CDP Global Climate Change Report 2015

At the tipping point?

Written on behalf of 822 investors with US$95 trillion in assets

Global report sponsor

CDP 2015 climate change scoring partners

CDP works with a number of partners to deliver the scores for all our responding companies.

These partners are listed below along with the geographical regions in which they provide the scoring. All scoring partners have to complete a detailed training course to ensure the methodology and guidance are applied correctly and the scoring results go through a comprehensive quality assurance process before being published. In some regions there is more than one scoring partner and the responsibilities are shared between multiple partners.

In 2015, CDP worked with RepRisk, a business intelligence provider specializing in ESG risks (www.reprisk.com), who provided additional risk research and data into the proposed A-List companies to assess whether they were severe reputational issues that could put their leadership status into question.

FIRSTCARBON SOLUTIONS™

Australia & New Zealand, Benelux, Canada, Hong Kong, India, Ireland, Italy, Japan, Nordic, SE Asia, South Africa, UK, USA.

BHP Brugger and Partners Ltd. Switzerland	CONSUS Carbon Engineering Central and Eastern Europe (CEE)	CQC 中国质量认证中心 China Quality Certification Centre China
DEKRA France	Deloitte. Japan, Turkey	EY Japan, Korea
:FutureCamp Germany & Austria	gestão origami Brazil	kosif Korea Sustainability Investing Forum Korea
Lloyd's Register LRQA Japan	mgminnova Latin America	pwc Spain & Portugal (Iberia)
SGS Japan	sustainable Germany & Austria	REPRISK ESG Business Intelligence All regions

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Please note: The selection of analyzed companies in this report is based on market capitalization of regional stock indices whose constituents change over time. Therefore the analyzed companies are not the same in 2010 and 2015 and any trends shown are indicative of the progress of the largest companies in that region as defined by market capitalization. Large emitters may be present in one year and not the other if they dropped out of or entered a stock index. 'Like for like' analysis on emissions for sub-set of companies that reported in both 2010 and 2015 is included for clarity. Some dual listed companies are present in more than one regional stock index. Companies referring to a parent company response, those responding after the deadline and self-selected voluntary responding companies are not included in the analysis. For more information about the companies requested to respond to CDP's climate change program in 2015 please visit:

https://www.cdp.net/Documents/disclosure/2015/Companies-requested-to-respond-CDP-climate-change.pdf

Paul Dickinson

Executive Chairman CDP

Decarbonizing the global economy is an ambitious undertaking, even over many decades… corporate leaders understand the size of the challenge, and the importance of meeting it. We are on the threshold of an economic revolution that will transform how we think about productive activity and growth.

CDP was set up, almost 15 years ago, to serve investors. A small group of 35 institutions, managing US$4 trillion in assets, wanted to see companies reporting reliable, comprehensive information about climate change risks and opportunities.

Since that time, our signatory base has grown enormously, to 822 investors with US$95 trillion in assets. And the corporate world has responded to their requests for this information. More than 5,500 companies now disclose to CDP, generating the world's largest database of corporate environmental information, covering climate, water and forest-risk commodities.

Our investor signatories are not interested in this information out of mere curiosity. They believe, as we do, that this vital data offers insights into how reporting companies are confronting the central sustainability challenges of the 21st century. And the data, and this report, shows that companies have made considerable progress in recent years – whether by adopting an internal carbon price, investing in low-carbon energy, or by setting long-term emissions reduction targets in line with climate science.

For our signatory investors, insight leads to action. They use CDP data to help guide investment decisions – to protect themselves against the risks associated with climate change and resource scarcity, and profit from those companies that are well positioned to succeed in a low-carbon economy.

This year, in particular, momentum among investors has grown strongly. Shareholders have come together in overwhelming support for climate resolutions at leading energy companies BP, Shell and Statoil. There is ever increasing direct engagement by shareholders to stop the boards of companies from using shareholders' funds to lobby against government action to tax and regulate greenhouse gasses. This activity is vital to protect the public.

Many investors are critically assessing the climate risk in their portfolios, leading to select divestment from more carbon-intensive energy stocks – or, in some cases, from the entire fossil fuel complex. Leading institutions have joined with us in the Portfolio Decarbonization Coalition, committing to cut the carbon intensity of their investments.

This momentum comes at a crucial time, as we look forward to COP21, the pivotal UN climate talks, in Paris in December. A successful Paris agreement would set the world on course for a goal of net zero emissions by the end of this century, providing business and investors with a clear, long-term trajectory against which to plan strategy and investment.

Without doubt, decarbonizing the global economy is an ambitious undertaking, even over many decades. But the actions that companies are already taking, and reporting to CDP, show that corporate leaders understand the size of the challenge, and the importance of meeting it.

We are on the threshold of an economic revolution that will transform how we think about productive activity and growth. We are beginning to decouple energy use and greenhouse gas emissions from GDP, through a process of 'dematerialization' – where consumption migrates from physical goods to electronic products and services. This will create new assets, multi-billion dollar companies with a fraction of the physical footprint of their predecessors.

Similarly, there is a growing realization that 'work' is no longer a place, but increasingly an activity that can take place anywhere. And it no longer relies on the physical, carbon-intensive infrastructure we once built to support it.

In the 19th century we built railway lines across the globe to transport people and goods. Now we need to create a new form of transportation, in the form of broadband. Investment in fixed and mobile broadband will create advanced networks upon which the communications-driven economy of the 21st century can be built – an economy where opportunity is not limited by time or geography, and where there are no limits to growth.

An economic revolution of this scale will create losers as well as winners. Schumpeter's 'creative destruction', applied to the climate challenge, is set to transform the global economy. It is only through the provision of timely, accurate information, such as that collected by CDP, that investors will be able to properly understand the processes underway. Our work has just begun.

Meg Whitman

President and CEO, Hewlett Packard Enterprise

> We must take swift and bold action to address the root causes of climate change. This means disrupting the status quo—changing the way we do business, holding ourselves and others accountable, and creating innovative solutions that drive a low-carbon economy.

Climate change is one of the most complex challenges facing business and governments. At Hewlett Packard Enterprise, we believe that by uniting people, ideas and technology, we can help solve many of the world's challenges, including climate change. The way we respond will have a profound and permanent impact on the health and prosperity of future generations.

As country leaders gather at COP21 to discuss a new global agreement to combat climate change, the message from climate scientists is clear: greenhouse gases are contributing to the warming of our planet at an alarming rate. We must take swift and bold action to address the root causes of climate change. This means disrupting the status quo—changing the way we do business, holding ourselves and others accountable, and creating innovative solutions that drive a low-carbon economy.

The Information and Communication Technology (ICT) industry is uniquely suited to combat climate change by enabling more sustainable business models and revolutionizing industries at speed and scale. But even as technology transforms other industries, we also must work to reduce the carbon footprint of the ICT industry. By 2020, 30 billion connected devices will generate unprecedented amounts of data. And this will only increase. This massive amount of data is collected, processed, stored and managed in large-scale data centers around the world, which collectively consume a tremendous amount of energy. Soon, we may not be able to make enough energy to keep up with the needs of these enormous data centers. Today, data centers that power the public cloud use more energy than the countries of Germany and Japan combined, and may soon require more energy than we can even produce each year.

Clearly, we must reduce the energy demand and space requirements of data centers. That's why Hewlett Packard Labs is focused on reimagining computing at its core. The Machine is our transformative research initiative that we believe will fundamentally change the architecture of computing—which has stood unchallenged for 60 years—enabling a quantum leap in performance and efficiency. We estimate that The Machine will use only 1 percent of the energy per calculation achievable today. We believe this is the type of disruptive innovation that is required to sustainably meet the data needs of the future. At the same time, we must address data center energy at the source.

In July, we signed a 12-year power purchase agreement for 112 megawatts (MW) of wind power with SunEdison, Inc. This agreement is sufficient to power 100 percent of our Texas-based data center operations, which support Hewlett Packard Enterprise's entire internal global information technology (IT) requirements and the delivery of IT services to a portion of our customers.

I'm thrilled to say that this agreement will help us reach our 2020 operational greenhouse gas emissions reduction goal by the end of fiscal year 2015, five years ahead of schedule. This action also makes us the first global IT company to set and achieve a science-based operational target in part using CDP and World Wildlife Fund's The 3% Solution[1]. The 3% Solution provides corporations with a guide for setting targets on a track to stay below the 2 degrees Celsius increase identified as a critical threshold, while driving profits.

Science-based goals help promote accountability and maximize impact, which is why we joined CDP and other business leaders in supporting the We Mean Business 'Commit to Action' initiative, in which we committed to develop corporate environmental goals that are based on climate science. We invite other forward-thinking companies to join us in supporting We Mean Business, sending a clear signal to global leaders that we are taking bold and meaningful action to combat climate change.

We are proud to stand with CDP, both as Hewlett Packard in the past and in the future as Hewlett Packard Enterprise, to help create a more secure, prosperous future for all. It is our hope that when future generations look back at 2015, they recognize this as the year that business and government leaders took the necessary action to combat climate change and drive a sustainable economy.

1 https://www.cdp.net/CDPResults/3-percent-solution-report.pdf

Global overview

The case for corporate action on climate change has never been stronger and better understood. With the scientific evidence of manmade climate change becoming ever more incontrovertible, leading companies and their investors increasingly recognize the strategic opportunity presented by the transition to a low-carbon global economy.

Global	2010	2015
Analyzed responses	1,799	1,997
Market cap of analyzed companies US$m*	25,179,776	35,697,470
Scope 1	5,459 $MtCO_2e$	5,382 $MtCO_2e$
Scope 2	1,027 $MtCO_2e$	1,301 $MtCO_2e$
Scope 1 like for like: 1,306 companies	4,135 $MtCO_2e$	4,425 $MtCO_2e$
Scope 2 like for like: 1,306 companies	794 $MtCO_2e$	887 $MtCO_2e$

* Market capitalization figures from Bloomberg at 1 January 2010 and 1 January 2015.

And they are acting to seize this opportunity. The latest data from companies that this year took part in CDP's climate change program – as requested by 822 institutional investors, representing US$95 trillion in assets – provide evidence that reporting companies are taking action and making investments to position themselves for this transition.

Growing momentum from the corporate world is coinciding with growing political momentum. Later this year, the world's governments will meet in Paris to forge a new international climate agreement. Whatever the contours of that agreement, business will be central to implementing the necessary transition to a low-carbon global economy.

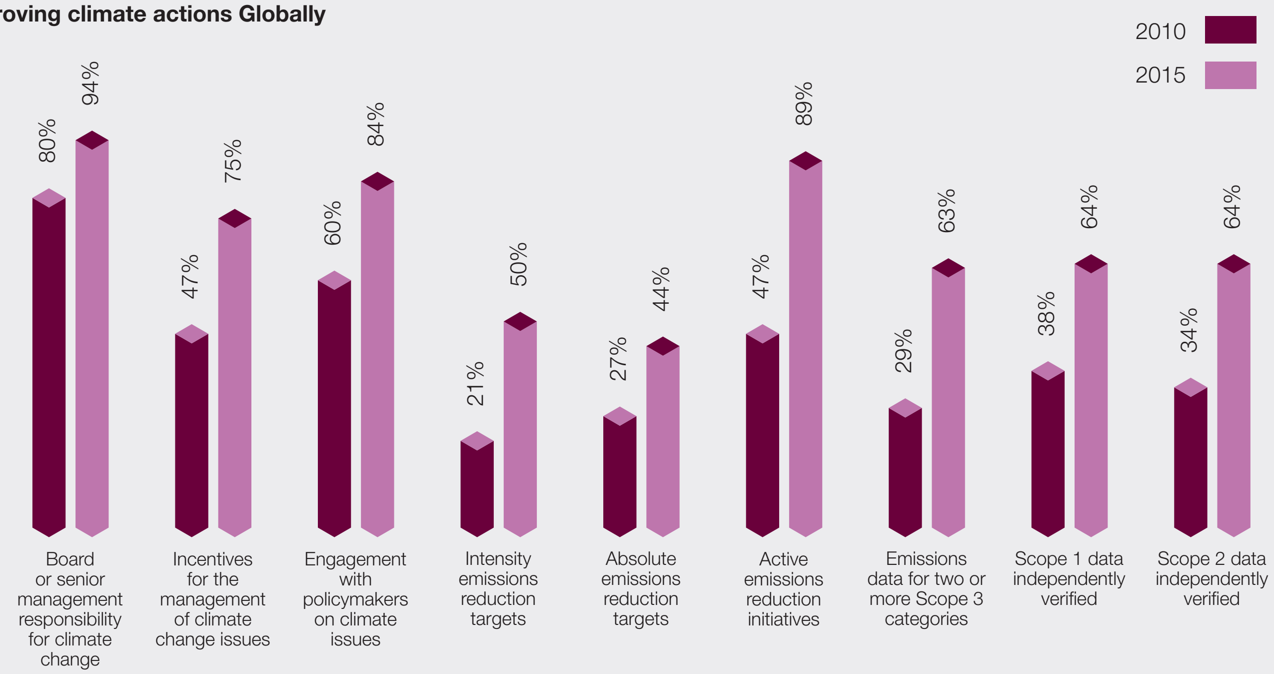
Business is already stepping up. The United Nations Environment Programme estimates that existing collaborative emissions reduction initiatives involving companies, cities and regions are on course to deliver the equivalent of 3 gigatons of carbon dioxide reductions by 2020. That's more than a third of the 'emissions gap' between existing government targets for that year and greenhouse gas emissions levels consistent with avoiding dangerous climate change.

Those investors who understand the need to decarbonize the global economy are watching particularly closely for evidence that the companies in which they invest are positioned to transition away from fossil fuel dependency.

By requesting that companies disclose through CDP, these investors have helped create the world's most comprehensive corporate environmental dataset. This data helps guide businesses, investors and governments to make better-informed decisions to address climate challenges.

This report offers a global analysis of the current state of the corporate response to climate change. For

1. Improving climate actions Globally



We are targeting the full operational emissions for the organisation, including electricity, natural gas, diesel and refrigerant gases used in operational buildings and fleets.

J Sainsbury Plc

CDP has changed the way investors are able to understand the impact of climate change in their portfolio... promoting awareness of what risks or benefits are embedded into investments.

Anna Kearney
BNY Mellon

the first time, CDP compares the existing landscape to when the world was last on the verge of a major climate agreement. By comparing data disclosed in 2015 with the information provided in 2010, this report tracks what companies were doing in 2009, ahead of the ill-fated Copenhagen climate talks at the end of that year.

The findings show considerable progress: with corporate and investor engagement with the climate issue; in leading companies' management of climate risk; and evidence that corporate action is proving effective. However, the data also shows that much more needs to be done if we are to avoid dangerous climate change.

Growing corporate engagement on climate change…

For the purposes of this 2015 report and analysis, we focused on responses from 1,997 companies, primarily selected by market capitalization through regional stock indexes and listings, to compare with the equivalent 1,799 companies that submitted data in 2010. These companies, from 51 countries around the world, represent 55% of the market capitalization of listed companies globally.

The data shows significant improvements in corporate management of climate change. What was leading behavior in 2010 is now standard practice. For example, governance is improving, with a higher percentage of companies allocating responsibility for climate issues to the board or to senior management (from 80% to 94% of respondents). And more companies are incentivizing employees through financial and non-financial means to manage climate issues (47% to 75%).

