2010.

• **Reluctance to report publicly:** 10 out of the 26 direct BIST 100 respondents chose non-public disclosure. Although these levels represent an improvement in terms of transparency from 2012 (only six out of 15 direct respondents were public), private companies continue to be reluctant to report publicly.

• **Improved emissions reporting:** In 2013, 32 (89%), representing an increase from 2012 (80%) of total respondents reported their core emissions (Scope 1 and Scope 2).

• **Lack of external verification despite plans for a regulatory framework:** Levels of external verification and assurance remain low at 25% from total responses and 31% amongst the BIST 100 respondents. Interest in carbon verification and assurance is growing in Turkey and is expected to increase further in the coming years given the Government's plans to establish a regulatory framework for an MRV system in the light of growing stakeholder demand for robust carbon data.

• **Early stages in managing climate-related risks despite high level responsibility assigned to managing climate-related issues:** 83% of this year's total respondents report they have assigned board-level or senior management responsibility to managing climate change-related issues. However, only 65% report that they have processes for managing climate change risks to their businesses. Many leading companies are still at an early stage in dealing with their climate change risks.

• **Targets are insufficient:** Only 50% of companies have targets for reducing emissions from their core operations. More should be done to decouple business growth from emissions growth as Turkey's economy is expected to grow in the near future and a significant portion of BIST-100 respondents (eight out of 21 companies with more than one year's emissions data) reported an increase in their emissions.

• **Achieved reductions in emissions:** On the positive side, 11(39%) of the BIST 100 companies reported that they had managed to reduce core emissions from the prior year in absolute terms, mainly due to their emission reduction activities.

### Climate Disclosure Leaders in Turkey (in alphabetical order)

Coca-Cola İçecek A.Ş.  
Duran Doğan Basım ve Ambalaj A.Ş.  
Türkiye Sınai Kalkınma Bankası A.Ş.  
Türk Telekomünikasyon A.Ş.

### Climate Performance Leaders in Turkey (in alphabetical order)

Akbank T.A.Ş.  
Arçelik A.Ş.  
Coca-Cola İçecek A.Ş.  
TAV Havalimanları Holding A.Ş.  
Türkiye Sınai Kalkınma Bankası A.Ş.  
Vestel Beyaz Eşya Sanayi ve Ticaret A.Ş.  
Zorlu Doğal Elektrik Üretimi A.Ş.

## Key Trends in Turkey

Climate change will hit a point of no return if greenhouse gas emissions continue rise at their current rate. Therefore it is important for countries to reach an international agreement, to set legally binding emission reduction targets and to start working towards meeting these targets.

The Climate Change Department, which was established under the Ministry of Environment and Urbanization in 2010, was merged with Air Management Department on 1 February 2013. During the merger, the Climate Change Adaptation Program was also closed.

Forty-nine new coal plants are proposed in Turkey in 2012, which places the country among the top four countries with coal plants in the world following China, India, and Russia. Furthermore, the Ministry of Energy declared 2012 the year of coal in Turkey. Turkey did not report any reduction targets in the second commitment period under the Kyoto Protocol. Effective strategies are required for reducing Turkey's dependence on fossil fuels.

Turkey has a significant potential for solar and wind energy production, which could reduce dependence on fossil fuels. However, the percentage of renewable energy in electricity production is only 2.6%<sup>1</sup>, which means that Turkey's renewable energy potential is not being utilized. Renewable energy and energy efficiency strategies should be developed to reduce Turkey's foreign energy dependency.

National and international organizations, experts, private sector and non-governmental organizations expect Turkey to announce emissions reduction targets and initiate activities to establish a low carbon development strategy. In particular, energy and transportation strategies for 2023 should be revised in support of renewable energy and energy efficiency strategies. It is emphasized that a transparent and participatory process is required for such revisions where stakeholder views should be taken into account. These strategies should not only include energy and industry sectors, but also agriculture, waste and building sectors.

### International Developments

#### United Nations Climate Change Conference – Doha (COP 18)

The 2012 United Nations Climate Change Conference was the 18th annual session of the Conference of the Parties (COP), and took place in Doha-Qatar from November 26th to December 7th.

What were the key decisions at Doha talks? The Kyoto Protocol was extended until 2020. But the new Kyoto phase covers only 15% of the world's greenhouse gases. Countries bound by emissions reduction targets during this second phase include the European Union (EU) countries, Switzerland, Norway, Ukraine, and Australia, while certain large emitters previously bound by targets declined to take on new reduction commitments (Russia, Canada, New Zealand and Japan) and the United States remains outside. The

Protocol still does not require developing countries, including those who have the highest emissions (e.g. China, India) to make emissions cuts. The EU has already reached its own target to reduce emissions by 20% by the year 2020.

The Kyoto Protocol's Market Mechanisms - the Clean Development Mechanism (CDM), Joint Implementation (JI) and International Emissions Trading (IET) will continue as of 2013 for all developed countries that have accepted targets for the second commitment period.

Governments have agreed to speedily work toward a universal climate change agreement covering all countries from 2020, to be adopted by 2015. They also agreed to find ways to scale up efforts before 2020 beyond existing pledges to curb emissions so that the world can stay below the agreed maximum two degrees Celsius temperature rise. Elements of a negotiating text are to be available no later than the end of 2014, so that a draft negotiating text is available before May 2015. The UN Secretary General Ban Ki-moon announced he would convene world leaders in 2014 to mobilize the political will to help ensure the 2015 deadline is met.

Doha addressed a key concern of developing countries by agreeing to establish institutional arrangements, such as an international mechanism, to address loss and damage associated with the impacts of climate change in particularly vulnerable developing countries. The arrangements will be established at the UN climate change conference to be held at the end of 2013 in Warsaw. In Doha, governments confirmed a United Nations Environment Programme (UNEP)-led consortium as host of the Climate Technology Center (CTC), for an initial term of five years. Developed countries have reiterated their commitment to deliver on promises to continue long-term climate finance support to developing nations, with a view to mobilizing 100 billion USD both for adaptation and mitigation by 2020. Germany, the UK, France, Denmark, Sweden and the EU Commission announced concrete finance pledges in Doha for the period up to 2015, totalling approximately US\$6 billion.

Levent Çakıroğlu, President of Durable Goods Group of Koç Holding A.Ş. and Arçelik A.Ş. General Manager, represented Turkey as the Term Spokesman of Climate Change Leaders' Group in the Summit, third of which was held this year. Çakıroğlu spoke in the panel titled "Resource Efficiency: Creating More with Less", where Christiana Figueres, the Executive Secretary of the UN Framework Convention on Climate Change, Connie Heidegard, EU Commissioner for Climate Action, Paul Simpson, CEO of CDP were also speakers. The role and leadership of the private sector for resource efficiency, climate friendliness and green development were discussed in the panel.

Between 1990 and 2010, Turkey's GHG emissions increased by 115%, leading the world in relative increase in GHG emissions within the given time period. Furthermore, Turkey did not announce any reduction

<sup>1</sup> TETC, Electricity Generation - Transmission Statistics of Turkey, 2013

targets. For all of these reasons, Turkey was heavily criticized and was given the Fossil of the Day award by GermanWatch, an organization which calculates climate change indices for all the countries and ranks them according to their performance. The conference outcome for Turkey was to protect its special position, and it is most likely that Turkey can make use of the financial and technical support mechanisms for developing low carbon development strategies.

### **Government Response to Climate Change On-going Projects**

#### *Instrument for Pre-Accession Assistance (IPA) - Support to Mechanism for Monitoring Turkey's Greenhouse Gas Emissions*

Under the UNFCCC and its Kyoto Protocol, Turkey is obliged to report the country's GHG emissions annually. This project, supported by the EU, aims to assist Turkey in national-level GHG emissions monitoring and reporting. The project's objectives include improving data quality and technical capacity for preparing better GHG projections and National Communication reports; implementing capacity building and training programmes; improving legal and institutional situations to set up an appropriate national system for preparing annual National Inventory Reports.

Developing a national measurement, reporting and verification (MRV) system which is in line with the revised EU system is one of the key objectives of the project. An MRV system will provide Turkey with the tools to effectively develop and implement climate change policy, while enhancing public access to and awareness of climate change information.

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

This project will also assist Turkey to fulfill its UNFCCC obligations, specifically to prepare its Second National Communication (SNC). Through the SNC preparation process, the project will aim to link climate change studies to the wider national development agenda. It will also address the gaps that were identified during the UNFCCC In-Country Review of the First National Communication. The preparation of the Second National Communication is expected to enhance general awareness and knowledge on climate change-related issues in Turkey as well as strengthen Turkey's technical and institutional capacities. This will enhance Turkey's ability to take climate change issues into account in national planning and policy processes.

#### *Partnership for Market Readiness (PMR) – World Bank*

The World Bank's PMR initiative aims to build capacity in developing countries for implementing new market-based instruments to cope with climate change. The Ministry of Environment and Urbanization in Turkey received a grant of US\$3 million from the initiative. Turkey will carry out capacity building projects and implement pilot projects focusing on systems for MRV processes and market based schemes.

#### *Increasing Awareness of Climate Change Impacts and Adaptation to Climate Change*

The aim of the project which is supported by the Ministry of Environment and Urbanization, is capacity building in national and regional organizations and creating awareness about the impacts of climate change and adaptation through dissemination of training for the management of climate change risks in Turkey's urban, rural and coastal areas.

TÜBİTAK - Turkish Industrial Management and Administration Institute (TÜSSİDE) coordinates the project, which focuses on four regions: Marmara, Aegean Region, Black Sea Region, and the Central Anatolia Region. As part of the project, climate change impacts and adaptation awareness workshops, science camps for seventh grade students, and seminars for teachers will be organized.

#### *Turkey's National Climate Change Action Plan (NCCAP) – Monitoring System*

The NCCAP (2010-2020) is the essential roadmap of Turkey for implementation of the National Climate Change Strategy. The NCCAP sets clear objectives for both mitigation and adaptation aspects of climate change.

In 2013, 'Monitoring and Evaluation Process' was established within the scope of NCCAP. This process is supported by an 'Electronic NCCAP Monitoring System', which became operational in January 2013. The Electronic Monitoring System opened to the use of institutions from previously identified sectors to submit emissions data. Submissions will be evaluated each year and annual 'NCCAP Monitoring and Evaluation Report' will be published and presented to the 'Coordination Board on Climate Change' (CBCC) to identify the problems of current system and create solutions for a better climate change strategy.

### **Regulatory Developments**

#### *Regulatory Framework on 'Monitoring GHGs Emissions'*

The Regulatory Framework on 'Monitoring GHGs Emissions' was published by Ministry of Environment and Urbanization in the official gazette on 25 May 2012. This is an important step toward a MRV System in Turkey.

The regulation covers the majority of national GHG emissions caused by combustion of fuels. It will institute monitoring of emissions at the installation-level from the steel, ceramic, cement, pulp and paper and glass production sectors. Its scope is expected to capture some 1500 installations and  $\pm$  50% of national GHG emissions.

Operators subject to the regulations will be required to monitor GHGs arising from their facilities and prepare a GHG monitoring plan for this purpose, which will then be sent to the Ministry for approval. Furthermore, they will be required to submit an annual GHG emissions

reporting plan to the Ministry by the end of each April for the previous calendar year's GHG emissions. Accredited verification institutions shall verify these plans. Operators are expected to submit their initial GHG monitoring plans by June 2014, and will be required to start submitting verified annual GHG emissions reports by 2016.

Detailed procedures for the implementation of the regulation are still under development. The Ministry is expected to issue communiqués to determine other principles and procedures for the monitoring and reporting obligations and authorization of the verification institutions.

### Strategies and Plans

Previous CDP Reports presented details of Turkey's National Climate Change Action Plan (2011) and Sustainable Development Plan (2012). Turkey's most recent strategy document, The Tenth Development Plan of Turkey is presented below.

#### *The Tenth Development Plan of Turkey*

The Tenth Development Plan of Turkey was adopted and came into effect in July 2013 and covers the period between 2014 and 2018. The plan highlights achieved emission savings over the period 1990-2012, and acknowledges environmental risks arising from economic development, population growth and consumption habits. In response, the plan suggests adoption of green growth strategies, development of policies and financing mechanisms to promote sustainable development including current and planned regulatory framework on emissions. Furthermore, the plan states that Turkey is still an energy-intensive economy despite achieved energy efficiency improvements. Details on Turkey's program on improving energy efficiency and Turkey's Energy Efficiency Strategy for 2012-2023 are summarized.

### Turkey's Emissions

According to the Turkish Statistical Institute's

Greenhouse Gas Emissions Inventory, over 1990-2011, total GHG emissions in Turkey increased to 422.4 million metric tons CO<sub>2</sub>e in 2011. This is an increase in CO<sub>2</sub>e terms of 124% compared to emissions in 1990. CO<sub>2</sub> emissions per capita stood at 5.71 metric tons in 2011, compared to 3.42 metric tonnes per capita in 1990. In 2011, the highest share of CO<sub>2</sub> emissions originated from the energy sector at 86%, with the remaining 14% originating from industrial processes.

### Carbon Markets in Turkey

In 2011, the market value of voluntary carbon markets worldwide rose to US\$576 million and the traded volume of credits equated to was 95 Mt CO<sub>2</sub>e. Turkey is a key player in the voluntary carbon market with 218 projects, 14 Mt CO<sub>2</sub>e trade volume, and US\$16.3 million market value.

The 2011 National Climate Change Action Plan reports that Turkey aims to carry out studies to establish a mandatory carbon market in Turkey by 2015. Turkey will get a US\$ 3 million grant from the World Bank PMR Initiative to carry out capacity building activities and pilot market instruments, which were identified by the regulation on Monitoring of Greenhouse Gas Emissions (2012).

Twenty-two Technical Working Groups have been established under the CCBC to carry out sector specific activities. A Carbon Markets Technical Working Group was established under CBCC and coordinated by the Ministry of Environment and Urbanization. It works on developing policies and strategies for enabling Turkey's participation to local and global carbon markets, as well as establishing and managing national carbon markets.

**Table 1 Projects developed in Turkey within the voluntary carbon markets<sup>1</sup>**

| Type              | Number of projects | Annual GHG Reduction (metric tons CO <sub>2</sub> e) |
|-------------------|--------------------|------------------------------------------------------|
| Hydroelectricity  | 124                | 7,181,723                                            |
| Wind              | 64                 | 5,603,468                                            |
| Bio-gas           | 6                  | 514,789                                              |
| Geothermal        | 6                  | 405,309                                              |
| Energy Efficiency | 5                  | 151,432                                              |
| Landfill Gas      | 13                 | 2,473,093                                            |
| <b>Total</b>      | <b>218</b>         | <b>16,329,814</b>                                    |

<sup>1</sup> Ministry of Environment and Urbanization, January 2013

## **Role of Institutions**

### **United Nations Development Program (UNDP) Turkey**

Some of the on-going climate change related projects include: Enabling Activities for the Preparation of Turkey's Second National Communication to the UNFCCC, Capacity Building on Energy Projection Modelling, Market Transformation of Energy Efficient Appliances in Turkey, Improving Energy Efficiency in Industry in Turkey

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

EBRD is providing finance for lending to Turkey's small and medium-sized enterprises (SMEs) wishing to improve energy efficiency or invest in renewable energy projects. Since January 2011, The Turkish Mid-size Sustainable Energy Financing Facility (MidSEFF) has financed 28 sustainable energy projects, which are helping to reduce CO<sub>2</sub> emissions by 1.2 million tonnes per year. Enerjisa Bares Wind Power Plant in Balıkesir, the biggest wind farm in Turkey built with syndicated loan arranged by the EBRD, started producing electricity in May 2013.

### **International Finance Corporation (IFC)**

In fiscal year 2012, IFC invested \$450 million and mobilized \$130 million in 13 projects in priority areas in Turkey. Those include exports, MSMEs, renewable energy, energy efficiency, cleaner production, energy security, health, infrastructure, trade finance and corporate expansion. With the new Country Partnership Strategy (2012-2015), the IFC plans to invest in energy efficiency, renewable energy, municipalities, and poorer regions of Turkey. With a focus on renewables, the financing has supported five projects across the country, including the construction of gas, hydro and wind power plants.

### **World Bank (WB)**

The energy sector represents one of the largest portions of the World Bank's financing portfolio in Turkey, at about 25 percent. The Environmental Sustainability and Energy Sector Development Policy Loan (ESES DPL) series has been playing a central role in supporting the energy sector, focusing on enhancing private sector clean technology investments and on integrating climate change considerations in key sector policies and programs. Through the WB, Turkey is participating in the Partnership for Market-Readiness to help implement a GHG MRV system in the power and industrial sectors, and prepare for a possible use of a market - based instrument in the future to mitigate the impact of climate change. Advanced preparations are underway to apply the EU Instrument for Pre-Accession Assistance through a WB technical assistance operation to maintain energy reform momentum and strengthen institutional capacity in the areas of power and gas market development, energy efficiency, and renewable energy integration.

### **Agence Française de Développement (AFD)**

AFD offers loans to industrial enterprises and SME's for their energy saving investments and supports renewable energy development via partner banks in Turkey. AFD also contributes to climate protection by supporting the Turkish Government to develop sustainable forest management and climate change adaptation. Finally, AFD is supporting municipalities such as Gaziantep to increase access to basic services for communities and to support their sustainable development.

### **WWF Turkey**

Operations fall under 3 main pillars: conserving our nature, tackling climate change and changing the way we live. WWF-Turkey's priority areas are Konya Closed Basin, Büyük Menderes Basin, Lake Eğirdir, Kaş-Kekova Specially Protected Area, Küre Mountains and Eastern Blacksea Region. WWF published Turkey's Ecological Footprint Report in 2012. WWF Turkey launched Turkey's Life Grant (Türkiye'nin Canı) campaign to boost awareness of Turkey's bio-diversity and spread nature conservation activities nationwide.

## 2013 Climate Leaders

Table 2 **Turkey's Climate Disclosure Leaders in 2013<sup>1</sup>**

| Company                             | Sector                     |
|-------------------------------------|----------------------------|
| Coca-Cola İçecek A.Ş.               | Consumer Staples           |
| Duran Doğan Basım ve Ambalaj A.Ş.   | Materials                  |
| Türkiye Sınai Kalkınma Bankası A.Ş. | Financials                 |
| Türk Telekomünikasyon A.Ş.          | Telecommunication Services |

2013, companies were assessed both on the comprehensiveness of their response (Climate Disclosure Score) and for performance (Climate Performance Score). All companies with a sufficiently high disclosure score received a performance band. The performance bands provide an indication of the extent to which companies are demonstrating action to support integrated climate change strategies.

### Disclosure Scores

The disclosure score reflects the comprehensiveness of a company's response in terms of the depth and breadth of its answers. The score is normalized to a 100-point scale and covers issues such as:

- The extent to which a company measures its carbon emissions
- The comprehensiveness of the information that it provides on climate-related actions
- The depth of information given on the issues climate change presents to the business
- Whether a company uses a third party for external verification of its data in order to promote greater confidence and usage of the data.

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

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

Generally, companies scoring within a particular range suggest levels of commitment to, and experience of, climate disclosure. Indicative descriptions of these levels are provided below for guidance only; data-users should read individual company responses to understand the context for each business.

**High (>70)** - Senior management understand the business issues related to climate change and are building climate related risks and opportunities into core business.

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

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

### Disclosure Scores in Turkey

In 2013 15 out of 36 companies scored over 70 (2012: 15 out of 28 companies scored over 70). Eight of these were successful in getting disclosure scores over 80. This is a significant improvement from last year, where there were only three companies with disclosure scores above 80.

### Disclosure Leaders in Turkey

Disclosure Leaders in Turkey are the companies that achieved a score within the top 10% of the total population of responding companies.

<sup>1</sup> All companies are informed on their detailed disclosure and performance scores.

Table 3 **Turkey's Climate Performance Leaders in 2013<sup>1</sup>**

| Company                                  | Sector                 | Score |
|------------------------------------------|------------------------|-------|
| Arçelik A.Ş.                             | Consumer Discretionary | B     |
| Akbank T.A.Ş.                            | Financials             | B     |
| Coca-Cola İçecek A.Ş.                    | Consumer Staples       | B     |
| TAV Havalimanları Holding A.Ş.           | Industrials            | B     |
| Türkiye Sınai Kalkınma Bankası A.Ş.      | Financials             | B     |
| Vestel Beyaz Eşya Sanayi ve Ticaret A.Ş. | Consumer Discretionary | B     |
| Zorlu Doğal Elektrik Üretimi A.Ş.        | Energy                 | B     |

### Performance Scores

A performance band is a measure of the positive actions that the company has demonstrated through their CDP response. These include actions to promote climate change mitigation, adaptation and transparency. It is represented by a letter from A to E, (including an A-band). CDP acknowledges that the performance scoring process is evolving and recommends that investors review individual company disclosures in addition to performance rankings in order to gain the most comprehensive understanding of company performance.

All companies with a sufficient level of disclosure in their response received a performance band. The qualifying threshold to receive a climate performance score was a minimum climate disclosure score of 50. Disclosure scores lower than 50 do not necessarily indicate poor performance; rather, they indicate insufficient information to evaluate performance.

### How are performance points awarded?

Performance points are awarded for actions considered to contribute to climate change mitigation, adaptation and transparency. Actions considered to be more fundamental to progress on combating climate change are awarded more points. External verification/assurance of emissions data is rewarded under the performance scoring as well as disclosure as it is considered that this can potentially give data-users greater confidence in the data, and so can help them to take positive climate actions based upon it. Verifying GHG data also signals the significance of climate change data in decision making process.

### The CDP 2013 climate performance bands

The climate performance score is given as a banded score. Indicative descriptions of the bands follow and are for guidance only. The drivers of any individual company score may vary across a number of different indicators however the same key actions need to be demonstrated across all sectors and geographies. As such, data-users should read individual company

responses to understand the context for each business. Care should be taken when comparing performance across companies.

**Band A (>85%)** - Fully integrated climate change strategy driving significant reduction in emissions due to climate change initiatives.

**Band B (>60%)** - Integration of climate change recognized as priority for strategy, not all initiatives fully established.

**Band C (>40%)** - Some activity on climate change with varied levels of integration of those initiatives into strategy.

**Band D (>20%)** - Limited evidence of mitigation or adaptation initiatives and no/limited strategy on climate change.

**Band E (>0%)** - Little evidence of initiatives on carbon management potentially due to companies just beginning to take action on climate change

No performance band is allocated below a disclosure of 50, as there would be insufficient information on which to base a performance score.

### Performance Leaders in Turkey

In 2013, there were no companies in band A (2012: none) and seven companies were in Band B. This is a significant improvement from last year, where there were only two companies in Band B. Turkey's Climate Performance Leaders in 2013 are the companies that are listed in Band B.