Importantly, the percentage of companies setting targets to reduce emissions has also grown strongly. Forty four per cent now set goals to reduce their total greenhouse gas emissions, up from just 27% in 2010. Even more – 50% - have goals to reduce emissions per unit of output, up from 20% in 2010.

Companies are responding to the ever-more compelling evidence that manmade greenhouse gas emissions are warming the atmosphere. This helps build the business case for monitoring, measuring and disclosing around climate change issues. But greater corporate engagement with climate change is at least partly down to influence from increasingly concerned investors.

… Amid growing investor concern

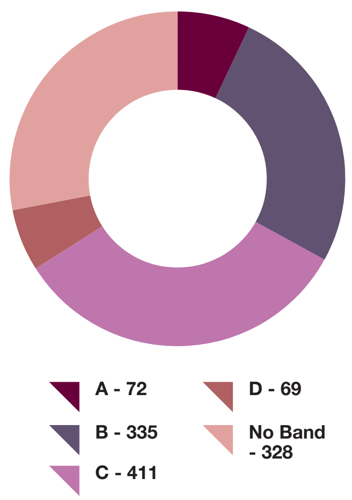
Since 2010, there has been a 54% rise in the number of institutional investors, from 534 to 822, requesting disclosure of climate change, energy and emissions data through CDP.

Investors are also broadening the means by which they are encouraging corporate action on emissions. In recent years, they have launched several other initiatives.

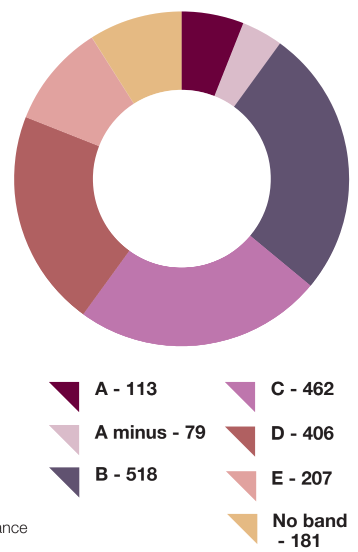
For example, a number of institutional investors have come together in the 'Aiming for A' coalition to call on specific major emitters to demonstrate good strategic carbon management by attaining (and maintaining) inclusion in CDP's Climate A List. The A List recognizes companies that are leading in their actions to reduce emissions and mitigate climate change in the past CDP reporting year. In 2015, following a period of engagement with the companies, the coalition was successful in passing shareholder resolutions calling for improved climate disclosure at the annual meetings of BP, Shell and Statoil, with nearly 100% of the votes in each case.

Investors are also applying principles of transparency and exposure to themselves. More than 60 institutional investors have signed the Montréal Carbon Pledge, under which they commit to measure and publicly disclose the carbon footprint of

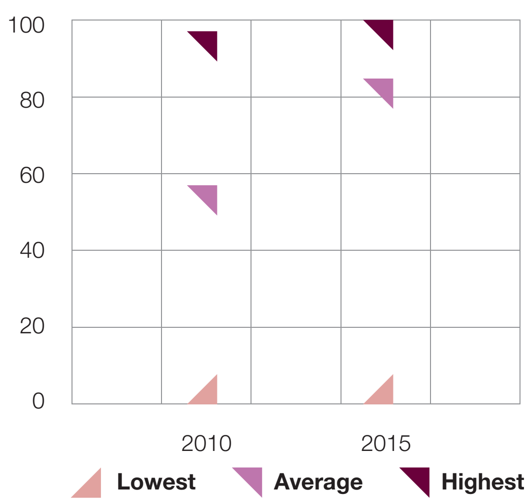
2. 2010 performance bands globally*



3. 2015 performance bands globally



4. Disclosure scores over time Globally



* in 2010 and 2015 not all companies were scored for performance

We have a public commitment to meet 100% of electricity requirements through renewables by fiscal 2018 and we will be investing in about 200 MW of solar PV plants.

Infosys

Google uses carbon prices as part of our risk assessment model. For example, the risk assessment at individual data centers also includes using a shadow price for carbon to estimate expected future energy costs.

Google

their investment portfolios on an annual basis. It aims to attract commitment from portfolios totaling US$3 trillion in time for the Paris climate talks.

Investors are seeking to better understand the link between lower carbon emissions and financial performance, including through the use of innovative investor products such as CDP's sector research, launched this year, which directly links environmental impacts to the bottom line. Some investors are taking the next logical step, and are working to shrink their carbon footprints via the Portfolio Decarbonization Coalition (PDC). As of August, the PDC – of which CDP is one the founding members – was overseeing the decarbonization of US$50 billion of assets under management by its 14 members.

Leading to effective corporate action

Companies are responding to these signals. In total, companies disclosed 8,335 projects or initiatives to reduce emissions in 2015, up from 7,285 in 2011 (the year for which the data allows for the most accurate comparison). The three most frequently undertaken types of project are: improving energy efficiency in buildings and processes; installing or building low carbon energy generators; and changing behavior, such as introducing cycle to work schemes, recycling programs and shared transport.

More than a third (36%) of reporting companies have switched to renewable energy to reduce their emissions. On average, the companies that purchased renewable energy in 2015 have doubled the number of activities they have in place to reduce their emissions, showing their growing understanding or capacity to realize the benefits of lower carbon business. Further, 71% (1,425) of respondents are employing energy efficiency measures to cut their emissions, compared with 62% (1,185) in 2011, demonstrating that companies are committed to reducing wasted energy wherever possible.

Companies are also quietly preparing for a world with constraints – and a price – on carbon emissions. In the past year particularly, we have seen a significant jump in the number of companies attributing a cost to each ton of carbon dioxide they emit, to help guide their investment decisions. This year 435[2] companies disclosed using an internal price on carbon, a near tripling of the 150 companies in 2014. Meanwhile, an additional 582 companies say they expect to be using an internal price on carbon in the next two years.

However, these efforts have not proved sufficient to adequately constrain emissions growth. On a like-for-like basis, direct ('Scope 1') emissions from the companies analyzed for this report grew 7% between 2010 and 2015. Scope 2 emissions, associated with purchased electricity, grew 11%. There are many factors that might explain this, not least economic growth but this rise in emissions is also considerably lower than would have been the case without the investments made by responding companies in emissions reduction activities.

Good progress – but it needs to accelerate

Companies disclosing through CDP's climate change program have made substantial progress in understanding, managing and beginning to reduce their climate change impacts. However, if dangerous climate change is to be avoided, emissions need to fall significantly.

Governments have committed to hold global warming to less than 2°C above pre-industrial levels. The Intergovernmental Panel on Climate Change calculates that to do this, global emissions need to fall between 41% and 72% by 2050. Although more companies are setting emissions targets, few of them are in line with this goal. In most cases, targets are neither deep enough nor sufficiently long term.

More than half (51%) of absolute emissions targets adopted by the reporting sample extend only to 2014 or 2015. Two fifths (42%) run to 2020 but only 6% extend beyond that date. The figures for intensity targets are almost identical. This caution in target setting is likely the result of the uncertain policy environment: many companies will be awaiting the outcome of the Paris climate talks before committing to longer-term targets.

However, a number of big emitters – such as utilities Iberdrola, Enel and NRG – have established long-term, ambitious emissions targets that are in line with climate science. These companies recognize that there is a business case for taking on such targets and setting a clear strategic direction, including encouraging innovation, identifying new markets and building long-term resilience. Many other companies have pledged to do so through the We Mean Business 'Commit to Action' initiative.

CDP aims to work along a number of fronts to help other companies, especially in high-emitting sectors, join them. With its partners, CDP has developed a sector-based approach to help companies set climate science-based emissions reduction targets. The Science Based Targets initiative uses the 2°C scenario developed by the International Energy Agency.

Looking forward, CDP will encourage more ambitious target setting through our performance scoring, by giving particular recognition to science-based targets. We are planning gradual changes to our scoring methodology that will reward companies that are transitioning towards renewable energy sources at pace and scale.

In addition, CDP is working with high-emitting industries to develop sector-specific climate change questionnaires and scoring methodologies, to ensure that disclosure to CDP, and the actions required to show leading performance, are appropriate for each sector. In 2015, we piloted a sector-specific climate change questionnaire and scoring methodology privately with selected oil and gas companies, ahead of their intended implementation in 2016.

The numbers for companies using or planning to implement internal carbon pricing are based on the sample analyzed for Putting a price on risk:Carbon pricing in the corporate world. Of the 1,997 companies analyzed in this report 315 have disclosed that they set an internal carbon price, with 263 planning to do so. For more detail, see https://www.cdp.net/CDPResults/carbon-pricing-in-the-corporate-world.pdf

> **The climate negotiations in Paris at the end of the year present a unique opportunity for countries around the world to commit to a prosperous, low carbon future. The more ambitious the effort, the higher the rewards will be. But Paris is a milestone on the road to a better climate, not the grand finale.**
>
> **Unilever**

And business needs a seat at the table in Paris
The Paris climate agreement will, we hope, provide vital encouragement to what is a multi-decade effort to bring greenhouse gas emissions under control. It will hopefully give private sector emitters the confidence to set longer-term emissions targets aligned with climate change. Companies and their investors therefore will be, alongside national governments, arguably the most important participants in ensuring the success of the global effort to rein in emissions.

Companies that have an opinion on a global climate deal are overwhelmingly in support: when asked if their board of directors would support a global climate change agreement to limit warming to below 2°C, 805 companies said yes, while 111 said no. However, a large number of respondents (1,075) stated they have no opinion, and 331 did not answer the question. This suggests either a lack of clarity around the official board position on the issue, or that many companies are not treating the imminent climate talks with the necessary strategic priority.

Conclusion
The direction of travel is clear: the world will need to rapidly reduce emissions to prevent the worst effects of climate change. And the political will is building to undertake those reductions. The majority of those reductions will need to be delivered by the corporate world – creating both risk and opportunity.

CDP and the investors we work with have played a formative role in building awareness of these risks and opportunities. Our data has helped build the business case for emissions reduction and inform investment decisions. The corporate world is responding with thousands of emissions reduction initiatives and projects. But the data also shows that efforts will need to be redoubled, by both companies and their investors, if we are to successfully confront the challenge of climate change in the years to come.

A deeper dive into corporate environmental risk

Central to CDP's mission is communicating the progress companies have made in addressing climate change, and highlighting where risk may be unmanaged. To better do so, CDP has introduced sector-specific research for investors.

This forward-looking research links environmental impacts directly to the bottom line and directs investors as to how they can engage with companies to improve environmental performance.

The research flags topical environmental and regulatory issues within particular sectors, relevant to specific companies' financial performance and valuation, and designed for incorporation into investment decisions. Sectors covered to date include automotive, electric utilities and chemicals. The research is intended to support engagement with companies, providing actionable company-level conclusions.

To better equip investors in understanding carbon and climate risk, CDP is also developing further investor tools such as a carbon footprinting methodology, and is working continuously to improve the quality of our data.

Working towards water stewardship

CDP has this year introduced the first evaluation and ranking of corporate water management, using scoring carried out by our lead water-scoring partner, South Pole Group.

The questions in the water disclosure process guide companies to comprehensively assess the direct and indirect impacts that their business has on water resources, and their vulnerability to water availability and quality.

Introducing credible scoring will catalyze further action. It will illuminate where companies can improve the quality of the information they report, and their water management performance. Participants will benefit from peer benchmarking and the sharing of best practice.

Water scoring will follow a banded approach, with scores made public for those companies reaching the top 'leadership' band. Scoring will raise the visibility of water as a strategic issue within companies and increase transparency on the efforts they are making to manage water more effectively.

Furthermore, scoring will be used to inform business strategies, build supply chain resilience and secure competitive advantage. We hope that keeping score on companies and water will reduce the detrimental impacts that the commercial world has on water resources, ensuring a better future for all.

The Climate A List 2015

Company	Country
Consumer Discretionary	
Best Buy Co., Inc.	USA
BMW AG	Germany
Coway Co Ltd	South Korea
Fiat Chrysler Automobiles NV	Italy
Las Vegas Sands Corporation	USA
LG Electronics	South Korea
Melia Hotels International SA	Spain
NH Hotel Group	Spain
Nissan Motor Co., Ltd.	Japan
Sky UK Limited	United Kingdom
Sony Corporation	Japan
Wyndham Worldwide Corporation	USA
YOOX SpA	Italy
Consumer Staples	
Asahi Group Holdings, Ltd.	Japan
Brown-Forman Corporation	USA
Diageo Plc	United Kingdom
J Sainsbury Plc	United Kingdom
Kesko Corporation	Finland
L'Oréal	France
Nestlé	Switzerland
Philip Morris International	USA
SABMiller	United Kingdom
Suntory Beverage & Food	Japan
Unilever Plc	United Kingdom
Energy	
Galp Energia SGPS SA	Portugal
PTT Exploration & Production Public Company Limited	Thailand

Company	Country
Financials	
Bank of America	USA
BNY Mellon	USA
CaixaBank	Spain
Citigroup Inc.	USA
Credit Suisse	Switzerland
Dexus Property Group	Australia
Foncière des Régions	France
Grupo Financiero Banorte SAB de CV	Mexico
Host Hotels & Resorts, Inc.	USA
ING Group	Netherlands
Intesa Sanpaolo S.p.A	Italy
Investa Office Fund	Australia
Investec Limited	South Africa
Kiwi Property Group	New Zealand
Macerich Co.	USA
MAPFRE	Spain
Nedbank Limited	South Africa
Principal Financial Group, Inc.	USA
Raiffeisen Bank International AG	Austria
Shinhan Financial Group	South Korea
Simon Property Group	USA
Standard Chartered	United Kingdom
State Street Corporation	USA
T.GARANTİ BANKASI A.Ş.	Turkey
The Hartford Financial Services Group, Inc.	USA
Health Care	
Roche Holding AG	Switzerland
Industrials	
Abengoa	Spain
Carillion	United Kingdom

Company	Country
CNH Industrial NV	United Kingdom
CSX Corporation	USA
Dai Nippon Printing Co., Ltd.	Japan
Deutsche Bahn AG*	Germany
Deutsche Post AG	Germany
Ferrovial	Spain
Huber + Suhner AG	Switzerland
Hyundai E&C	South Korea
Kingspan Group PLC	Ireland
Kone Oyj	Finland
Obrascon Huarte Lain (OHL)	Spain
Pitney Bowes Inc.	USA
Raytheon Company	USA
Royal BAM Group NV	Netherlands
Royal Philips	Netherlands
Samsung C&T	South Korea
Samsung Engineering	South Korea
Schneider Electric	France
Senior Plc	United Kingdom
Shimizu Corporation	Japan
Siemens AG	Germany
Stanley Black & Decker, Inc.	USA
United Technologies Corporation	USA
Information Technology	
Accenture	Ireland
Adobe Systems, Inc.	USA
Alcatel - Lucent	France
Apple Inc.	USA
Atos SE	France
Autodesk, Inc.	USA
Cisco Systems, Inc.	USA
EMC Corporation	USA

Company	Country
Google Inc.	USA
Hewlett-Packard	USA
Hitachi, Ltd.	Japan
Juniper Networks, Inc.	USA
LG Innotek	South Korea
Microsoft Corporation	USA
Samsung Electro-Mechanics Co., Ltd.	South Korea
Samsung Electronics	South Korea
Materials	
BillerudKorsnäs	Sweden
Givaudan SA	Switzerland
Harmony Gold Mining Co Ltd*	South Africa
International Flavors & Fragrances Inc.	USA
Kumba Iron Ore	South Africa
Sealed Air Corp.	USA
Symrise AG	Germany
The Mosaic Company	USA
Telecommunication Services	
Proximus (formerly Belgacom)	Belgium
KT Corporation	South Korea
LG Uplus	South Korea
Sprint Corporation	USA
Swisscom	Switzerland
Telefonica	Spain
Telenor Group	Norway
Utilities	
ACCIONA S.A.	Spain
E.ON SE	Germany
EDP - Energias de Portugal S.A.	Portugal
Entergy Corporation	USA
Iberdrola SA	Spain

*Deutsche Bahn responded through Mittelstand program and is not included in analysis

*Harmony Gold Mining is not part of analysis sample

2015 leadership criteria

Each year companies that participate in CDP's climate change program are scored against two parallel assessment schemes: performance and disclosure.