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

## Global Emissions Reporting:

### **A summary of current regional, national and multi-national legislation**

*Governments are increasingly transitioning from voluntary to mandatory reporting of GHG emissions and environmental risks. July 2013 saw the UK government legislate for mandatory reporting of GHG emissions by all quoted companies on the London Stock Exchange. CDP played a central role in ensuring these regulations passed, providing technical advice on the content of the regulations and seconding staff to the UK Department of Environment, Food and Rural Affairs to write the guidance that accompanied the regulations. Whilst other countries have similar reporting requirements in place, the UK regulations are unique in requiring companies to report on their GHG emissions globally, and to include details in their annual report.*

*Discussions are currently on going at EU-level for mandatory reporting of Environmental, Social and Governance information (including GHG emissions) to be included in companies' end of year reports. This legislation would affect all large EU companies with more than 500 employees, totalling some 18,000 companies across the EU. This underlines the growing acceptance by policymakers that reporting of corporate sustainability impacts will lead to more effective management of these impacts, and CDP will continue to engage with European policymakers to support the introduction of non-financial reporting requirements. The inclusion of Article 47 on sustainability reporting in the outcome document of the Rio+20 UN Conference on Sustainable Development also demonstrates increased recognition of corporate sustainability at the international level. CDP is working hard to transform this into long lasting policy change.*

## BIST-100 Snapshot

Responding companies:

28

>70 disclosure score respondents:

8

Performance B band respondents:

5

Response and Scoring Summary<sup>1</sup>

Integrate climate change into business strategy:

77%

Provide incentives for management of climate change:

69%

Set an emissions reductions target:

48%

Climate Change Management & Performance

### Top risks:

- ▼ Reputation
- ▼ Change in precipitation extremes and droughts
- ▼ Change in mean temperature
- ▼ International agreements
- ▼ Changing consumer behaviour
- ▼ Carbon/fuel/energy taxes and regulations

### Top opportunities:

- ▼ Changing consumer behaviour
- ▼ Cap and trade scheme
- ▼ Reputation
- ▼ Change in temperature extremes
- ▼ International agreements

Risks & Opportunities

Reported Scope 1 and Scope 2 emissions:

85%

Reported Scope 3 emissions:

42%

Scopes 1 and 2 verification:

31%

Emissions Reporting

Reported absolute targets:

38%

Reported intensity targets:

23%

Reported absolute and intensity targets:

15%

Emission Reduction Targets

<sup>1</sup> Analyses are based on 26 BIST-100 companies who have directly responded to CDP 2013 Climate Change Questionnaire.

## Company Responses Overview

In 2013, overall 39 companies responded to CDP. 26 BIST 100 companies responded to CDP with an additional two companies responding via their parent company (Figure 1). This year there were also 10 Other Reporting Companies (ORCs) (2012: 13) that responded directly to CDP and one other respondent via a parent company as shown in Figure 1.

The BIST 100 total response rate has increased 65% in 2013 compare to 2012 and is the highest response rate since the CDP was launched in Turkey in 2010. However, some of this increase relates to changes in market capitalisation with five of last year's voluntary respondents (or 'Other Reporting Companies') amongst this year's BIST 100 respondents. Finally, in 2013 two of the BIST 100 respondents (2012: 2) and one of the ORCs (2012: 2) answered through a parent company (i.e. response 'SA' – 'see another') and as a result, their responses have not been included in the analysis to this report but they are still shown in Table 1 in order to give a more complete picture of the responses to this year's CDP questionnaire.

Overall, as Figure 1 shows, the total number of responses from the BIST 100 and Other Reporting Companies has increased to 39 from 32 companies in 2012, suggesting that there is increasing awareness within the business sector in Turkey of the importance of climate change and Greenhouse Gas (GHG) information to investors and to other stakeholders more broadly.

The response rate in Turkey is comparable with some of the major emerging economies such as India (India 200) and China (China 100), at 27% and 19% respectively in 2013. Nevertheless, its response rate currently lags behind other emerging companies such as Brazil (Brazil 100) and South Africa (JSE 100) at 56% and 83% respectively for 2013.

The full list of this year's respondent companies from the BIST 100 and the ORCs are shown in Tables 4 and 5 respectively.



*We believe that climate change is a serious challenge that requires a comprehensive and global response from all sectors of society. To address it at VESTEL, we are committed to measuring, transparently reporting, and reducing the carbon footprint of our own operations. Within the commitment to environmental sustainability, we are taking our own steps to proactively reduce energy and water demand, and greenhouse gas emissions from our operations. We are also pursuing opportunities with our R&D and partners to increase the energy efficiency of our products. The Carbon Disclosure Project that we're pleased to be part of it, is an opportunity for us to reflect our transparency and commitment.*

**Sertaç Beller**  
General Manager  
Vestel Elektronik A.Ş.



**Figure 1** Response Rates

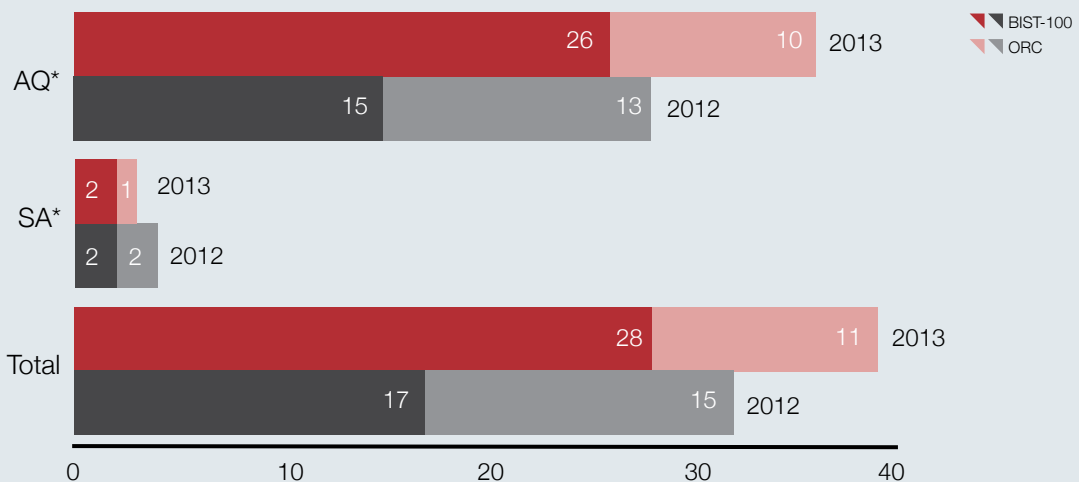


Table 4 **BIST Respondents in 2013**

| Company                                                 |                                                         |
|---------------------------------------------------------|---------------------------------------------------------|
| Akbank T.A.Ş. (**)                                      | Sabancı Holding A.Ş.                                    |
| Akenerji Elektrik Üretim A.Ş.                           | Şekerbank T.A.Ş.                                        |
| Alarko Holding A.Ş.                                     | T.Garanti Bankası A.Ş. (**)                             |
| Albaraka Türk Katılım Bankası A.Ş.                      | T.Sınai Kalkınma Bankası A.Ş.                           |
| Arçelik A.Ş.                                            | T.Şişe ve Cam Fabrikaları A.Ş.                          |
| Bagfaş Bandırma Gübre Fabrikaları A.Ş.                  | Tav Havalimanları Holding A.Ş.                          |
| Beşiktaş Futbol Yatırımları Sanayi ve Ticaret A.Ş.      | Türk Ekonomi Bankası A.Ş.                               |
| Boynér Büyük Mağazacılık A.Ş.                           | Türk Telekomünikasyon A.Ş.                              |
| Brisa Bridgestone Sabancı Lastik Sanayi ve Ticaret A.Ş. | Türkiye Halk Bankası A.Ş.                               |
| Çelebi Hava Servisi A.Ş.                                | Türkiye Vakıflar Bankası T.A.O.                         |
| Coca-Cola İçecek A.Ş.                                   | Vestel Elektronik Sanayi ve Ticaret A.Ş.                |
| İhlas Ev Aletleri İmalat Sanayi ve Ticaret A.Ş.         | Zorlu Enerji Elektrik Üretim A.Ş.                       |
| Kardemir Karabük Demir Çelik Sanayi ve Ticaret A.Ş.     | Mondi Tire Kutsan Kağıt ve Ambalaj Sanayi A.Ş. (SA) (*) |
| Petkim Petrokimya Holding A.Ş.                          | Trakya Cam Sanayii A.Ş. (SA) (*)                        |

Table 5 **Other Reporting Companies (ORCs) in 2013**

| Company                                |                                          |
|----------------------------------------|------------------------------------------|
| Akçansa Çimento Sanayi ve Ticaret A.Ş. | Vestel Beyaz Eşya Sanayi ve Ticaret A.Ş. |
| Duran Doğan Basım ve Ambalaj A.Ş.      | Yüksel İnşaat A.Ş.                       |
| Ekoten Tekstil Sanayi ve Ticaret A.Ş.  | Yünsa Yünlü Sanayi ve Ticaret A.Ş.       |
| Noor Fındık Sanayi ve Ticaret Ltd Şti. | Zorlu Doğal Elektrik Üretimi A.Ş.        |
| Orduspor Sportif Faaliyetler A.Ş.      | Tesco KİPA (SA)*                         |
| Sun Tekstil Sanayi ve Ticaret A.Ş.     |                                          |

(\*) 'SA' companies are not included in this analysis.

(\*\*) These companies are included in this analysis but were scored at CDP Global level since they are included in CDP 2013 Global 500 Report.