The performance score assesses the level of action, as reported by the company, on climate change mitigation, adaptation and transparency. Its intent is to highlight positive climate action as demonstrated by a company's CDP response. A high performance score signals that a company is measuring, verifying and managing its carbon footprint, for example by setting and meeting carbon reduction targets and implementing programs to reduce emissions in both its direct operations and supply chain.

The disclosure score assesses the completeness and quality of a company's response. Its purpose is to provide a summary of the extent to which companies have answered CDP's questions in a structured format. A high disclosure score signals that a company provided comprehensive information about the measurement and management of its carbon footprint, its climate change strategy and risk management processes and outcomes.

The highest scoring companies for performance and/or disclosure enter the A List (Performance band A) and / or the Climate Disclosure Leadership Index (CDLI). Public scores are available in CDP reports, through Bloomberg terminals, Google Finance and Deutsche Boerse's website.

In 2015 the climate change scoring methodology was revised to put more emphasis on action and as a result achieving A is now better aligned with what the current climate change scenario requires.

CDP operates a strict conflict of interest policy with regards to scoring and this can be viewed at https://www.cdp.net/Documents/Guidance/2015/CDP-conflict-of-interest-policy.pdf

What are the A List and CDLI criteria?

To enter the A List, a company must:

- Make its response public and submit via CDP's Online Response System
- Attain a performance score greater than 85
- Score maximum performance points on question 12.1a (absolute emissions performance) for GHG reductions due to emission reduction actions over the past year 4% or above in 2015)
- Disclose gross global Scope 1 and Scope 2 figures
- Score maximum performance points for verification of Scope 1 and Scope 2 emissions (having 70% or more of their emissions verified)
- Furthermore, CDP reserves the right to exclude any company from the A List if there is anything in its response or other publicly available information that calls into question its suitability for inclusion. CDP is working with RepRisk in 2015 to strengthen this background research.

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

To enter the CDLI, a company must:

- Make its response public and submit via CDP's Online Response System
- Achieve a disclosure score within the top 10% of the total regional sample population*

*Note: while it is usually 10%, in some regions the CDLI cut-off may be based on another criteria, please see local reports for confirmation.

Communicating progress

Central to CDP's mission is communicating the progress companies have made in addressing climate change, and highlighting where risk may be unmanaged. To better do so, CDP is changing how our climate performance scoring is presented, and we have introduced sector-specific research for investors.

Banding performance scores

Starting with water and forests in 2015 and including climate change and supply chain in 2016, CDP is moving to present scores using an approach that illustrates companies' progress towards environmental stewardship. Each reporting company will be placed in one of the following bands:

- **Disclosure** measures the completeness of the company's response;
- **Awareness** measures the extent to which the company has assessed environmental issues, risks and impacts in relation to its business;
- **Management** measures the extent to which the company has implemented actions, policies and strategies to address environmental issues;
- **Leadership** looks for particular steps a company has taken which represent best practice in the field of environmental management.

We believe that this approach will be clearer and easier to understand for companies, investors and other stakeholders. Water and forest scores will use this new presentation of banded scores in 2015, while the updated scoring methodology for climate change will be available in February 2016 with results in late 2016.

Low carbon investing hits mainstream

> **I think there are great benefits to investment managers who are able to integrate environmental data into their models. They are the leaders in finding a value-driver within an industry and modeling it when the rest of the market can't. That gives you a competitive advantage.**
>
> **George Serafeim**
> **Harvard Business School**

Capital markets are waking up to climate-conscious investing. Mainstream European investors are finding ways to lower the carbon content of their portfolios, without sacrificing returns. The largest asset managers on Wall Street now offer financial products to address carbon opportunities and risks. And more activist funds from Sweden to Australia are engaging with the heaviest emitters, urging them to lower their greenhouse gas emissions.

CDP led this shift, harnessing the power of investors now representing one-third of the world's investment. In 2000, when CDP first asked investors to sign its disclosure request to companies, most fund directors were indifferent to climate change issues. Since then, CDP has won the support of financial giants including AIG, Bank of America Merrill Lynch, Barclays', BlackRock, Credit Suisse, Deutsche Bank, HSBC, ING, Itau, J.P. Morgan Chase, Macquarie, Nomura, Santander, and Wells Fargo.

"The field would not be where it is today without CDP," said Curtis Ravenel, director of sustainability for Bloomberg, whose terminals display CDP data, scoring and rankings that form the basis for new index-based funds. "They mobilized the investment community to recognize climate change and to drive disclosure from companies."

While the US has long lagged Europe in investor action on climate change, many Wall Street stalwarts are now focusing on it. "Over the last two years, ESG has become more central to our clients," said Hugh Lawson, Goldman Sachs' recently appointed first director of environmental, social and governance (ESG) Investing. "Climate change is clearly on people's minds."

Wall Street is building products and tools to reduce carbon intensity in portfolios, and shifting investment to new low carbon technologies and opportunities, building on indexes developed by Standard & Poor's and MSCI. New products include exchange-traded funds at State Street and BlackRock, BNY Mellon's Green Beta Investing Approach, and a low-carbon portfolio at Northern Trust.

Developing new strategies and products requires solid information, and CDP gathers and analyzes the environmental impact of more than 5,500 companies representing 55%* of the world's market capitalization.

Qualitative answers to CDP's climate change questionnaire offer integrated information for active investors engaging companies. Investment manager Rockefeller & Co. sees in CDP disclosures how companies are dealing with water and emissions challenges, and the transparency of their supply chain.

"We like to put the (financial) metrics in context," said Farha-Joyce Haboucha, Rockefeller's director of Sustainability & Impact Investing. "All those nitty-gritty details help us talk to management. We can show one company's details to another, and say: 'You can do better on this.'"

Companies will now have to prove they meet strict ESG standards to be included in the portfolio of ABP, one of the world's biggest pension funds, with €350bn in assets and 2.8 million participants. The Dutch pension fund expects to shift €30bn of its €90bn in equities to cut the carbon emissions of companies within its portfolio by 25% over the next five years. "The new strategy must not have an impact on the return on investment,' the fund's chairwoman Corien Wortmann said.

Whether active or passive, investors' actions are backed by research that shows that good disclosure is a proxy for good management globally and that best-in-class climate performers may outperform their peers. "It is more feasible to incorporate climate change into investment decisions because the data availability and quality has increased in the last 10 years due to groups like CDP," said George Serafeim at Harvard Business School.

Globally, $21.4 trillion was invested in funds with ESG mandates in 2014, up 61% in two years, according to the Global Sustainable Investment Alliance**. In Europe, it is more than half of institutionally managed assets.

Investors taking a long-term view are crucial to avoiding the "tragedy of the horizon," according to Mark Carney, Chairman of the Financial Stability Board and Governor of the Bank of England. In a recent speech*** to Lloyd's of London, Carney called for better disclosure worldwide, citing CDP as a model, to make the global economy more resilient. He said clear prices on carbon, another focus of CDP, and stress-testing would buttress this.

As mainstream investors take a longer view, they are asking companies to future-proof their business to take better account of environmental risks and opportunities to stabilize, maximize and grow shareholder return. The North American edition of CDP's 2015 global climate change report will further examine trends and innovation in low-carbon investing.

* sourced from Bloomberg
** http://www.gsi-alliance.org/members-resources/global-sustainable-investment-review-2014/
*** http://www.bankofengland.co.uk/publications/Documents/speeches/2015/speech844.pdf

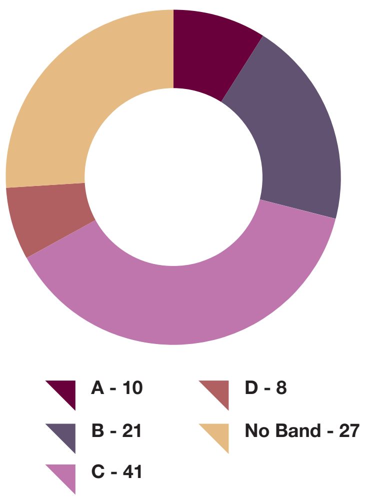
Australia and New Zealand

Australia/NZ	2010	2015
Analyzed responses†	98 (13)	97 (7)
Market cap of analyzed companies US$m	1,338,617	1,292,207
Scope 1	129.2 MtCO$_2$e	136.5 MtCO$_2$e
Scope 2	70.8 MtCO$_2$e	57.4 MtCO$_2$e
Scope 1 like for like: 61 companies	102.4 MtCO$_2$e	134.1 MtCO$_2$e
Scope 2 like for like: 61 companies	64.8 MtCO$_2$e	52.9 MtCO$_2$e

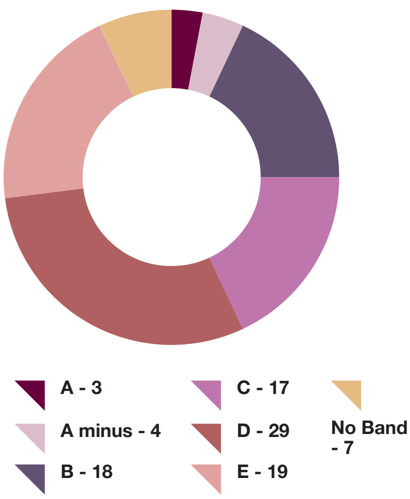
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

Companies in this region are demonstrating an increasing appetite to act on climate change, and have been steadily developing their approach to climate change management. This is perhaps indicative of a corporate understanding of the issues that is greater than the political will to act. Despite the Australian government scrapping its carbon pricing mechanism, around a quarter of companies use an

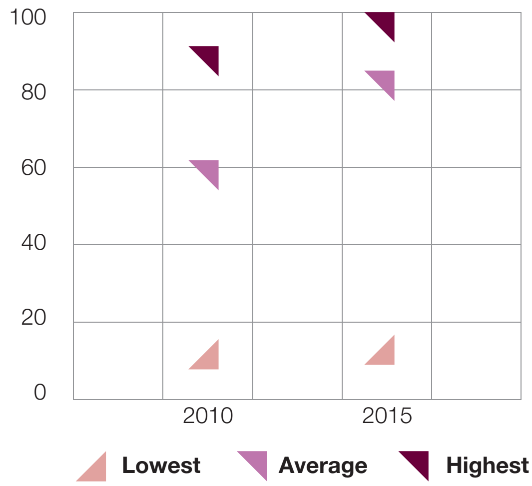
1. 2010 performance bands in Australia and New Zealand



2. 2015 performance bands in Australia and New Zealand



3. Disclosure scores over time in Australia and New Zealand



4. Improving climate actions in Australia and New Zealand

35%

increase of companies with active emissions reduction initiatives.

internally determined price per ton of carbon to guide their investment decisions. This demonstrates the value that those companies see from carbon pricing, and their belief that it has a future.

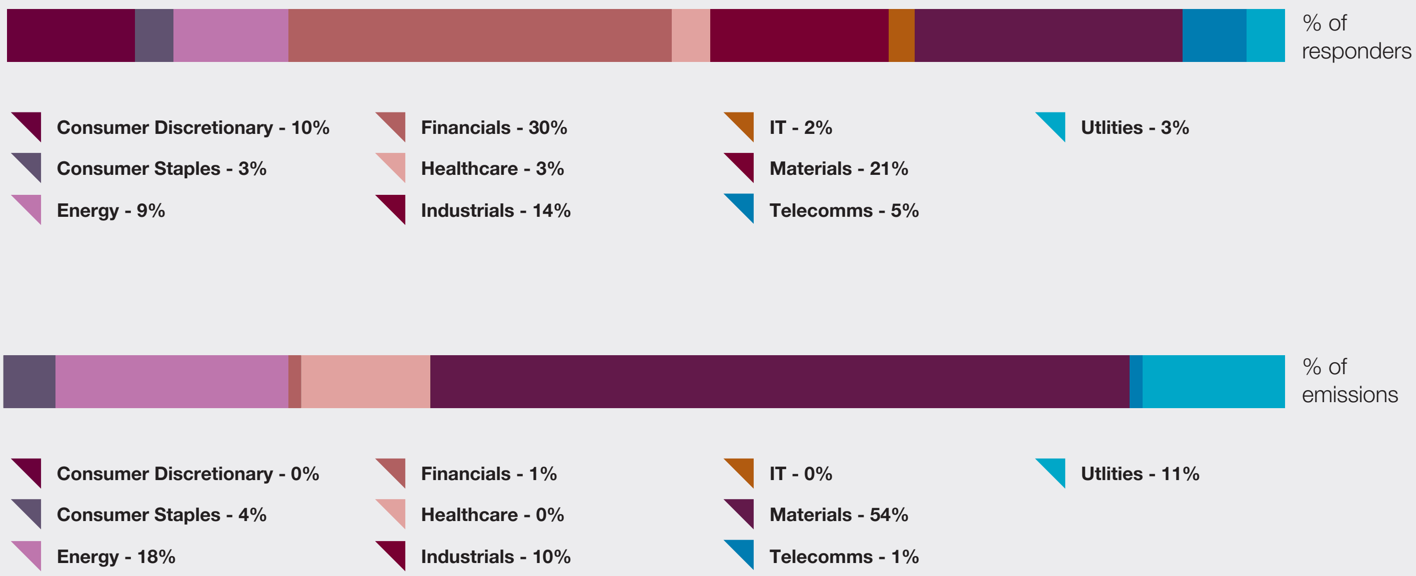
Since 2010 there has been a jump of at least 20 percentage points in the proportion of this sample using incentives to drive climate change management, setting intensity-based emissions reduction targets and seeking external verification for their Scope 1 emissions data. And this is leading into action: five years ago, fewer than half of the companies participating in CDP's climate change program were actively moving to reduce their emissions. This year, more than 80% have initiatives in place to do so.

Further, Scope 2 emissions of the companies that disclosed to CDP in both 2010 and 2015 have declined by 18%, suggesting that they have reduced the amount of power they use and/or its carbon intensity. Indeed, energy efficiency projects are consistently the most popular approach to emissions reductions.

Australian Real Estate management firm **Investa Office Fund** notes that "tenant organisations are increasingly interested in leasing environmentally responsible and climate resilient office space" and this gives them a strategic advantage to meet their clients changing requirements, while their New Zealand sector peer **Kiwi Property Group** echo this sentiment of reduced operating costs and improved reputation as part of their strategic decision to install large scale solar at their Sylvia Park shopping Center. While companies in this region have been moving in the right direction, they would benefit from policy that will help accelerate their progress and lead to Scope 1 emissions reductions.

> **We have invested over AUS$3 billion in new renewable energy projects, including wind, solar and hydro projects and constructed the southern hemisphere's largest wind farm and are currently building the southern hemisphere's largest solar PV installation.**
>
> **AGL Energy**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Australia and New Zealand



Benelux

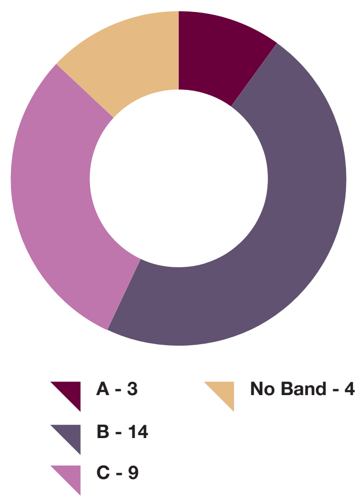
Benelux	2010	2015
Analyzed responses†	31 (3)	47 (6)
Market cap of analyzed companies US$m	507,367	770,195
Scope 1	242.1 $MtCO_2e$	281.6 $MtCO_2e$
Scope 2	45.8 $MtCO_2e$	41.8 $MtCO_2e$
Scope 1 like for like: 26 companies	241.8 $MtCO_2e$	277 $MtCO_2e$
Scope 2 like for like: 26 companies	45.3 $MtCO_2e$	38.6 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

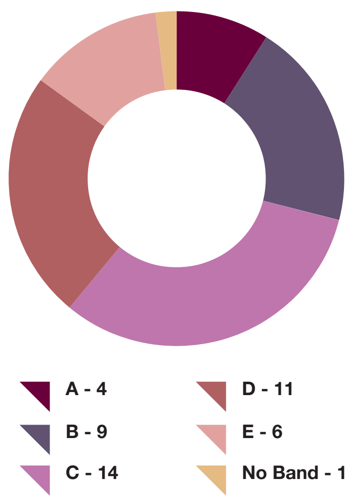
Companies in Belgium, the Netherlands and Luxembourg demonstrate an above average appetite for action on climate change. Benelux companies perform better than the global CDP sample in seven of the nine indicators included in the chart below (Fig. 4).

The percentage of those companies carrying out emissions reduction activities - such as investing in energy efficiency improvements, or installing renewable

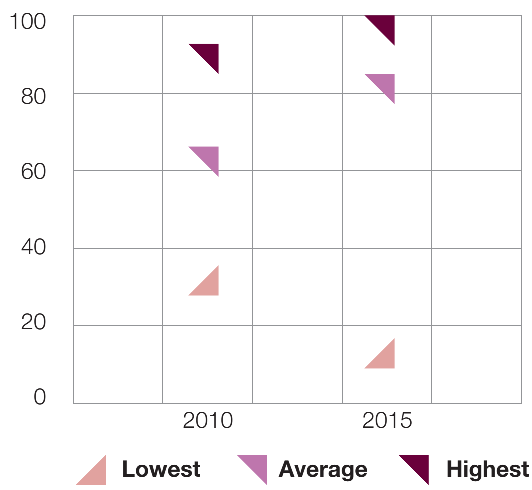
1. 2010 performance bands in Benelux



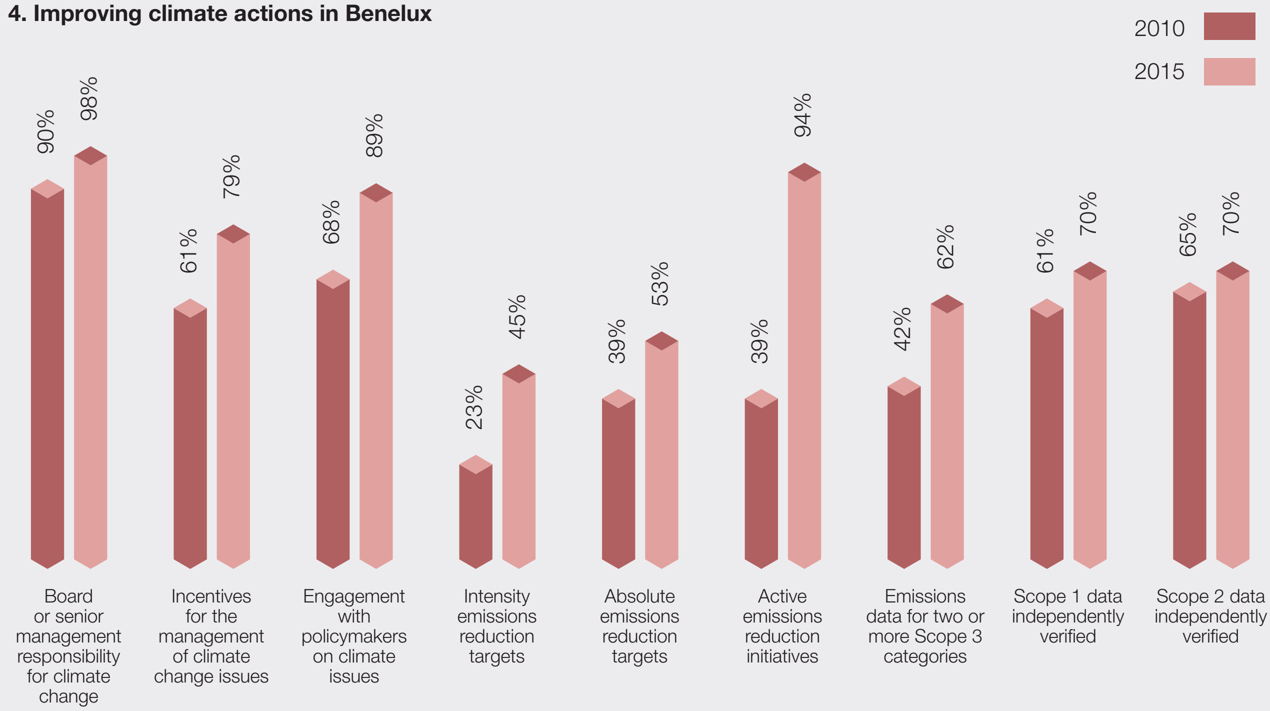
2. 2015 performance bands in Benelux



3. Disclosure scores over time in Benelux



4. Improving climate actions in Benelux



55%

increase between 2010 and 2015 in Benelux companies undertaking emissions reduction activities.

energy systems - has more than doubled to 94% from 39%. For example, electronics giant **Royal Philips** has carried out a suite of energy efficiency projects under its EcoVision and Green Operations programs, such as installing LED lighting, replacing old air conditioning units, optimizing temperature control settings, and recovering waste heat. These projects have delivered annual carbon savings of 2,625 tons and monetary saving of €338,400 a year.

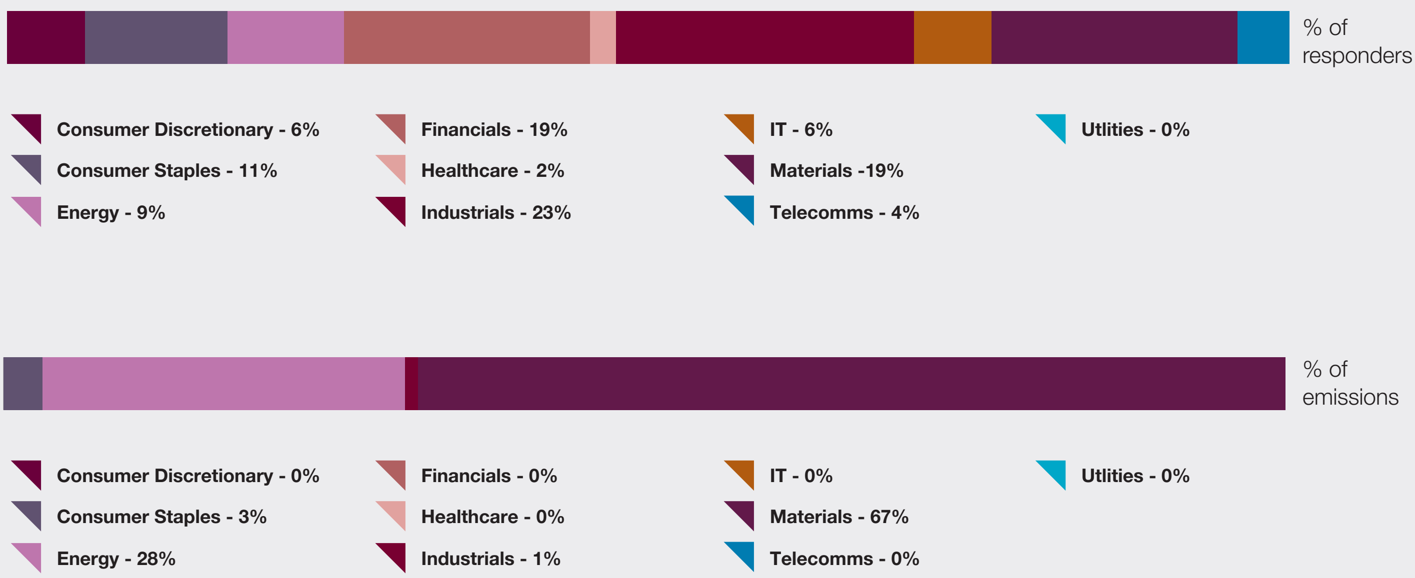
Particularly noteworthy is that 70% of companies in the Benelux sample – including pharma group **Akzo Nobel** and telecoms firms **Proximus** (formerly Belgacom) and **Royal KPN** – are consuming renewable energy to reduce their emissions, compared with 36% of the global sample. There has also been a jump in the percentage of companies setting emissions reduction targets: 45% set targets based on emissions per unit of production (up from 23%) and 53% set absolute targets (up from 39%).

With a 50% rise in the number of Benelux corporations participating in CDP's climate change program since 2010, an impressive jump in the average disclosure score and 98% of companies stating board or senior management responsibility for climate change, this region shows one of the greatest appetites for increasingly ambitious climate action.

These efforts have delivered mixed results, however, when it comes to emissions reductions. Companies disclosing both in 2010 and 2015 have reduced their Scope 2 emissions by 14.8% but their 'Scope 1 emissions have risen by a similar proportion. This suggests that companies in the region need to redouble their emissions reduction efforts, and increase their focus on the emissions over which they have direct responsibility.

> **We have found that the weighting placed on environmental / CO_2 issues as part of tenders and bids is increasing. The importance of these issues is expected to grow in the near future and Royal BAM Group has to comply with expectations of clients.**
>
> **Royal Bam Group**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Benelux



Profile: ING Group, Financials

I believe that climate change is one of the biggest global challenges of our time. A challenge to our planet's health, and a challenge to the sustainability of societies and economies around the world. On behalf of ING, I commit to reducing the impact of our operations – of our buildings, our IT systems and our business travel – by setting a target of 20% reduction by 2020.

But the impact of ING's business activities reaches further. Through the choices we make – as a lender, as an investor and through the services we offer our customers – we have a significant influence. With that influence comes responsibility. Our Environmental and Social Risk Framework guides us in making the right choices in how, where and with whom we do business. Mitigating any negative impact that our business or our customers' businesses may have on the environment and communities.

By the first half of 2015 we've financed more than €20.9 billion in sustainable projects and customer transitions. Driving sustainable progress is integral to our purpose, and we continue to seek opportunities to help customers adapt and innovate their businesses in preparation for the low-carbon economy of the future.

Ralph Hamers,
Chief Executive Officer,
ING Group

Brazil

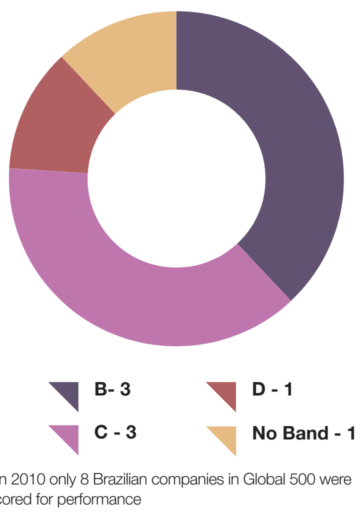
Brazil	2010	2015
Analyzed responses†	47 (7)	55 (8)
Market cap of analyzed companies US$m	928,736	501,730
Scope 1	105.6 $MtCO_2e$	165.7 $MtCO_2e$
Scope 2	2.9 $MtCO_2e$	17.8 $MtCO_2e$
Scope 1 like for like: 36 companies	100.6 $MtCO_2e$	135.2 $MtCO_2e$
Scope 2 like for like: 36 companies	2.8 $MtCO_2e$	14.7 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

Brazilian companies show considerable improvement in their strategic actions in response to the climate challenge, despite economic instability.

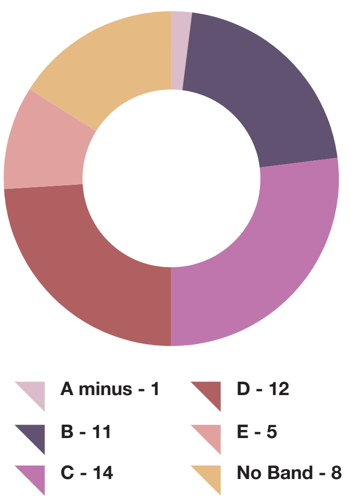
Brazilian participation in CDP's climate change program is increasing over time but the market capitalization of the sample has halved. However, financial constraints do not appear to have reduced corporate focus on moves to transition to lower

1. 2010 performance bands in Brazil*

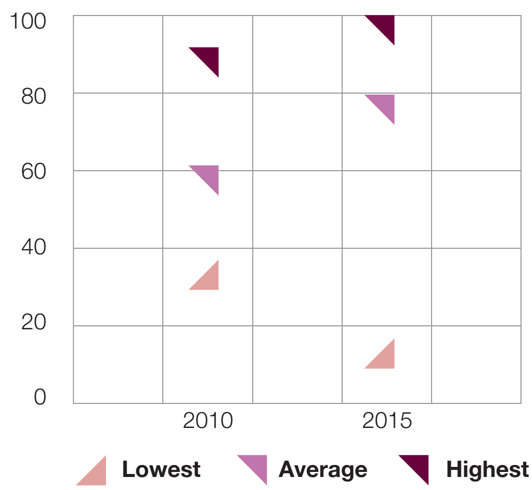


* in 2010 only 8 Brazilian companies in Global 500 were scored for performance

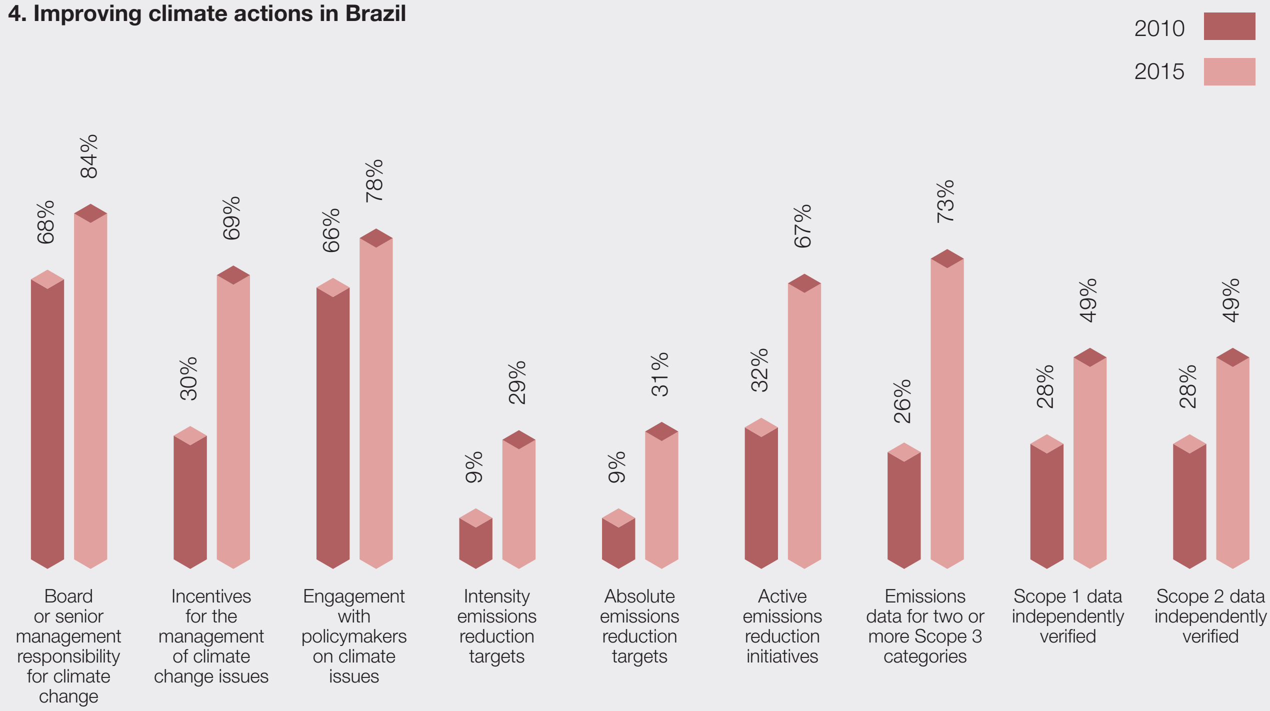
2. 2015 performance bands in Brazil



3. Disclosure scores over time in Brazil



4. Improving climate actions in Brazil



39%

increase in the number of Brazilian companies incentivizing management to address climate change.

carbon models. The percentage of companies setting targets to reduce emissions has tripled, while those with activities to reduce their emissions has doubled. These companies initiated 224 emissions reduction activities in 2015 – up 27% on the 176 initiated in 2010. For example, oil company **Petróleo Brasileiro SA (Petrobras)** reported an impressive 41 emission reduction activities in 2015.