**Governance**

**Involvement of senior management**

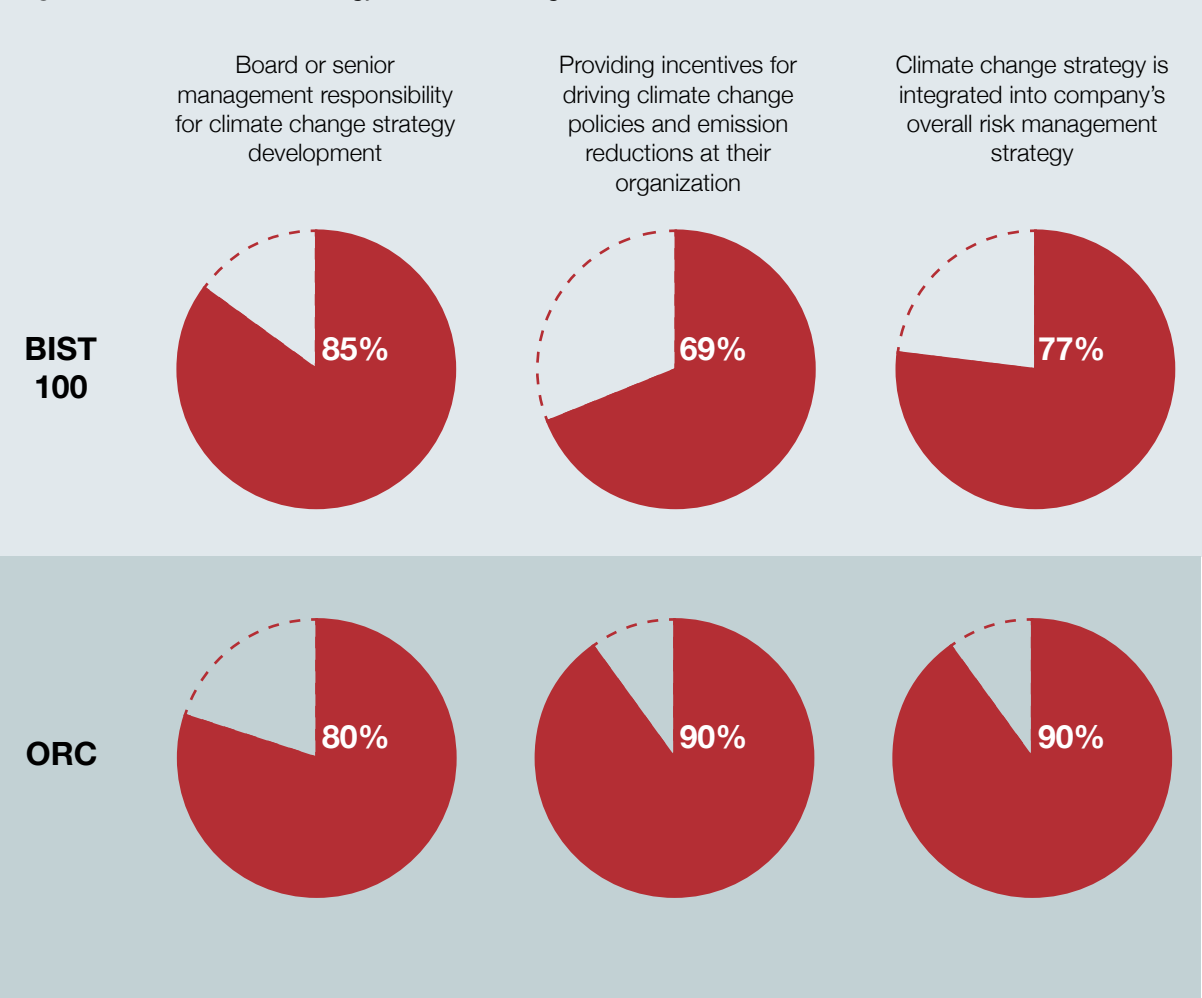
As shown in Figure 2, 22 (85%) of this year's BIST 100 respondents state that they have appointed a senior level committee, an executive body or a senior manager to develop their climate change strategy. This finding is broadly consistent with the trend in 2012 when 93% of companies indicated that a senior representative had been appointed for climate change, albeit from a smaller sample of 15 direct respondents. However, of the 22 BIST 100 respondents citing at least senior management involvement in 2013 only 11 specifically cite the integration of climate change directly to Executive level with a Board level representative ultimately accountable for climate change. This relatively low response rate suggests that many of the largest companies in Turkey are still at a relatively early stage in terms of embedding climate change strategy in their organisation. The findings that relate to climate change governance levels from the BIST 100 respondents are comparable with those from this year's ORCs where 80% of respondents (2012: 69%) reported having appointed a Board committee, executive body or senior manager to develop their climate change strategy.

As shown in Figure 2, 18 (69%) of this year's BIST 100 respondents report that they provided incentives for driving climate change policies and emission reductions at their organizations of which 12 (67%) provide monetary incentives, often in combination with other types of incentives. The response rate for incentivisation was higher amongst the ORCs at 90% albeit from a smaller sample of 10 companies, of which only four respondents reported providing monetary incentives again often in combination with other types of incentives.

**Strategy**

In 2013, 20 (77%) BIST 100 respondents report that climate change strategy is integrated into their overall corporate risk management processes, which is consistent with last year when an integrated strategy was reported by 12 out of 15 BIST 100 respondents. This year's BIST 100 findings are also broadly comparable with the responses from this year's ORCs, in which nine voluntary respondents (90%) stated they had integrated climate change strategy into their overall corporate and risk management processes.

**Figure 2** Governance and strategy for climate change in BIST-100 and ORC





*We as Zorlu Enerji view climate protection and carbon management as our priorities. For the last two decades, climate change and carbon crisis have not only affecting the natural environment and human health negatively, but have been imposing a threat on sustainable development as well. We are reinforcing our organization structure particularly against climate change, and developing various tools for risk management. CDP is a critical global mechanism that inspires our strategies in this area and help us to share the actions we take with the public.*

**Sinan Ak**  
General Manager  
Zorlu Enerji Elektrik Üretim A.Ş.



*Within the past decade we have been focusing on sustainability and energy efficiency in all aspects of our operations. Improving our sustainability performance has become part of our business strategy, as well as one of our key performance indicators. The contribution of our employees is the key success factor in making CCI one of Turkey's carbon performance leaders. We are proud to be a part of CDP Turkey, which has become an effective initiative in climate protection efforts.*

**Damian Gammell**  
CEO  
Coca-Cola İçecek



**Risk Management**

As shown in Figure 3, 65% of BIST 100 respondents state they have implemented processes for managing climate change risks impacting their organizations, either through integrating into their broader enterprise risk management processes (46%) or through a specific climate change risk management process (19%). This trend is consistent with the ORC responses this year where 60% of respondents report they have implemented processes for managing their organisation’s climate change risks. Overall, these findings around climate change risk management indicate little movement from last year, since in 2012 there was a higher rate of companies reporting they had implemented processes for managing their climate change risks (79%) but a smaller number of respondents.

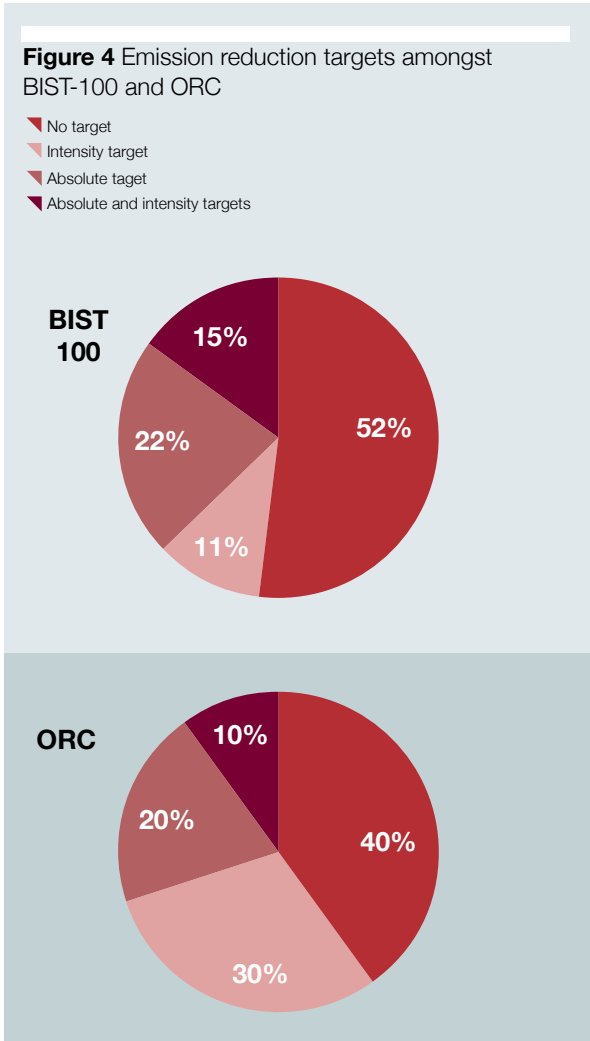
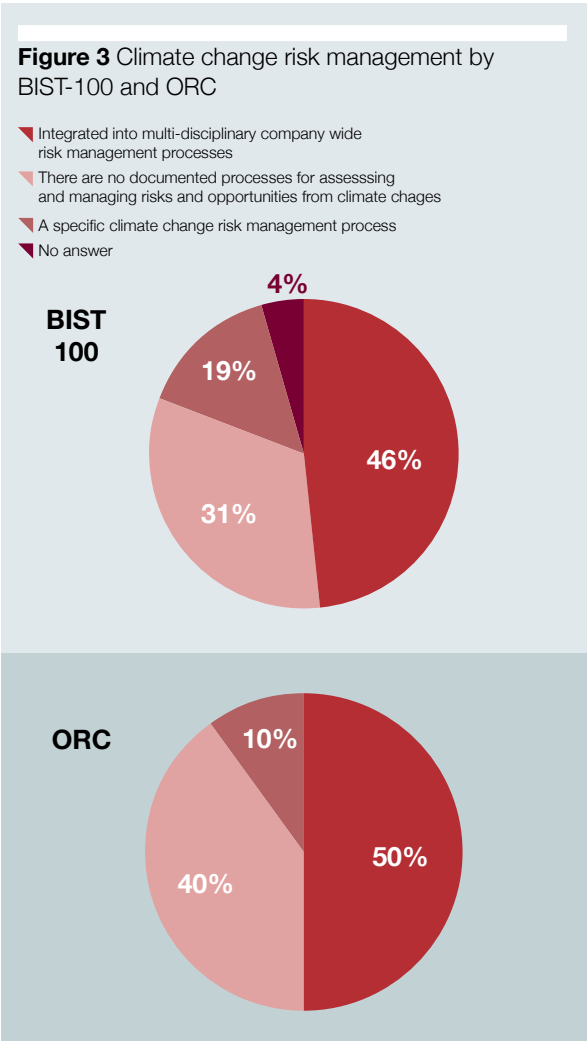
In addition, a relatively high proportion of BIST 100 respondents (31%) state they do not yet have any documented processes for dealing with climate change risks. This is despite 85% of respondents reporting that they have assigned management of climate change risks to senior management or a Board representative and 77% reporting climate change is integrated into

their overall corporate strategy and risk management processes, indicating that many companies are still at an early stage in terms of managing their climate change risks.

**Targets and Initiatives**

As indicated in Figure 4, 13 (52%) BIST 100 respondent companies report not having an emission reduction target, which is comparable with the prior year in which 8 out of 15 BIST 100 respondents stated they did not have a target at that time. Of the 12 respondents (48%) with a target in 2013, six reported an absolute target only with another four reporting having absolute and intensity targets. Of the respondents with absolute targets, 30% of those stated that their targets related only to Scope 3 emission activities, such as from business travel, but not from their core business operations.

As shown in Figure 4, 60% of this year’s ORCs reported having an emission reporting target though from a smaller sample of 10 companies. Of those with a target, three (30%) of the respondents reported an intensity target, two an absolute target and one stated having both absolute and intensity targets.





*Having integrated sustainability in our core business strategy, identifying and acting on climate change-related risks and opportunities constitute a continuous and major challenge at TAV. We strive to establish an interdisciplinary, inclusive and transparent process to create carbon-neutral airports, whilst aiming at producing a positive impact for the wider society. We believe only an orchestrated action by all stakeholders would succeed.*

**Sani Şener**  
CEO  
TAV Airports

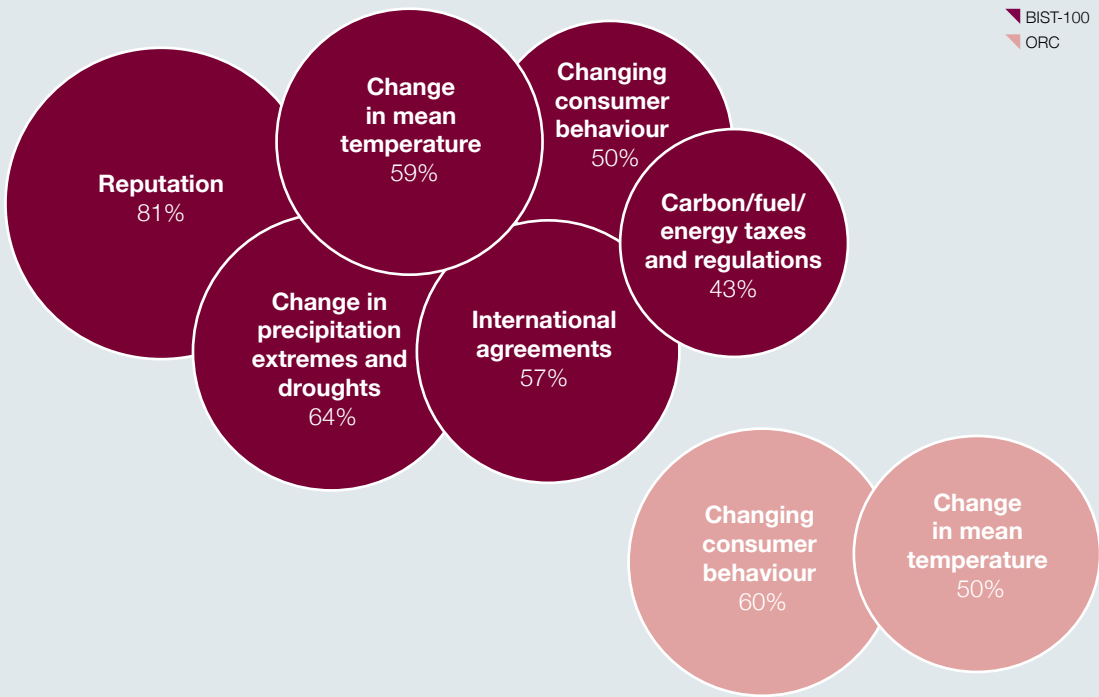


*Being Turkey's first carbon-neutral bank, TSKB has adopted the sustainability concept in economic, environmental and social dimensions and implemented a number of sustainability-related initiatives. In line with our efforts to switch to a low carbon economy for Turkey's sustainable development, we'll continue to support Carbon Disclosure Project and share our performance results and targets on carbon management.*

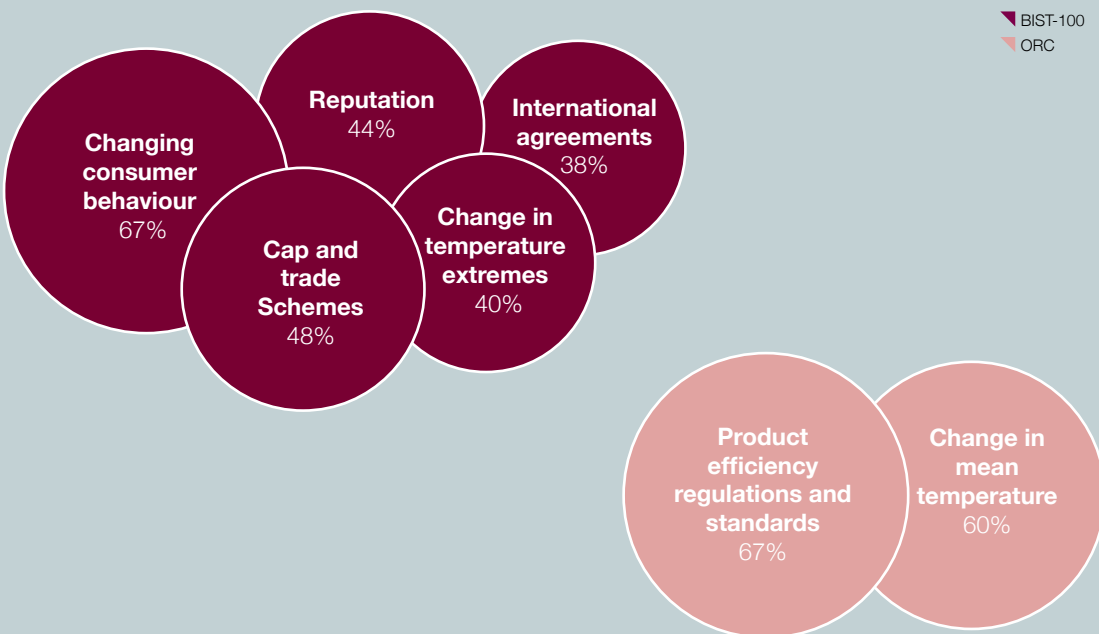
**Özcan Türkakın**  
CEO  
TSKB



**Figure 5** Percentage of companies selecting the most commonly reported risks<sup>1</sup>



**Figure 6** Percentage of companies selecting the most commonly reported opportunities<sup>1</sup>



<sup>1</sup> Percentages are based on number of companies that responded to each questions

## Communications

Stakeholders increasingly expect information on companies' climate change and GHG emissions policies to be made publically available and corporate communication in this area is being increasingly factored into investment decisions. Against this backdrop, a growing number of the largest companies in Turkey are now reporting on their climate change policies with 17 out of the 26 BIST 100 respondents (65%) providing data in other reports such as annual and sustainability reports. A similar trend is apparent from the ORCs with 60% reporting that they have communicated their climate change-related policies in areas other than through CDP.

## Climate Change Risks

The 23 BIST 100 companies that responded to this question all reported that they had identified climate change risks to their business, which is comparable with last year when 14 out of 15 BIST 100 respondents cited both regulatory and physical climate change-related risks as being amongst their significant business risks.

As Figure 5 shows, the principal risks to business in Turkey that were identified by this year's respondents included regulatory risks such as uncertainties over the impact of future international climate change agreements and the introduction of new carbon or energy taxes; physical risks from changes in temperature and precipitation and other key climate change-induced risks including damage to reputation and risks that consumer behaviour might be impacted, for example if climate change led to increased scarcity of key food supplies following reduced agricultural yields.

## Climate Change Opportunities

As well as risks, climate change also presents business in Turkey with opportunities for new products or services as is recognized by most of this year's respondents. For example, as Figures 6 shows, many respondents reported they had identified regulatory opportunities arising from climate change, which included opportunities to launch new green products in response to product labelling or energy efficiency regulation and the potential to benefit from a future cap and trade scheme in Turkey. Many BIST 100 respondents and ORCs also identified physical opportunities from climate change with the principal ones stemming from changes to temperature average and extremes.



*Turkey's leading communication and convergence technologies company Türk Telekom aims to turn the country into an information society. While investing on technology, infrastructure and human resources we also transform our products and services, office practices and work processes according to sustainability principles. We consider including all of our employees, their families, our suppliers and customers into this process as a part of its strategy.*

**Tahsin Yılmaz**  
CEO  
Türk Telekom



*In accordance with our 'Respects the Globe, Respected Globally' vision, we keep a sharp focus on resource efficiency and sustainability best exemplified by the wide range of energy and water efficient appliances we develop. In 2010, we have voluntarily moved to have our GHG emissions verified by an independent audit firm. We continue to support projects and initiatives against climate change in Turkey and abroad. As spokesman for the Turkish Climate Platform, we represented Turkey in World Climate Change conferences in Durban and Doha. In 2012, we received the "CDP Turkey Carbon Disclosure Leader" award. As a global organization, we will stay committed to the cause of sustainability.*

**Levent Çakıroğlu,**  
CEO, Arçelik A.Ş.  
President,  
Koç Holding Durables Goods





*As Vestel White Goods, we are proud of having a sustainable environmental system covering both our production and our products. We are aware of our responsibility towards society and our strategy includes innovative, energy efficient and low carbon investments. Not only does CDP allow us to talk about our existing activities to reduce our energy consumption and carbon footprint, but also it has challenged us to review all related risks and opportunities related to climate change. CDP raises the awareness about environmental issues in the global market and encourage the companies for developing sustainable strategies on climate change, energy efficiency and source utilization.*

**Nedim SEZER**

Executive Board Member  
Vestel Beyaz



### Emissions history

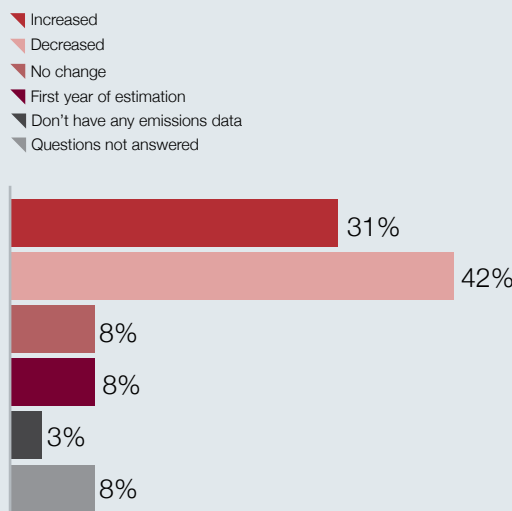
As Figure 7 shows, 31% of the BIST 100 respondents report an increase in their combined absolute Scope 1 and 2 emissions in 2013 despite many of these companies already having some emission reduction initiatives in place. Turkey's economy continues to exhibit strong growth and is increasingly carbon-intensive, indicating the challenge companies in Turkey face in decoupling economic growth from starting to decarbonise their operations.

Reporting on Scope 3 indirect emissions is currently at a very early stage and hence companies are yet to start assessing or reporting on many of their impacts across their value chains. For example, 35% of the BIST 100 respondents report not having any Scope 3 emissions data to compare. Scope 3 emissions are all indirect emissions that are not included in scope 2 that occur in the value chain of the reporting company, including both upstream and downstream. Examples include employee business travel and the emissions generated in products used by companies. Nevertheless, 38% of BIST 100 respondents state that they are able to compare some Scope 3 emission sources for 2013 with the prior year.

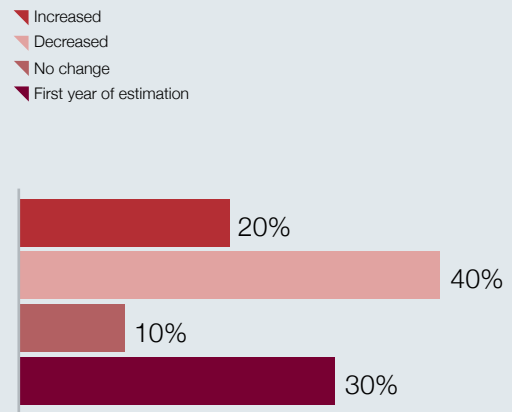
Current opportunities for emission trading for the BIST 100 respondents relate to participation in the voluntary carbon market in Turkey, which is currently an area of relatively low but growing interest for Turkish companies. In 2013, 11% of BIST 100 respondents reported they had participated in voluntary emission reduction activities with a further 23% stating they anticipated participating within the next 2 years.

As shown in Figure 8, 20% of ORCs report an increase in their combined Scope 1 and 2 absolute emissions this year while 40% report a reduction, mainly through their emission reduction activities.

**Figure 7** Change in absolute emissions from prior year (Scope 1 and 2) from BIST-100 companies



**Figure 8** Change in absolute emissions from prior year (Scope 1 and 2) from ORC



### External verification or assurance

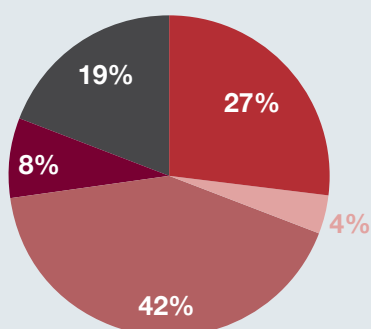
Globally, there is an increasing focus on mandatory emissions reporting requirements and potential market and fiscal policy measures, which place a high expectation on emissions' data being measurable, reportable and verifiable (MRV). Indeed, there is growing market demand not only from investors but also from other stakeholders including customers, regulators and non-governmental organisations for assured and reliable climate data. As a consequence, a growing minority of Turkish companies are following the global trend and seeking verification of their GHG data and/or assurance of their carbon and other material data in their sustainability reports. For example, in 2013, eight BIST 100 respondents (31%) reported that they have either obtained external verification or emissions of their Scope 1 and 2 emissions with the majority stating they had obtained reasonable assurance of their GHG assertion under ISO 14064-3 (Figure 9). This represents an increase from the prior year when only five out of 15 companies reported they had verification or assurance completed or underway for their Scope 1 and 2 emissions. Conversely, none of the voluntary respondents (ORCs) reported that they had yet obtained external verification or assurance in 2013 although 1 respondent reported that external verification or assurance was underway.