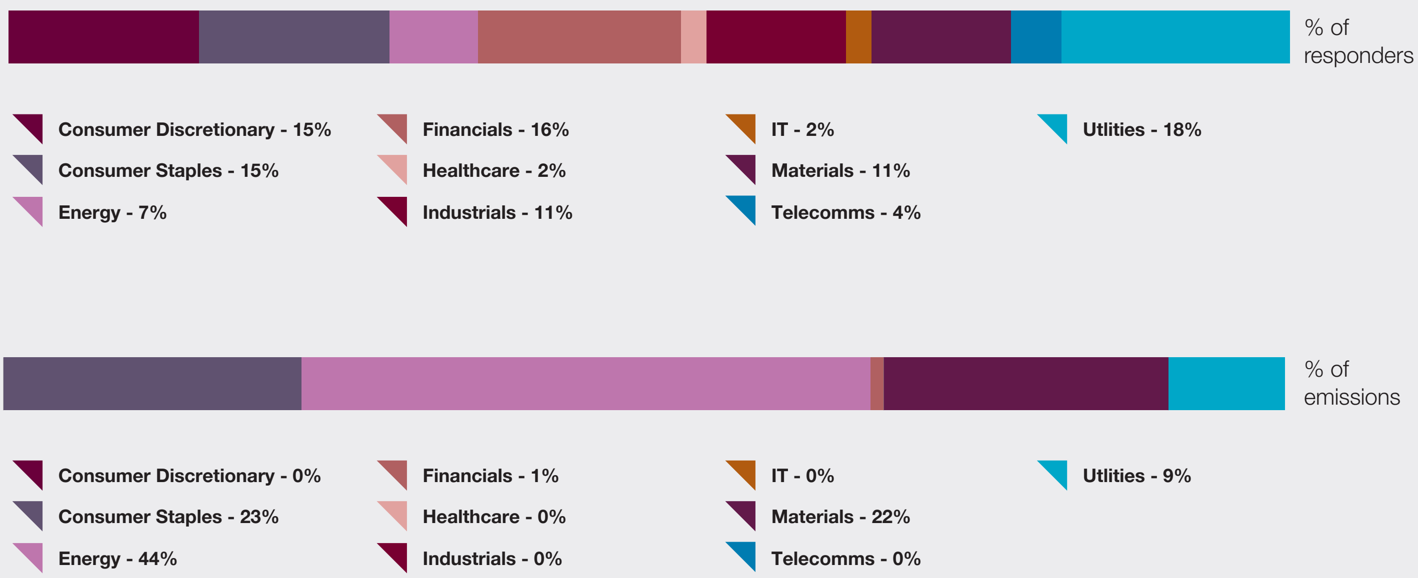
More than two-thirds of companies incentivize management to address climate change issues, up from less than a third in 2010. This may be associated with climate change climbing the boardroom agenda in Brazil: The percentage of companies with board level oversight has risen to over 80%, in line with countries traditionally more advanced in tackling climate change.

The current drought in Brazil - which has led to increased thermal power generation to compensate for a drop in the availability of hydroelectric power – will have had a direct impact on rising Scope 2 emissions – those caused by purchased electricity.

Brazilian companies lag the global average in terms of renewable energy use, with only a quarter consuming renewable energy to reduce their emissions, compared with the global average of 36%. Tapping wind and solar energy is a particularly important response in the light of challenges to Brazil's current electricity mix.

> **Braskem's strategy is influenced by reputational aspects and changes in consumption habits, recognising the growing demand for products that are less carbon-intensive and use renewable feedstock, such as our innovative process for the production of polymers from sugar cane which gives us a competitive advantage in the global market.**
>
> **Braskem**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Brazil



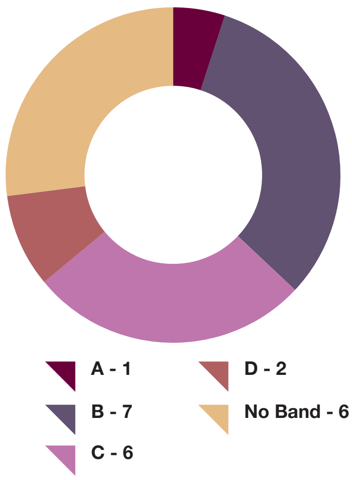
Canada

Canada	2010	2015
Analyzed responses†	95 (8)	100 (21)
Market cap of analyzed companies US$m	1,049,097	1,447,035
Scope 1	212.2 $MtCO_2e$	199 $MtCO_2e$
Scope 2	26 $MtCO_2e$	36.7 $MtCO_2e$
Scope 1 like for like: 69 companies	135.3 $MtCO_2e$	152.4 $MtCO_2e$
Scope 2 like for like: 69 companies	20.7 $MtCO_2e$	25.8 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

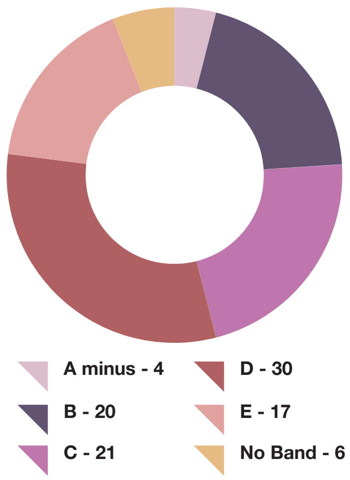
The climate change actions of Canadian companies are improving. More than nine in ten companies now apply board or senior management oversight to climate issues. Despite limited policy support from the previous national government that placed a low priority on climate action, Canadian companies are increasingly politically engaged on the issue, perhaps due to developments on an international level. The early signals from the new administration appear to reflect this more progressive position.

1. 2010 performance bands in Canada*



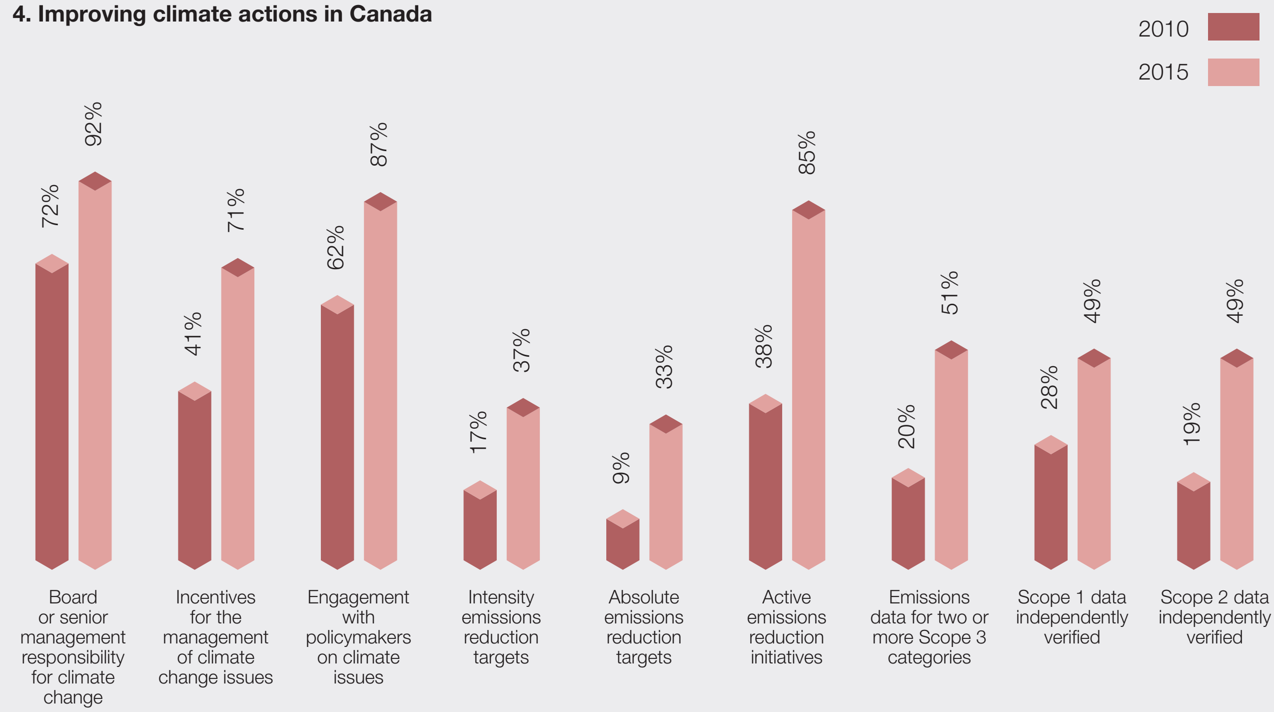
* in 2010 only 22 Canadian companies in Global 500 were scored for performance

2. 2015 performance bands in Canada



3. Disclosure scores over time in Canada

4. Improving climate actions in Canada



47%

increase between 2010 and 2015 in the number of Canadian companies undertaking emissions reduction activities

More than two-thirds incentivize managers to act on climate change and the total percentage of companies with active emissions reduction initiatives underway increased to 85% in 2015, from 38% in 2010.

Companies that have been acting to reduce their emissions since 2010 see the value in lowering their carbon. For example, those that purchased renewable energy five years ago have since doubled the number of emissions reduction activities in place. This is in line with the global average, illustrating a growing capacity to realize the benefits of low-carbon business.

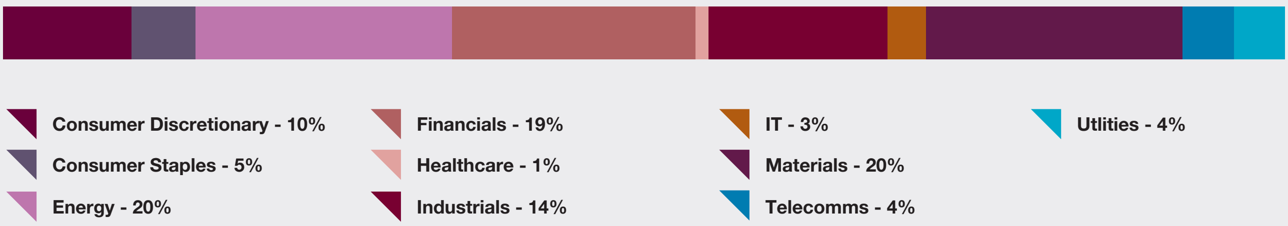
But this does not apply to the Canadian sample as a whole. There is a 16% drop in the number of companies pursuing reductions through renewable energy projects, which contrasts with the 6% average increase globally.

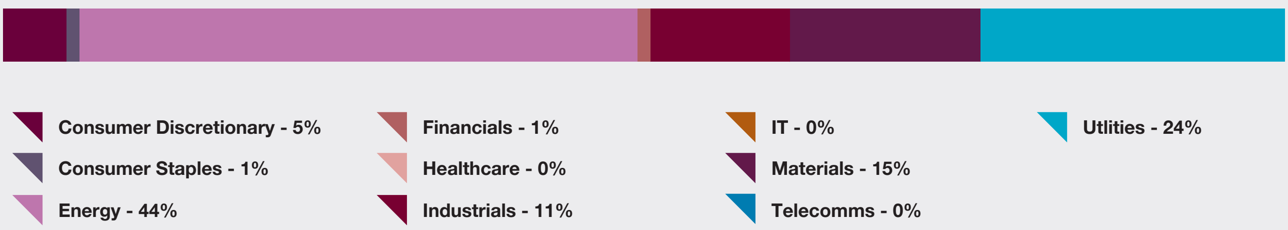
Further, Canadian companies lag in terms of climate change strategy. For example, only 33% set absolute emissions targets compared with 44% globally. Perhaps unsurprisingly, emissions are continuing to increase. Comparing companies that reported in both 2010 and 2015, Scope 1 emissions have risen 12% and Scope 2 by 24% over the last five years.

These indicators point to growing visibility of climate issues within corporate leadership, and a growing willingness to undertake mitigation.

> **An effective agreement in Paris would mean more stringent regulations regarding carbon emissions. Such regulations would provide market opportunities to sell our carbon-reducing products and services, including remote collaboration tools, cloud computing, green data Centers, virtualization.**
>
> **BCE Inc**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Canada





Central & Eastern Europe (CEE)

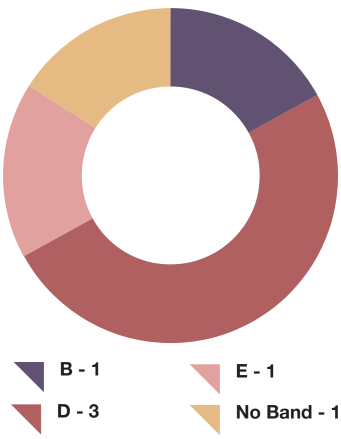
CEE	2010	2015
Analyzed responses†	6 (9)	7 (9)
Market cap of analyzed companies US$m	19,386	24,255
Scope 1	10.9 $MtCO_2e$	9.5 $MtCO_2e$
Scope 2	2.9 $MtCO_2e$	1.6 $MtCO_2e$
Scope 1 like for like: 3 companies	10.9 $MtCO_2e$	5.8 $MtCO_2e$
Scope 2 like for like: 3 companies	2.9 $MtCO_2e$	1.3 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

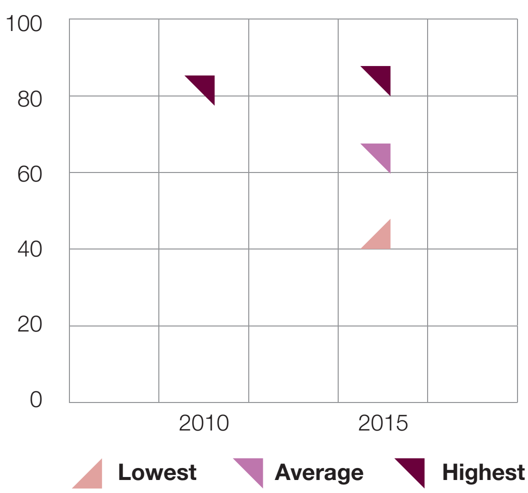
67%

increase between 2010 and 2015 in the number of companies in the CEE region undertaking emissions reduction activities

1. 2015 performance bands in CEE



2. Disclosure scores over time in CEE*



* only one CEE company was scored in 2010.