*Şişecam is pleased to re-participate in CDP, leading organization designed to manage sustainable environmental management. As required by its objective of sustainable growth, Şişecam has been providing significant progress and successful results in integration of energy and carbon management aspects into the corporate strategy. In this context, CDP has a significant role in announcing these improved efforts of Şişecam.*

**Prof. Dr. Ahmet Kirman**  
Vice Chairman and CEO  
Şişecam

**Figure 9** BIST-100 Respondents - Verification/assurance of Scope 1 and 2 emissions

- Third party verification or assurance complete
- Third party verification or assurance underway but not yet complete last years statement available
- No third party verification or assurance
- No emissions data provided
- Question not answered



*As Garanti Bank, we emphasize the management of not only the environmental impacts of our in-house operations, but also the indirect ones resulting from lending activities. For us, transferring our know-how on environmental risk management to our customers and supporting sustainable investments through products such as renewable energy loans are integral parts of our environmental management approach.*

**Ergun Özen**  
CEO  
Garanti Bank

## Key Findings

Although the response rate from the BIST 100 companies has increased sharply in 2013 from 17% to 28%, this increase has been skewed by changes in market capitalization, meaning that overall, total responses have shown a steady increase of 65%. Overall, the response rate from the BIST 100 companies continues to be low and may stem from concerns that disclosing non-mandatory information relating to a company's performance and strategy on climate change can put the company at a competitive disadvantage if peer companies are not being equally transparent.

Moreover, concerns around disclosure would seem to be supported by the low rate of public disclosure responses granted by companies responding directly to CDP. For example, this year 10 out of the 26 direct BIST 100 respondents selected a non-public disclosure though this is a more transparent score than last year when only six out of 15 direct respondents from the BIST 100 elected for their disclosure to be made publically available.

Indeed, the fact that this year 16 out of 26 BIST 100 respondents elected a public disclosure may indicate that there is a steadily increasing awareness of the benefits to businesses from reporting transparently on climate change. For example, communication of a company's climate change strategy and GHG reduction initiatives can enhance a company's reputation as a responsible corporate citizen. In addition, it can provide reassurance to investors that a company is well run and that it is taking proactive action to prepare for, and capitalize from, the uncertainties and opportunities posed by climate change. Furthermore, through the implementation of initiatives to reduce emissions, the organization is often able to achieve operational efficiencies that can result in significant cost savings. Similarly, through the development of new products and services companies may be able to generate new revenue streams.

Our analysis of this year's responses has identified some promising trends. Nearly all of this year's direct respondents from the BIST-100 and ORCs state they had placed their climate change strategy under the responsibility of senior management or a Board-level committee and that those made responsible are incentivized to achieve their organization's climate change objectives. In a similar vein, the overwhelming majority (80%) of all respondents report that they have fully integrated climate change into their broader corporate strategy. These findings around climate change governance are broadly comparable with last year's results. Nevertheless, many of the respondents report that they have yet to integrate climate change strategy directly to Board level discussion, indicating that companies in Turkey have scope for further improvement in this area. This finding also appears to be in line with the results from the risk management responses where despite the majority of respondents reporting that they had implemented procedures for managing their climate change-related risks, a third of all respondents stated

they had yet to document any processes for dealing with climate change risks.

The number of companies reporting targets for reducing their emissions from their operations (Scope 1 and 2 emissions) continues to be low and as many companies in Turkey continue to grow strongly they are faced with the fundamental challenge of needing to decouple this business growth from growth in their emissions. Nevertheless, around half of both the BIST 100 respondents and the ORCs with more than one year's emissions data reported that they had managed to reduce their combined Scope 1 and 2 emissions from last year, mainly due to emission reduction activities. Since nearly all companies continue to report significant regulatory risks from future carbon regulations and international agreements, those companies that have already put in place targets and initiatives to reduce emissions stand to obtain a competitive advantage over less well prepared peer companies that may be left behind. Reporting on Scope 3 indirect emissions is currently at a very early stage and hence companies are yet to start assessing or reporting on many of their impacts across their value chains.

The number of companies obtaining external verification or assurance of their emissions remains relatively low from both the BIST 100 respondents and the ORCs. Nevertheless, interest in carbon verification and assurance is growing in Turkey and is expected to increase further in the coming years given the Government's efforts to establish a regulatory framework for carbon and in the light of growing stakeholder demand for robust carbon data.



*Through its investments in renewable energy sources, Zorlu Doğal Elektrik Üretim is working to set an example to the industry for clean energy, which will become a necessity in the transition to a low-carbon economy. The climate change and carbon management policies of the Group play a significant part in why our growth strategy is shaped with domestic and renewable sources. We view CDP as a prestigious and reliable guide that strengthens the reporting and transparency aspects of our organization.*

**Selen Zorlu Melik**  
Board of Directors Member  
Zorlu Doğal Elektrik Üretimi A.Ş.



## EY Turkey Commentary

Zeynep Okuyan

Head of Climate Change and Sustainability Services in Turkey

We, as EY Turkey, are proud to be the report writing sponsor of the CDP Turkey Climate Change Report for the fourth consecutive year since CDP was launched in Turkey in 2010. Our role as report writing sponsor of CDP Turkey is just one of the many initiatives we, as a firm globally, are undertaking in order to help our clients transform into low carbon and low energy businesses, integrate their financial reporting with non-financial information and become part of the green economy.

As an emerging economy that continues to grow strongly, Turkey's energy needs continue to increase sharply. Achieving economic growth whilst making the transition to a low-carbon economy represents a key challenge to the increasingly carbon-intensive Turkish economy. Businesses in Turkey are expected to meet a range of stakeholder expectations that may not always be complimentary. For example, businesses need to be profitable and grow whilst minimizing their environmental footprint and making the transition to a low carbon economy. These competing pressures are evident from this year's responses to the CDP Turkey questionnaire. This year, more companies responded than ever before and most of the respondents report that they have implemented a climate change strategy that is integrated into their broader corporate strategy. Notwithstanding this, the core emissions (Scope 1 and Scope 2) from many of this year's respondents are reported as having still increased from last year, which underlines the challenge businesses in Turkey face in breaking the link between economic growth and emissions growth. Furthermore, leading companies are only just starting to assess and report on climate change issues in their broader value chains and there is clearly much more that business in Turkey needs to do to reduce emissions

We increasingly see from our clients globally and in Turkey the recognition that sustainability isn't just about the environment but that it makes good business sense that is fundamental to helping maintain growth on a long-term basis. Indeed, a survey that we conducted in 2013 in conjunction with the Boston College Center for Corporate Citizenship revealed that more than 50% of respondents issuing sustainability reports reported that those reports helped improve firm reputation. However, by embedding climate change and sustainability strategy into a corporate strategy, businesses stand to gain more than just an enhanced reputation. Frequently, it also helps identify opportunities to reduce costs, become more efficient, mitigate risks and develop new products or services.

In summary, we believe this year's CDP Turkey Climate Change Report will help to further raise awareness about the issues, opportunities and initiatives that climate change presents to businesses in Turkey. We also believe this year's report can help provide further stimulus for other Turkish companies to embark on a low carbon journey of their own in order to tap into the opportunities and mitigate the risks presented by climate change and sustainability more broadly, areas which are increasingly of fundamental importance to many businesses in Turkey.

## Turkey 2013: Response Status Table

### BIST-100 Companies

| Company                                             | 2013 Response Status | 2012 Response Status | Permission Status | Scope 1 | Scope 2 | Scope 3 | Targets  |
|-----------------------------------------------------|----------------------|----------------------|-------------------|---------|---------|---------|----------|
| <b>Consumer Discretionary</b>                       |                      |                      |                   |         |         |         |          |
| ARÇELİK A.Ş.                                        | AQ                   | AQ                   | NP                | D       | D       | D       | abs, int |
| BEŞİKTAŞ FUTBOL YATIRIMLARI SANAYİ VE TİCARET A.Ş.  | AQ                   | DP                   | P                 |         |         |         |          |
| BOYNER BÜYÜK MAĞAZACILIK A.Ş.                       | AQ                   | DP                   | NP                | D       | D       |         |          |
| BRİSA BRIDGESTONE SABANCI LASTİK SAN.VE TİC.A.Ş.    | AQ                   | AQ                   | NP                | D       | D       | D       | abs, int |
| DOĞAN YAYIN HOLDİNG A.Ş.                            | DP                   | DP                   | N/A               |         |         |         |          |
| DOĞUŞ OTOMOTİV SERVİS VE TİCARET A.Ş.               | NR                   | DP                   | N/A               |         |         |         |          |
| EGE ENDÜSTRİ VE TİCARET A.Ş.                        | NR                   | X                    | N/A               |         |         |         |          |
| FENERBAHÇE SPORTİF HİZMETLER SANAYİ VE TİCARET A.Ş. | NR                   | DP                   | N/A               |         |         |         |          |
| FORD OTOMOTİV SANAYİ A.Ş.                           | DP                   | DP                   | N/A               |         |         |         |          |
| GALATASARAY SPORTİF SİNİ VE YATIRIMLAR A.Ş.         | NR                   | NR                   | N/A               |         |         |         |          |
| GOODYEAR LASTİKLERİ T.A.Ş.                          | NR                   | NR                   | N/A               |         |         |         |          |
| HÜRRİYET GAZETECİLİK VE MATBAACILIK A.Ş.            | NR                   | DP                   | N/A               |         |         |         |          |
| İHLAS EV ALETLERİ İMALAT SANAYİ VE TİCARET A.Ş.     | AQ                   | NR                   | P                 | D       | D       |         | abs      |
| KARSAN OTOMOTİV SANAYİİ VE TİCARET A.Ş.             | NR                   | NR                   | N/A               |         |         |         |          |
| MENDERES TEKSTİL SANAYİ VE TİCARET A.Ş.             | NR                   | DP                   | N/A               |         |         |         |          |
| NET HOLDİNG A.Ş.                                    | NR                   | NR                   | N/A               |         |         |         |          |
| OTOKAR OTOMOTİV VE SAVUNMA SANAYİ A.Ş.              | NR                   | DP                   | N/A               |         |         |         |          |
| T.ŞİŞE VE CAM FABRİKALARI A.Ş.                      | AQ                   | AQ                   | NP                | D       | D       |         |          |
| TOFAŞ TÜRK OTOMOBİL FABRİKASI A.Ş.                  | NR                   | DP                   | N/A               |         |         |         |          |
| TRABZONSPOR SPORTİF YATIRIM VE TİCARET A.Ş.         | NR                   | NR                   | N/A               |         |         |         |          |
| VESTEL ELEKTRONİK SANAYİ VE TİCARET A.Ş.            | AQ                   | AQ                   | P                 | D       | D       | D       | abs      |
| <b>Consumer Staples</b>                             |                      |                      |                   |         |         |         |          |
| ANADOLU EFES BİRACILIK VE MALT SANAYİİ A.Ş.         | NR                   | DP                   | N/A               |         |         |         |          |
| BANVİT BANDIRMA VİTAMİNLİ YEM SANAYİİ A.Ş.          | NR                   | DP                   | N/A               |         |         |         |          |
| BİM BİRLEŞİK MAĞAZALAR A.Ş.                         | DP                   | DP                   | N/A               |         |         |         |          |
| BİZİM TOPTAN SATIŞ MAĞAZALARI A.Ş.                  | NR                   | NR                   | N/A               |         |         |         |          |
| COCA-COLA İÇECEK A.Ş.                               | AQ                   | AQ                   | P                 | D       | D       | D       | abs, int |
| MİGROS TİCARET A.Ş.                                 | NR                   | DP                   | N/A               |         |         |         |          |
| ÜLKER BİSKÜVİ SANAYİ A.Ş.                           | NR                   | DP                   | N/A               |         |         |         |          |

| Company                                                | 2013 Response Status | 2012 Response Status | Permission Status | Scope 1 | Scope 2 | Scope 3 | Targets  |
|--------------------------------------------------------|----------------------|----------------------|-------------------|---------|---------|---------|----------|
| <b>Energy</b>                                          |                      |                      |                   |         |         |         |          |
| PARK ELEKTRİK ÜRETİM MADENCİLİK SANAYİ VE TİCARET A.Ş. | NR                   | NR                   | N/A               |         |         |         |          |
| TÜPRAŞ-TÜRKİYE PETROL RAFİNERİLERİ A.Ş.                | NR                   | NR                   | N/A               |         |         |         |          |
| TURCAS PETROL A.Ş.                                     | NR                   | DP                   | N/A               |         |         |         |          |
| ZORLU ENERJİ ELEKTRİK ÜRETİM A.Ş.                      | AQ                   | AQ                   | P                 | D       | D       |         | abs      |
| <b>Financials</b>                                      |                      |                      |                   |         |         |         |          |
| AKBANK T.A.Ş.                                          | AQ                   | AQ                   | NP                | D       | D       | D       | abs, int |
| AKFEN HOLDİNG A.Ş.                                     | DP                   | DP                   | N/A               |         |         |         |          |
| ALARKO GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.              | NR                   | X                    | N/A               |         |         |         |          |
| ALARKO HOLDİNG A.Ş.                                    | AQ                   | DP                   | P                 |         |         |         |          |
| ALBARAKA TÜRK KATILIM BANKASI A.Ş.                     | AQ                   | X                    | P                 |         |         |         |          |
| ANADOLU ANONİM TÜRK SİGORTA ŞİRKETİ                    | NR                   | DP                   | N/A               |         |         |         |          |
| ANADOLU HAYAT EMEKLİLİK A.Ş.                           | NR                   | X                    | N/A               |         |         |         |          |
| ASYA KATILIM BANKASI A.Ş.                              | NR                   | DP                   | N/A               |         |         |         |          |
| ECZACIBAŞI YATIRIM HOLDİNG ORTAKLIĞI A.Ş.              | DP                   | DP                   | N/A               |         |         |         |          |
| EMLAK KONUT GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.         | NR                   | NR                   | N/A               |         |         |         |          |
| GÖZDE GİRİŞİM SERMAYESİ YATIRIM ORTAKLIĞI A.Ş.         | NR                   | NR                   | N/A               |         |         |         |          |
| GSD HOLDİNG A.Ş.                                       | NR                   | DP                   | N/A               |         |         |         |          |
| İHLAS HOLDİNG A.Ş.                                     | NR                   | NR                   | N/A               |         |         |         |          |
| İŞ FİNANSAL KİRALAMA A.Ş.                              | NR                   | DP                   | N/A               |         |         |         |          |
| İŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.                  | NR                   | DP                   | N/A               |         |         |         |          |
| İTTİFAK HOLDİNG A.Ş.                                   | NR                   | NR                   | N/A               |         |         |         |          |
| KİLER GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.               | NR                   | DP                   | N/A               |         |         |         |          |
| METRO TİCARİ VE MALİ YATIRIMLAR A.Ş.                   | NR                   | NR                   | N/A               |         |         |         |          |
| RHEA GİRİŞİM SERMAYESİ YATIRIM ORTAKLIĞI A.Ş.          | NR                   | NR                   | N/A               |         |         |         |          |
| SABANCI HOLDİNG A.Ş.                                   | AQ                   | AQ                   | NP                | D       | D       |         | abs      |
| SAF GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.                 | NR                   | X                    | N/A               |         |         |         |          |
| ŞEKERBANK T.A.Ş.                                       | AQ                   | AQ                   | NP                | D       | D       | D       |          |
| SİNPAŞ GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.              | NR                   | NR                   | N/A               |         |         |         |          |
| T.İŞ BANKASI A.Ş.                                      | DP                   | NR                   | N/A               |         |         |         |          |

| Company                                                                  | 2013 Response Status | 2012 Response Status | Permission Status | Scope 1 | Scope 2 | Scope 3 | Targets |
|--------------------------------------------------------------------------|----------------------|----------------------|-------------------|---------|---------|---------|---------|
| T.GARANTİ BANKASI A.Ş.                                                   | AQ                   | AQ                   | P                 | D       | D       | D       | int     |
| T.SİNAİ KALKINMA BANKASI A.Ş.                                            | AQ                   | AQ                   | P                 | D       | D       | D       | abs     |
| TORUNLAR GAYRİMENKUL YATIRIM ORTAKLIĞI A.Ş.                              | NR                   | DP                   | N/A               |         |         |         |         |
| TÜRK EKONOMİ BANKASI A.Ş.                                                | AQ                   | AQ                   | NP                | D       | D       | D       | abs     |
| TÜRKİYE HALK BANKASI A.Ş.                                                | AQ                   | AQ                   | P                 | D       | D       | D       |         |
| TÜRKİYE VAKIFLAR BANKASI T.A.O.                                          | AQ                   | NR                   | P                 |         |         |         |         |
| YAPI VE KREDİ BANKASI A.Ş.                                               | NR                   | DP                   | N/A               |         |         |         |         |
| <b>Health Care</b>                                                       |                      |                      |                   |         |         |         |         |
| EİS ECZACIBAŞI İLAÇ, SİNAİ VE FİNANSAL YATIRIMLAR SANAYİ VE TİCARET A.Ş. | DP                   | DP                   | N/A               |         |         |         |         |
| <b>Industrials</b>                                                       |                      |                      |                   |         |         |         |         |
| ANADOLU ISUZU OTOMOTİV SANAYİ VE TİCARET A.Ş.                            | NR                   | X                    | N/A               |         |         |         |         |
| ASELSAN ELEKTRONİK SANAYİ VE TİCARET A.Ş.                                | DP                   | AQ                   | N/A               |         |         |         |         |
| ÇELEBİ HAVA SERVİSİ A.Ş.                                                 | AQ                   | AQ                   | NP                | D       | D       |         |         |
| DOĞAN ŞİRKETLER GRUBU HOLDİNG A.Ş.                                       | DP                   | DP                   | N/A               |         |         |         |         |
| ENKA İNŞAAT VE SANAYİ A.Ş.                                               | NR                   | DP                   | N/A               |         |         |         |         |
| KOÇ HOLDİNG A.Ş.                                                         | DP                   | DP                   | N/A               |         |         |         |         |
| KOZA ANADOLU METAL MADENCİLİK İŞLETMELERİ A.Ş.                           | NR                   | NR                   | N/A               |         |         |         |         |
| TAV HAVALİMANLARI HOLDİNG A.Ş.                                           | AQ                   | AQ                   | P                 | D       | D       |         | int     |
| TEKFEN HOLDİNG A.Ş.                                                      | NR                   | DP                   | N/A               |         |         |         |         |
| TRAKYA CAM SANAYİ A.Ş. (T.Şişe ve Cam Fabrikaları A.Ş.)                  | SA                   | SA                   | N/A               |         |         |         |         |
| TÜRK HAVA YOLLARI A.O.                                                   | DP                   | DP                   | N/A               |         |         |         |         |
| TÜRK TRAKTÖR VE ZİRAAT MAKİNELERİ A.Ş.                                   | NR                   | DP                   | N/A               |         |         |         |         |
| <b>Materials</b>                                                         |                      |                      |                   |         |         |         |         |
| AFYON ÇİMENTO SANAYİ T.A.Ş.                                              | DP                   | DP                   | N/A               |         |         |         |         |
| AKSA AKRİLİK KİMYA SANAYİ A.Ş.                                           | DP                   | DP                   | N/A               |         |         |         |         |
| ALKİM ALKALİ KİMYA A.Ş.                                                  | NR                   | X                    | N/A               |         |         |         |         |
| BAGFAŞ BANDIRMA GÜBRE FABRİKALARI A.Ş.                                   | AQ                   | AQ                   | P                 | D       | D       |         |         |
| BORUSAN MANNESMANN BORU SANAYİ VE TİCARET A.Ş.                           | DP                   | DP                   | N/A               |         |         |         |         |
| ÇEMAŞ DÖKÜM SANAYİ A.Ş.                                                  | NR                   | X                    | N/A               |         |         |         |         |

| Company                                                    | 2013 Response Status | 2012 Response Status | Permission Status | Scope 1 | Scope 2 | Scope 3 | Targets |
|------------------------------------------------------------|----------------------|----------------------|-------------------|---------|---------|---------|---------|
| EGE GÜBRE SANAYİİ A.Ş.                                     | NR                   | NR                   | N/A               |         |         |         |         |
| EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.                   | DP                   | DP                   | N/A               |         |         |         |         |
| GÖLTAŞ GÖLLER BÖLGESİ ÇİMENTO SAN. VE TİC.A.Ş.             | NR                   | DP                   | N/A               |         |         |         |         |
| GÜBRE FABRİKALARI T.A.Ş.                                   | NR                   | DP                   | N/A               |         |         |         |         |
| İPEK DOĞAL ENERJİ KAYNAKLARI ARAŞTIRMA VE ÜRETİM A.Ş.      | NR                   | NR                   | N/A               |         |         |         |         |
| İZMİR DEMİR ÇELİK SANAYİ A.Ş.                              | NR                   | DP                   | N/A               |         |         |         |         |
| KARDEMİR KARABÜK DEMİR ÇELİK SANAYİ VE TİCARET A.Ş.        | AQ                   | AQ                   | NP                | D       | D       |         |         |
| KARTONSAN KARTON SANAYİ VE TİCARET A.Ş.                    | NR                   | DP                   | N/A               |         |         |         |         |
| KONYA ÇİMENTO SANAYİİ A.Ş.                                 | NR                   | DP                   | N/A               |         |         |         |         |
| KOZA ALTIN İŞLETMELERİ A.Ş.                                | NR                   | NR                   | N/A               |         |         |         |         |
| MONDİ TİRE KUTSAN KAĞIT VE AMBALAJ SANAYİ A.Ş. (Mondi PLC) | SA                   | SA                   | N/A               |         |         |         |         |
| PETKİM PETROKİMYA HOLDİNG A.Ş.                             | AQ                   | AQ                   | P                 | D       | D       |         |         |
| SASA POLYESTER SANAYİ A.Ş.                                 | NR                   | NR                   | N/A               |         |         |         |         |
| <b>Telecommunication Services</b>                          |                      |                      |                   |         |         |         |         |
| NETAŞ TELEKOMÜNİKASYON A.Ş.                                | DP                   | DP                   | N/A               |         |         |         |         |
| TÜRK TELEKOMÜNİKASYON A.Ş.                                 | AQ                   | AQ                   | P                 | D       | D       | D       |         |
| TURKCELL İLETİŞİM HİZMETLERİ A.Ş.                          | NR                   | DP                   | N/A               |         |         |         |         |
| <b>Utilities</b>                                           |                      |                      |                   |         |         |         |         |
| AKENERJİ ELEKTRİK ÜRETİM A.Ş.                              | AQ                   | AQ                   | P                 | D       | D       |         |         |
| AYGAZ A.Ş.                                                 | NR                   | NR                   | N/A               |         |         |         |         |