Disclosure from Central and Eastern European companies is still at a very low level. From the sample of the 100 largest listed companies in Poland, the Czech Republic, Hungary and the Baltic States, only seven disclosed directly to CDP, while nine disclosed through parent companies.

Those companies that are leading in the region by participating in CDP's climate change program are still somewhat project-oriented, rather than strategic, in their approach to addressing climate change. The majority of reporting companies lack emission reduction targets, and even leading companies in the region are failing to analyze their Scope 1 and Scope 2 emissions, nor verify emissions data with third parties.

However, there are signs that companies in the region are beginning to recognize the challenge posed by climate change. All but one are engaging with policymakers, while a majority have charged a board member with responsibility for the area, and have emission reduction initiatives underway.

While CDP's climate program is still clearly in development in the region, between 2011 and 2014 the number of emission reduction initiatives rose to 23 from 13, and almost half of companies disclosing are consuming renewable energy to reduce their emissions.

In house technological expertise and vertical integration into 2nd and 3rd generation biofuels is a key success factor. In addition, energy efficiency will remain in focus, all energy-intensive sites have been implementing projects to reduce both energy consumption and CO_2 emissions.

MOL Nyrt

China

56%

of Chinese companies have set absolute emissions reduction targets

China's commitment to tackling climate change is driven from the very top of its political leadership. President Xi's September joint statement, with US President Barack Obama, saw China announce US$3.1 billion in international climate finance, and reiterated Beijing's plan to launch a national carbon trading program in 2017.

However, among Chinese corporations, climate change disclosure is at its early stages. Only nine Chinese companies disclosed to CDP's climate change program by the deadline in 2015, up from eight in 2010.

With such a limited sample size, it is difficult to draw meaningful inferences from the data collected. What we have seen, however, is a greater number of Chinese companies disclosing through CDP's supply chain program, and an improvement in the quality of the information they provide. This means that Chinese supplier companies are responding to requests from their multinational customers for greenhouse gas emissions and other climate change related data. It suggests that corporate influence from other economies is driving action within the Chinese market. Leading companies such as **China Mobile** are disclosing targets to reduce energy use, and have identified low-carbon strategic opportunities.

CDP will continue to work with the Chinese government and domestic companies to encourage disclosure as an essential foundation of climate change management. To that end, we are working with the Ministry of Finance, with support from the UK's Foreign and Commonwealth Office, to leverage its purchasing power as the coordinating body for public procurement. We are also partnering with the China Quality Certification Center, with a view to addressing concerns about disclosure among Chinese companies.

The company has recognized the opportunities brought by climate change, and realized that information and "Internet of things" service would be the low carbon service which the company should develop... and announced the energy saving target of 35% reduction on energy consumption per unit of information flow by 2015 compared to that of 2012.

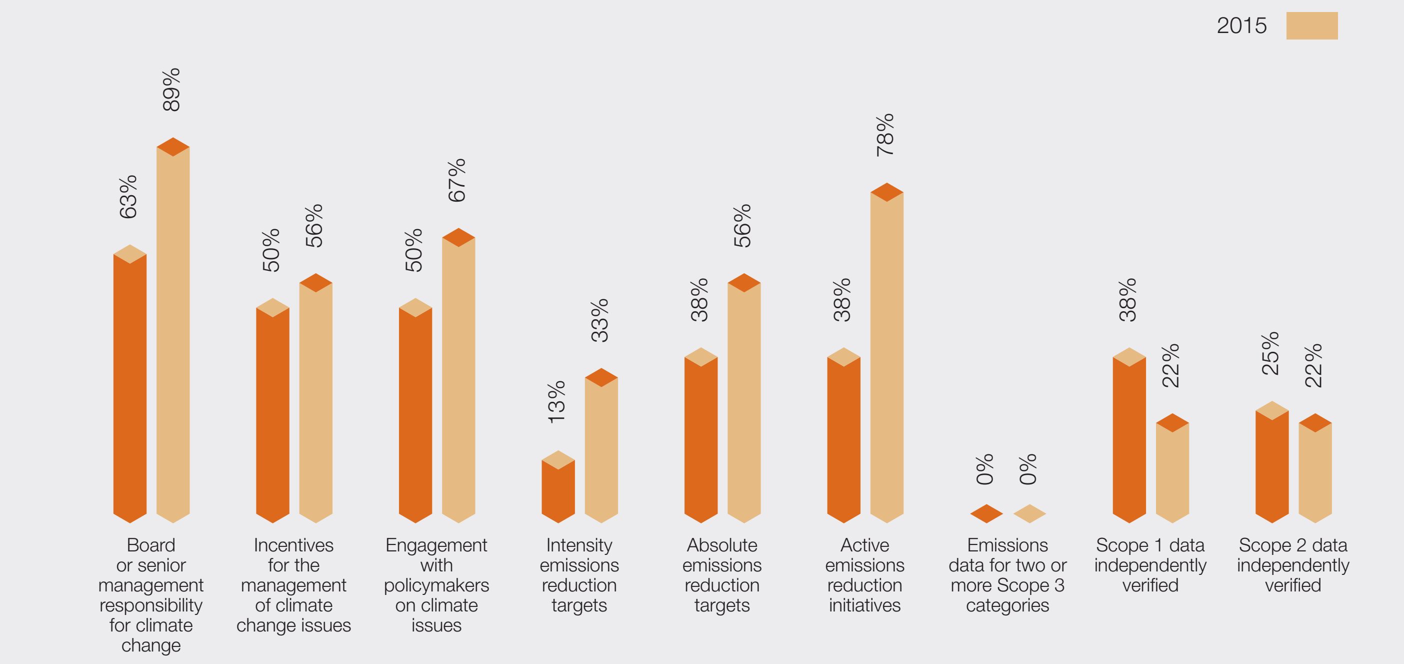
China Mobile

China	2010	2015
Analyzed responses†	8 (5)	9 (19)
Market cap of analyzed companies US$m	530,144	970,697
Scope 1	21 $MtCO_2e$	68 $MtCO_2e$
Scope 2	1.4 $MtCO_2e$	0.06 $MtCO_2e$
Scope 1 like for like: 3 companies*	0.01 $MtCO_2e$	67 $MtCO_2e$
Scope 2 like for like: 3 companies	0.15 $MtCO_2e$	no data

* not all companies provided emissions data

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

1. Improving climate actions in China



Austria, Germany & Switzerland (DACH)

DACH	2010	2015
Analyzed responses†	166 (11)	155 (10)
Market cap of analyzed companies US$m*	1,988,204	2,685,313
Scope 1	683.3 $MtCO_2e$	587 $MtCO_2e$
Scope 2	70.1 $MtCO_2e$	81.3 $MtCO_2e$
Scope 1 like for like: 120 companies	573.5 $MtCO_2e$	572.1 $MtCO_2e$
Scope 2 like for like: 120 companies	62.9 $MtCO_2e$	76.7 $MtCO_2e$

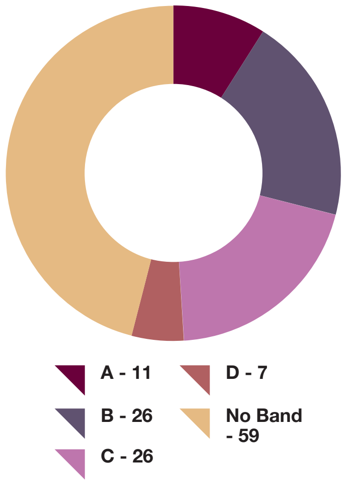
* Please note: Volkswagen 2015 climate change response and score withdrawn due to legal enquiry into misstated diesel emissions Sep 2015

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

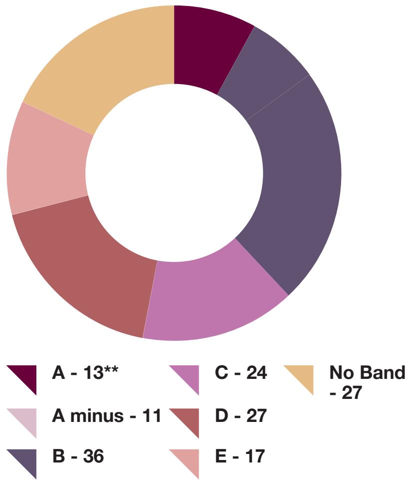
Companies in Austria, Germany and Switzerland are significantly improving their actions to mitigate climate change, as demonstrated by a particularly large increase in the percentage engaging in emission reduction initiatives, which has nearly tripled to 90% from 33%.

The percentage of companies in the region with key climate actions in place has jumped across the

1. 2010 performance bands in DACH

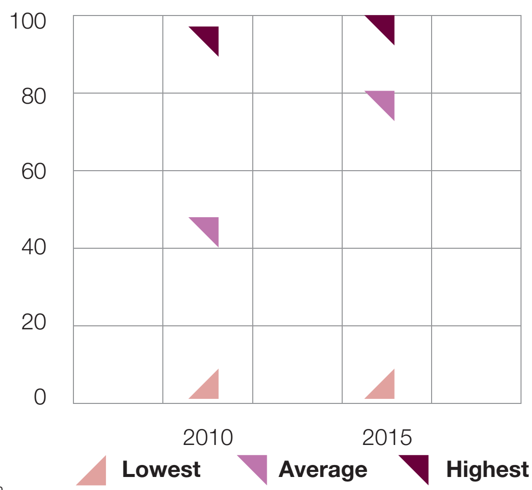


2. 2015 performance bands in DACH

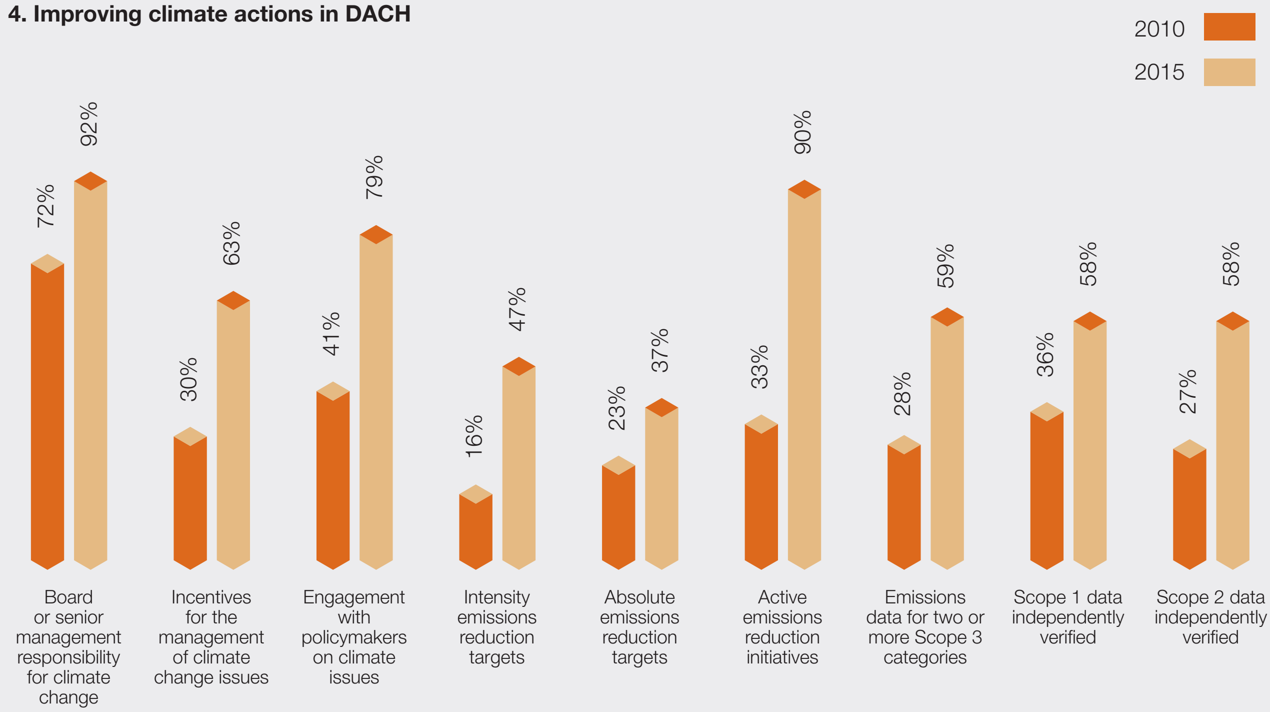


** includes Deutsche Bahn AG as part of Mittelstand program

3. Disclosure scores over time in DACH



4. Improving climate actions in DACH



90%

Of companies in the region have initiatives in place to reduce emissions

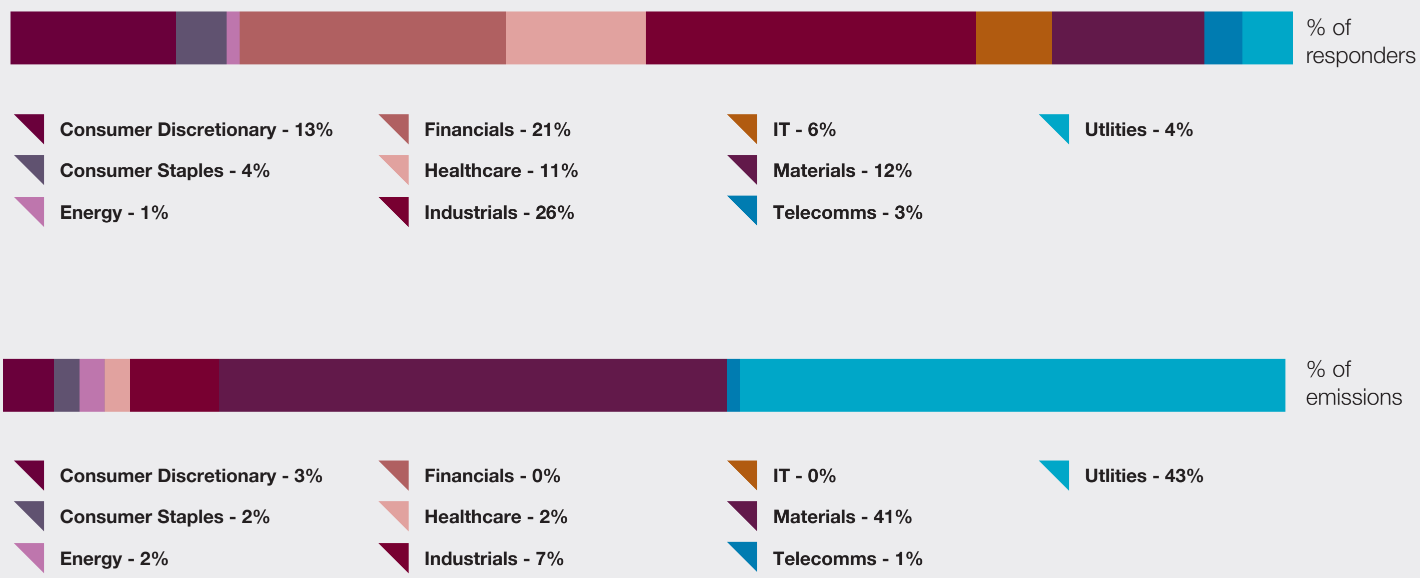
board, with the region placing just marginally lower than the global benchmark against most of the metrics. For example, 94% of the global sample cites board or senior level responsibility for climate change, which compares with 92% of the DACH region.