## KEY TO RESPONSE STATUS TABLE

(AQ) Answered questionnaire

(NR) No response

(DP) Declined to Participate

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

(P) Response is publicly available

(NP) Response is not publicly available

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

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

(abs) Absolute targets

(int) Intensity targets

## Other Responding Companies

| Company                                  | 2013 Response Status | 2012 Response Status | Permission Status | Scope 1 | Scope 2 | Scope 3 | Targets  |
|------------------------------------------|----------------------|----------------------|-------------------|---------|---------|---------|----------|
| <b>Consumer Discretionary</b>            |                      |                      |                   |         |         |         |          |
| EKOTEN TEKSTİL SANAYİ VE TİCARET A.Ş.    | AQ                   | AQ                   | P                 | D       | D       |         | int      |
| ORDUSPOR SPORTIF FAALİYETLER A.Ş.        | AQ                   | X                    | NP                | D       | D       | D       |          |
| SUN TEKSTİL SANAYİ VE TİCARET A.Ş.       | AQ                   | AQ                   | P                 | D       |         |         | int      |
| TESCO KİPA (Tesco)                       | SA                   | SA                   | N/A               |         |         |         |          |
| VESTEL BEYAZ EŞYA SANAYİ VE TİCARET A.Ş. | AQ                   | AQ                   | NP                | D       | D       | D       | abs      |
| YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş.       | AQ                   | AQ                   | P                 | D       | D       | D       |          |
| <b>Consumer Staples</b>                  |                      |                      |                   |         |         |         |          |
| NOOR FINDIK SAN. VE TİC. LTD ŞTİ.        | AQ                   | X                    | NP                | D       | D       | D       |          |
| <b>Energy</b>                            |                      |                      |                   |         |         |         |          |
| ZORLU DOĞAL ELEKTRİK ÜRETİMİ A.Ş.        | AQ                   | AQ                   | P                 | D       | D       |         | abs      |
| <b>Industrials</b>                       |                      |                      |                   |         |         |         |          |
| YÜKSEL İNŞAAT A.Ş.                       | AQ                   | X                    | NP                | D       | D       | D       |          |
| <b>Materials</b>                         |                      |                      |                   |         |         |         |          |
| AKÇANSA ÇİMENTO SANAYİ VE TİCARET A.Ş.   | AQ                   | AQ                   | P                 | D       | D       |         | int      |
| DURAN DOĞAN BASIM VE AMBALAJ A.Ş.        | AQ                   | X                    | NP                | D       | D       | D       | abs, int |

### KEY TO RESPONSE STATUS TABLE

(AQ) Answered questionnaire

(NR) No response

(DP) Declined to Participate

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

(P) Response is publicly available

(NP) Response is not publicly available

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

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

(abs) Absolute targets

(int) Intensity targets



## 2013 Global Key trends

| Statistic                                                                                                                          | Asia ex-Japan | Australia ASX 200 | Benelux | Bonds | Brazil | Canada | Central & Eastern Europe | China | Emerging Markets | Electric Utilities (Global) | Europe | France |
|------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|---------|-------|--------|--------|--------------------------|-------|------------------|-----------------------------|--------|--------|
| Number of companies in sample                                                                                                      | 400           | 200               | 150     | 180   | 100    | 200    | 100                      | 100   | 800              | 250                         | 300    | 250    |
| % sample answering CDP 2013 <sup>1</sup>                                                                                           | 33            | 50                | 34      | 86    | 56     | 58     | 27                       | 19    | 37               | 37                          | 90     | 38     |
| Number of companies answering CDP 2013 <sup>1</sup>                                                                                | 131           | 99                | 51      | 154   | 56     | 115    | 27                       | 19    | 296              | 92                          | 271    | 94     |
| % of responders reporting Board or other senior management responsibility for climate change                                       | 91            | 94                | 96      | 99    | 88     | 90     | 100                      | 68    | 93               | 96                          | 99     | 98     |
| % responders reporting incentives for the management of climate change issues                                                      | 71            | 57                | 73      | 92    | 61     | 64     | 75                       | 42    | 74               | 74                          | 85     | 70     |
| % of responders reporting climate change as being integrated into their business strategy                                          | 93            | 87                | 90      | 97    | 82     | 85     | 100                      | 84    | 91               | 98                          | 95     | 89     |
| % of responders reporting engagement with policymakers on climate issues to encourage mitigation or adaptation                     | 83            | 73                | 90      | 88    | 84     | 80     | 75                       | 58    | 86               | 94                          | 92     | 83     |
| % of responders reporting emission reduction targets <sup>2</sup>                                                                  | 73            | 52                | 71      | 87    | 55     | 49     | 75                       | 26    | 73               | 74                          | 90     | 76     |
| % of responders reporting absolute emission reduction targets <sup>2</sup>                                                         | 32            | 30                | 48      | 58    | 27     | 28     | 50                       | 26    | 39               | 48                          | 56     | 39     |
| % of responders reporting active emissions reduction initiatives in the reporting year                                             | 88            | 77                | 94      | 98    | 80     | 88     | 75                       | 84    | 91               | 93                          | 99     | 96     |
| % of responders indicating that their products and services directly enable third parties to avoid GHG emissions                   | 73            | 55                | 75      | 72    | 78     | 68     | 75                       | 58    | 65               | 89                          | 78     | 80     |
| % of responders seeing regulatory risks                                                                                            | 81            | 82                | 83      | 82    | 80     | 78     | 75                       | 37    | 88               | 93                          | 89     | 86     |
| % of responders seeing regulatory opportunities                                                                                    | 84            | 71                | 83      | 80    | 80     | 70     | 75                       | 47    | 85               | 91                          | 90     | 84     |
| % of responders whose absolute emissions (Scope 1 and 2) have decreased compared to last year due to emission reduction activities | 21            | 30                | 54      | 65    | 8      | 25     | 75                       | 11    | 25               | 24                          | 53     | 37     |
| % of responders reporting any portion of Scope 1 emissions data as independently verified <sup>3</sup>                             | 57            | 55                | 67      | 79    | 55     | 40     | 50                       | 11    | 64               | 66                          | 85     | 82     |
| % of responders reporting any portion of Scope 2 emissions data as independently verified <sup>3</sup>                             | 57            | 51                | 69      | 73    | 57     | 27     | 50                       | 11    | 64               | 54                          | 84     | 81     |
| % of responders reporting emissions data for 2 or more named Scope 3 categories <sup>4</sup>                                       | 27            | 33                | 35      | 40    | 59     | 25     | 25                       | 5     | 35               | 39                          | 53     | 38     |

The statistics presented in this key trends table may differ from those in other CDP reports for two reasons:

(1) the data in this table is based on all responses received by 28 August 2013;

(2) it is based on binary data (e.g. Yes/No or other drop down menu selection) reported to CDP and does not incorporate any validation of the follow up information provided or reflect the scoring methodology. The latter, in particular, is likely to lead to an over-reporting of data in this key trends table.

| DACH<br>(DE, AUT, CH) | Global 500 | Iberia (ES, PT) | India | Ireland | Italy | Japan | Korea | Latin America | New Zealand<br>NZX 50 | Nordic | Russia | South Africa | Switzerland | Turkey <sup>6</sup> | Transport (Global) | United Kingdom<br>FTSE 350 | United States<br>S&P 500 | Overall <sup>5</sup> |
|-----------------------|------------|-----------------|-------|---------|-------|-------|-------|---------------|-----------------------|--------|--------|--------------|-------------|---------------------|--------------------|----------------------------|--------------------------|----------------------|
| 350                   | 500        | 125             | 200   | 30      | 100   | 500   | 250   | 80            | 50                    | 260    | 50     | 100          | 100         | 100                 | 100                | 350                        | 500                      | N/A                  |
| 52                    | 81         | 44              | 27    | 40      | 46    | 45    | 36    | 53            | 42                    | 59     | 18     | 83           | 64          | 28                  | 55                 | 74                         | 68                       | N/A                  |
| 182                   | 403        | 55              | 54    | 12      | 46    | 225   | 89    | 42            | 21                    | 153    | 9      | 83           | 64          | 28                  | 55                 | 260                        | 342                      | 2465                 |
| 86                    | 97         | 92              | 98    | 92      | 89    | 97    | 89    | 95            | 86                    | 93     | 100    | 99           | 94          | 85                  | 91                 | 95                         | 91                       | 91                   |
| 48                    | 85         | 77              | 76    | 67      | 59    | 80    | 73    | 64            | 48                    | 62     | 43     | 72           | 48          | 65                  | 78                 | 66                         | 75                       | 65                   |
| 77                    | 95         | 94              | 95    | 83      | 77    | 92    | 89    | 95            | 81                    | 90     | 86     | 87           | 75          | 77                  | 89                 | 83                         | 86                       | 85                   |
| 71                    | 90         | 90              | 79    | 75      | 86    | 87    | 75    | 92            | 67                    | 84     | 57     | 87           | 67          | 65                  | 89                 | 77                         | 80                       | 78                   |
| 57                    | 83         | 81              | 79    | 75      | 66    | 94    | 79    | 62            | 38                    | 71     | 57     | 68           | 64          | 46                  | 76                 | 68                         | 75                       | 68                   |
| 33                    | 50         | 54              | 10    | 42      | 50    | 69    | 48    | 31            | 33                    | 34     | 43     | 37           | 36          | 38                  | 28                 | 37                         | 43                       | 40                   |
| 86                    | 97         | 94              | 93    | 75      | 84    | 98    | 78    | 92            | 62                    | 87     | 100    | 97           | 95          | 73                  | 93                 | 89                         | 93                       | 87                   |
| 70                    | 74         | 85              | 67    | 42      | 73    | 80    | 62    | 77            | 67                    | 76     | 43     | 58           | 64          | 58                  | 76                 | 60                         | 64                       | 66                   |
| 62                    | 84         | 88              | 86    | 83      | 77    | 95    | 88    | 92            | 71                    | 89     | 43     | 99           | 63          | 88                  | 87                 | 85                         | 73                       | 80                   |
| 73                    | 83         | 92              | 88    | 83      | 86    | 89    | 83    | 82            | 52                    | 82     | 29     | 92           | 66          | 85                  | 78                 | 76                         | 70                       | 76                   |
| 29                    | 47         | 42              | 14    | 58      | 34    | 34    | 36    | 8             | 24                    | 47     | 0      | 41           | 34          | 27                  | 35                 | 38                         | 52                       | 35                   |
| 50                    | 78         | 79              | 60    | 75      | 70    | 54    | 73    | 62            | 38                    | 52     | 29     | 70           | 53          | 35                  | 65                 | 58                         | 57                       | 53                   |
| 43                    | 75         | 73              | 57    | 67      | 70    | 51    | 73    | 64            | 38                    | 48     | 29     | 68           | 48          | 35                  | 57                 | 54                         | 53                       | 50                   |
| 37                    | 45         | 63              | 33    | 25      | 34    | 43    | 20    | 56            | 33                    | 40     | 0      | 53           | 39          | 15                  | 20                 | 28                         | 29                       | 32                   |

1: This statistic includes those companies that respond by referencing a parent or holding company's response. However the remaining statistics presented do not include these responses.

2: Companies may report multiple targets. However, in these statistics a company will only be counted once.

3: This takes into account companies reporting that verification is complete or underway, but does not include any evaluation of the verification statement provided.

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

5: Includes responses across all samples as well as responses submitted by companies not included in specific geographic or industry samples in 2013.

6: Shows statistics calculated using responses from BIST-100 respondents, excludes eleven ORCs.

# Notes

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Our sincere thanks are extended to the following individuals:

Fikret Adaman and Yıldız Arkan for reviewing Key Trends in Turkey section.

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