Almost half of companies (47%) are consuming renewable energy to reduce their emissions. This high percentage is supported by strong policy signals from the German government, in particular, which is an enthusiastic supporter of renewable energy through its Energiewende ('Energy Transition') suite of policies. Specifically, Germany's feed-in tariff has made investing in renewable energy highly attractive. Some companies are setting ambitious low-carbon targets: Austrian utility **Verbund**, for example, has pledged to generate all its electricity from non-emitting sources by 2020.

There has, however, been a fall in the number of companies in this region disclosing to investors through CDP's climate change program, to 156 from 165 partly due to previous responding companies falling out of the stock index selection in 2015, although an additional 10 companies chose to participate on a voluntary basis.

> **By 2015 – We will reduce direct GHG emissions per tonne of product by 35% since 2005, resulting in an absolute reduction of GHG emissions... we will reduce energy consumption per tonne of product in every product category to achieve an overall reduction of 25% since 2005.**
>
> **Nestlé**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in DACH



As the inventor of the automobile, we confirm our commitment for its future in a healthy environment.

Economic development and wealth increase happen at a global scale. We must not wait for climate change to derogate this development for the earth's growing population. We expect the international community to come to broadly supported decisions for climate protection at COP21 in Paris, which take into account both the climate challenge and the individual economic prospects of the regions worldwide.

Our contribution to a sustainable economy is an intelligent composition of drive concepts: advanced high-tech combustion engines with ever decreasing fuel consumption help us meet the ambitious CO_2 and fuel efficiency targets. Plus, by 2017 our customers will be able to choose between 10 plug-in hybrid models to find their own tailor-made hybrid solution. Next to our strategic hybrid initiative we push for market penetration of electric vehicles with battery and fuel cell.

Our Sustainability Program 2020 has clear CO_2-reduction targets and incorporates all stages of our vehicles' life-cycle, plus, the social and ethical impacts of our business. We pursue our Sustainability Program as a continuous request and a true challenge to ourselves.

Prof. Dr. Thomas Weber,
Member of the Board of Management of Daimler AG,
Group Research & Mercedes-Benz Cars Development

This profile is collaborative content sponsored by Daimler AG

Responsible growth is the cornerstone of Givaudan's future success. To continue to deliver value in the long-term we look beyond the financials to make a positive difference for the environment and the communities where we are present.

We have strengthened our eco-efficiency targets to be achieved by 2020 and now aspire to stabilise our environmental impact while increasing our production volumes. Notably, we will leverage innovation to reduce our annual CO_2 footprint by 4% of the absolute CO_2 footprint of the previous year. In addition to demonstrating our commitment to responsible growth, this target aligns Givaudan with other companies using science-based targets to limit their impact on climate change.

Givaudan has numerous success stories that give us confidence in meeting our challenging targets by 2020. At our production site in St. Celoni, Spain, when production capacity doubled, local employees looked into reducing the energy consumption of the site. The result was a decrease in energy to levels even lower than those reported prior to the increase in production.

Our eco-efficiency targets are ambitious but we are deeply committed to tackling these objectives for the good of the Company, the planet and our stakeholders.

Gilles Andrier,
Chief Executive Officer,
Givaudan SA

This profile is collaborative content sponsored by Givaudan

Profile: Siemens, Industrials

At Siemens, we are pleased to have reached "100 A" in the 2015 CDP Climate Change Report. This highest possible result clearly reflects our commitment to transparency and our improved performance on delivering innovative solutions around climate change mitigation.

One of our USPs on a global scale is that we are supplying our customers with energy-efficient and low-carbon technologies. About 46% of Siemens' revenue is related to products from our Environmental Portfolio, helping our customers to reduce carbon emissions by 428 million metric tons per year – equivalent to more than half of Germany's total annual CO_2 emissions.

As one of the world's largest producers of resource-saving technologies, our company also has a clear responsibility to lead by example. That's why we are committing to cut our own global carbon footprint in half by 2020 and to make our global operations carbon neutral by 2030.

The direction the G7 leaders agreed upon is clear: decarbonizing the global economy over the course of this century is the only way forward. We support this effort and send a clear signal to COP21 that the private sector can and should take action to address climate change.

**Dr. Roland Busch,
Member of the Managing Board
and Chief Sustainability Officer,
Siemens AG**

This profile is collaborative content sponsored by Siemens

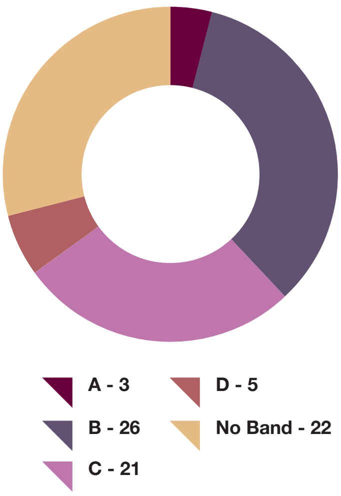
France

France	2010	2015
Analyzed responses†	77 (4)	95 (3)
Market cap of analyzed companies US$m	1,551,873	1,578,903
Scope 1	584.5 MtCO$_2$e	629.8 MtCO$_2$e
Scope 2	79.9 MtCO$_2$e	82.4 MtCO$_2$e
Scope 1 like for like: 67 companies	578.1 MtCO$_2$e	623.1 MtCO$_2$e
Scope 2 like for like: 67 companies	77.9 MtCO$_2$e	77.3 MtCO$_2$e

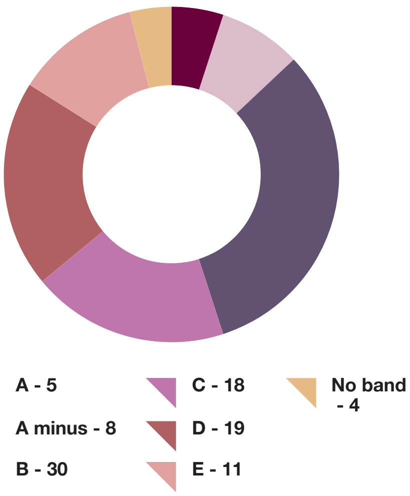
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

France offers a supportive regulatory environment for action on climate change: its Grenelle II law requires companies to publicly report Scope 1 and 2 emissions. The number of French companies disclosing on climate through CDP has risen to 98 since 2010, and the quality of the reported information has improved strongly in that time, with the average disclosure score rising to 88 from 59.

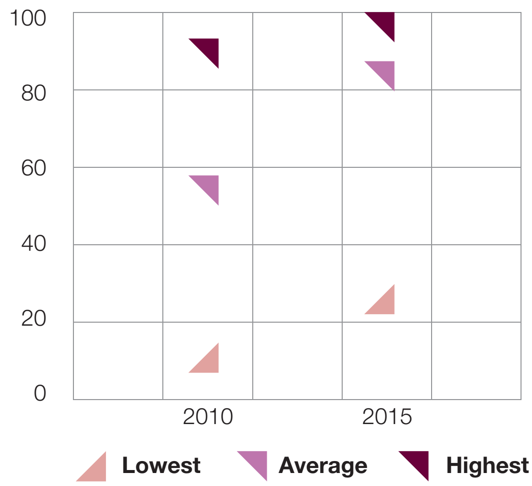
1. 2010 performance bands in France



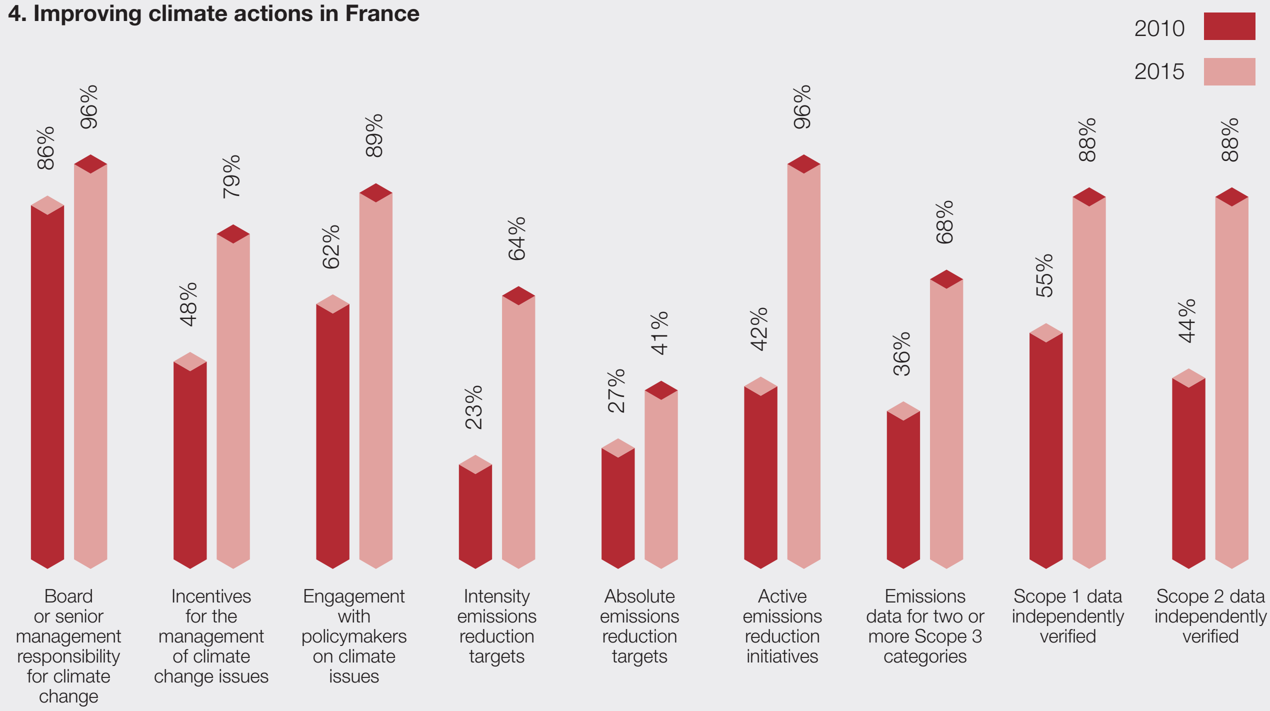
2. 2015 performance bands in France



3. Disclosure scores over time in France



4. Improving climate actions in France



88

average disclosure score for French companies

Further, the French sample reports high levels of external verification of both Scope 1 and 2 emissions, at 88% for each, compared with a global benchmark of 64%. The percentage of French companies reporting two or more categories of Scope 3 emissions has almost doubled since 2010, to 68%.

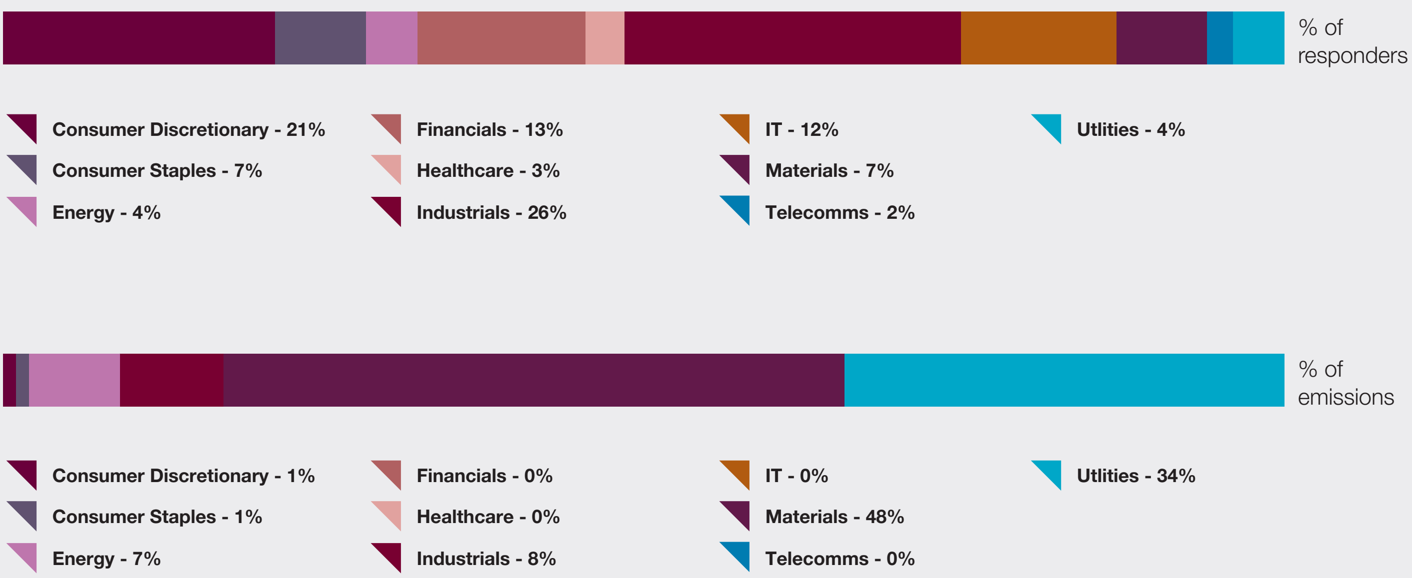
And this better data is leading to better action. The number of emissions reduction activities initiated in the last year has grown strongly, up 26% compared with 2010, to 505. In terms of the emission reduction activities favored by French companies, renewable energy, transportation and energy efficiency initiatives have become more popular.

These efforts are helping to make leading companies more competitive. “Our long- and short-term strategies give us strategic advantage over our competitors by providing operational cost savings and developing innovative products and services for which demand is expected to grow as the energy challenge and climate change become more prevalent,” says **Schneider Electric**.

However, this action is yet to decouple productivity from emissions growth: the average Scope 1 emissions of the 67 companies which responded both in 2010 and 2015 have risen 7%, while Scope 2 emissions have fallen marginally, by 0.7%.

> **In May 2014, the Group issued a €2.5 billion Green Bond, the largest ever by a private company. The proceeds of the operation will be used to finance the Group’s development in renewable energy projects – such as wind farms and hydroelectric plants – as well as in its energy efficiency activity.**
>
> **ENGIE (formerly GDF Suez)**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in France



Profile: L’Oréal, Consumer Staples

We are engaged in a profound transformation towards an increasingly sustainable and responsible business model, through our program Sharing Beauty with All, our commitments on sustainable development for 2020 which cover our whole value chain, and have become a strategic priority.

We have succeeded in decoupling our growth from greenhouse gas emissions and in 2014, we reached a key milestone: successfully reducing carbon emissions from our production activities by 50% in absolute terms compared to 2005, while production increased by 22% over the same period. Two policies have helped us achieve this result: a committed energy efficiency policy and the development of major renewable energy production projects.

However, given the urgency of taking action to fight climate change, I felt it was our duty to go even further in order to respond to the challenges the world faces. We decided to accelerate our transition to a low-carbon business. Through our sustainable sourcing projects, we aim to generate carbon savings corresponding to the amount of greenhouse gas emissions linked to our activities. This will allow us to become a “carbon-balanced” company by 2020.

Jean-Paul Agon,
Chairman and
Chief Executive Officer,
L’Oréal Group

This profile is collaborative content sponsored by L’Oréal Group

Profile: Renault, Consumer Discretionary

As a global car manufacturer with a long-standing commitment to environmental sustainability, we at Renault are well aware of the contribution of the transportation industry to climate change and our subsequent responsibility to take an active part in its mitigation. We are calling for an international agreement to maintain the global temperature increase at +2°C by 2100 and fully support the COP 21 Paris conference, of which we are an Official Partner.

Since 2011 the Renault-Nissan Alliance has been leading the way in mass-marketing electric vehicles with over 50% global market share and more than 250,000 sales. The electric vehicle is an effective solution to reduce automotive greenhouse gas emissions as its carbon footprint, which is nearly half that of an internal combustion vehicle with the average European power production mix, decreases constantly as the share of renewable energy rises.

We are committed to a 3% annual reduction, from 2010 to 2016, of the life cycle carbon footprint of our vehicles, by continuously improving the energy efficiency of our products and operations, developing on-site renewables, reducing logistics CO_2 emissions and applying the principles of circular economy such as large scale use of recycled materials, end-of-life vehicle recycling and used parts remanufacturing.

GROUPE RENAULT

This profile is collaborative content sponsored by Renault

Hong Kong and South East Asia

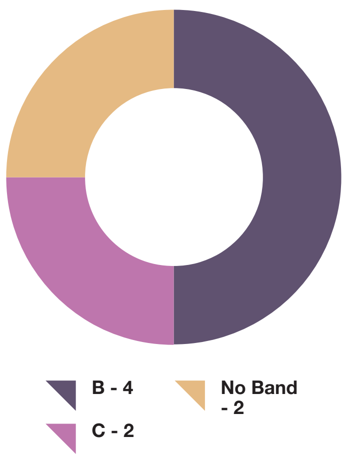
HK and SE Asia	2010	2015
Analyzed responses†	44 (6)	42 (11)
Market cap of analyzed companies US$m	489,723	757,005
Scope 1	161.2 $MtCO_2e$	164 $MtCO_2e$
Scope 2	14.2 $MtCO_2e$	19.1 $MtCO_2e$
Scope 1 like for like: 26 companies	122.1 $MtCO_2e$	129 $MtCO_2e$
Scope 2 like for like: 26 companies	13.9 $MtCO_2e$	12.8 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

In the five years since 2010, disclosure and implementation of climate actions have risen dramatically among those companies in Hong Kong and South-East Asia. On all but two metrics included in the figure below, companies in the region outperform the global sample.

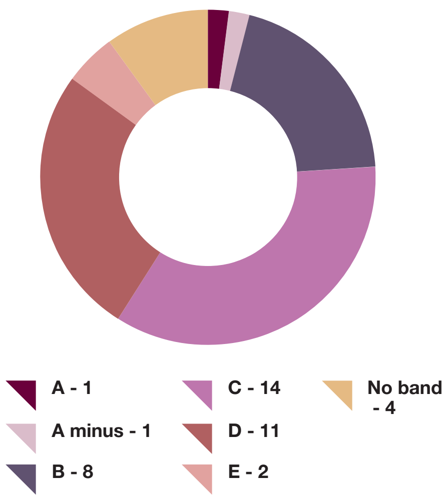
All but one company assigns board or senior management responsibility for climate change. Nearly

1. 2010 Performance bands* in Hong Kong and SE Asia

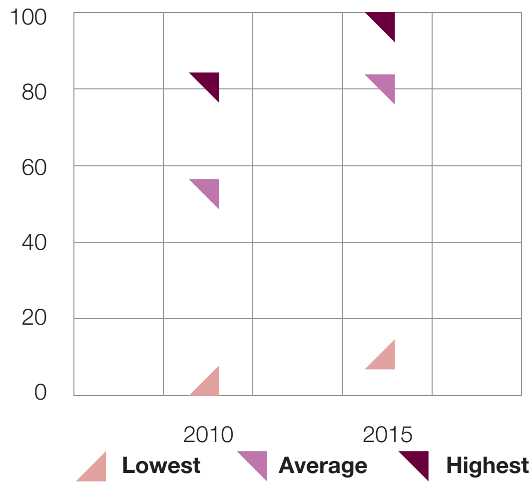


* in 2010 only 8 companies from HK and SE Asia that were part of the Global 500 were scored for performance

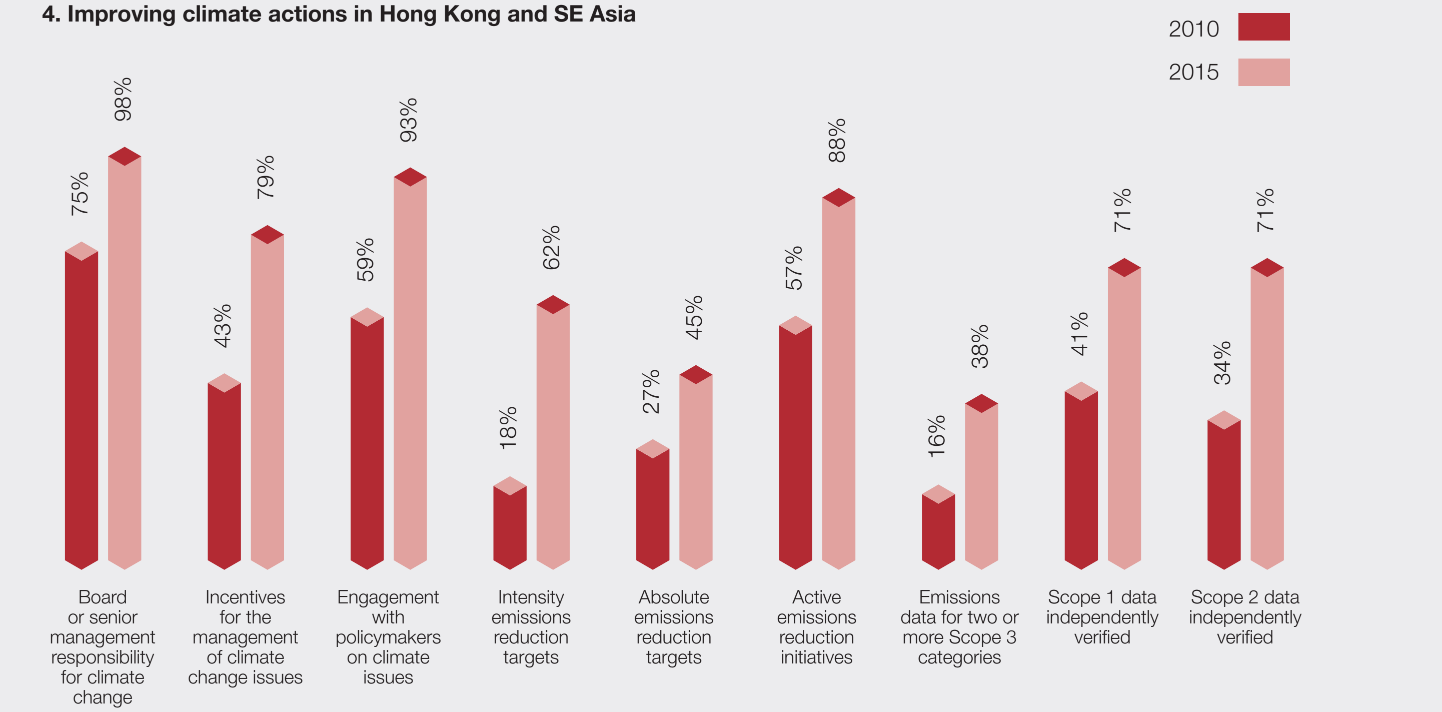
2. 2015 performance bands in Hong Kong and SE Asia



3. Disclosure scores over time in Hong Kong and SE Asia



4. Improving climate actions in Hong Kong and SE Asia



98%

of companies in the region assign board or senior management responsibility for climate change

two-thirds set emissions intensity targets. More than two thirds seek third-party verification of their Scope 1 and 2 data.

Overall, the average disclosure score has risen to 83 from 57 in 2010. The number of emissions reduction activities initiated by participating firms rose in 2015, to 190 from 138 in 2011. This 38% increase compares favorably with the global average increase of 14%.

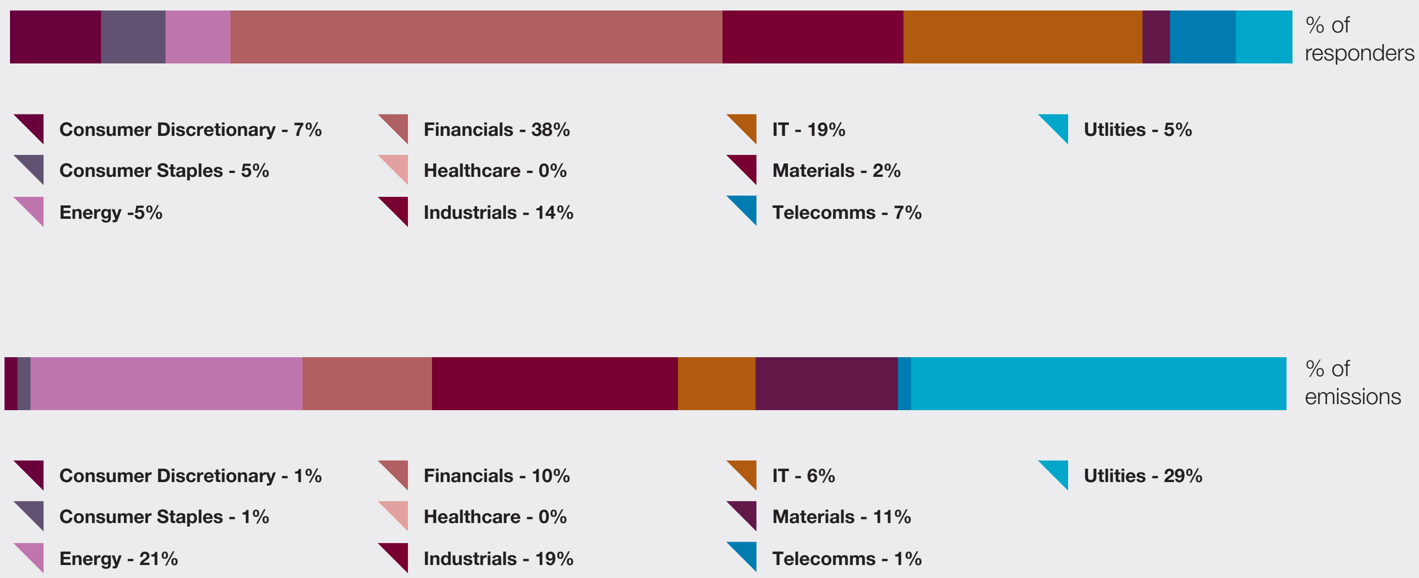
Comparing the 26 companies that disclosed in both 2010 and 2015, Scope 1 emissions rose by an average of 5%, although Scope 2 emissions fell by 7%. Because the sample is relatively small, and is spread across a number of jurisdictions, it is difficult to identify particular drivers for trends in emissions, but it is worth noting that the companies grew significantly over the period, as measured by the 55% increase in their collective market capitalization.

The number of companies disclosing climate change information in the region continues to be somewhat low compared with Europe and North America. CDP sought disclosure from 170 companies, comprising the 75 largest companies listed in Hong Kong, the top 25 in both Singapore and Taiwan, the top 15 in Malaysia, and the top 10 in each of Thailand, the Philippines and Indonesia. A total of 53 responded (11 of which through their parent company), slightly increasing from 50 in 2010.

> **Our strategy includes...promoting the design for high efficiency, low energy consumption products… considering climate change as a major issue while choosing manufacturing site locations…and implementing low-carbon partner program for carbon emission reduction from the suppliers side.**
>
> **United Microelectronics**

Domestic stock exchanges are encouraging corporate environmental, social and governance (ESG) reporting and this should have a positive influence on greater disclosure in the region. Most encourage voluntary reporting by listed companies, and the Hong Kong Stock Exchange is working on implementing ESG reporting on a "comply or explain" basis, highlighting the need for providing consistency and comparability between financial and ESG information.

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Hong Kong and SE Asia



India

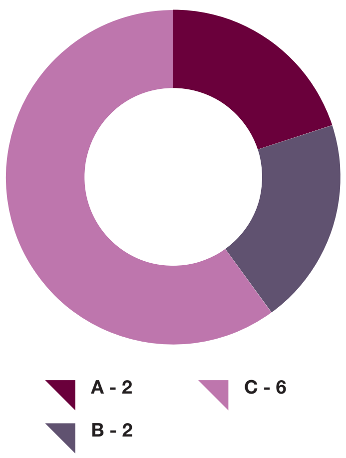
India	2010	2015
Analyzed responses†	34 (16)	49 (13)
Market cap of analyzed companies US$m	551,597	551,671
Scope 1	87.9 $MtCO_2e$	245.3 $MtCO_2e$
Scope 2	35.6 $MtCO_2e$	12.1 $MtCO_2e$
Scope 1 like for like: 23 companies	68.3 $MtCO_2e$	161 $MtCO_2e$
Scope 2 like for like: 23 companies	18.5 $MtCO_2e$	8.7 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

With signs that the Government in Delhi is increasing its efforts to tackle climate change, corporate India is beginning to respond. The number of Indian companies managing climate change through CDP has increased to 49 since 2010.

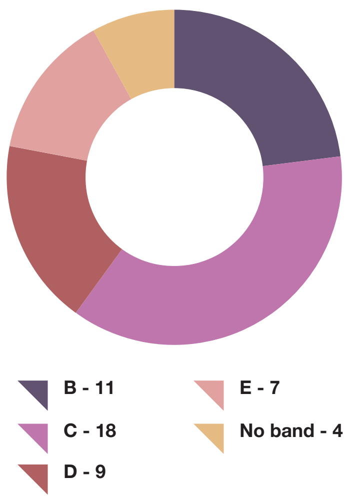
The region sees one of the most dramatic jumps in average disclosure scores, reflecting a sophistication of approach to data collection and climate accountability. The average disclosure score stands at 86 – just above the global average – up from 50 in 2010.

1. 2010 performance bands in India*

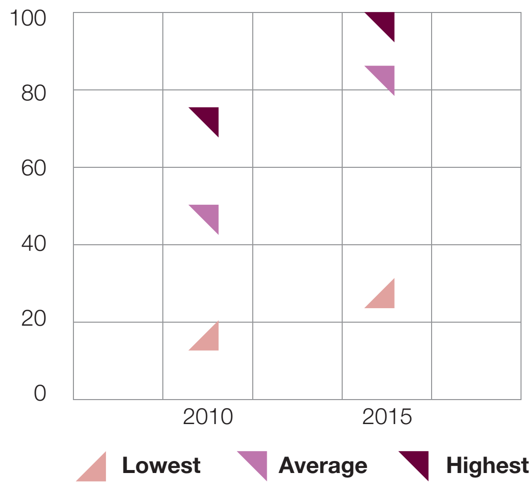


* in 2010 only 8 Indian companies in Global 500 were scored for performance

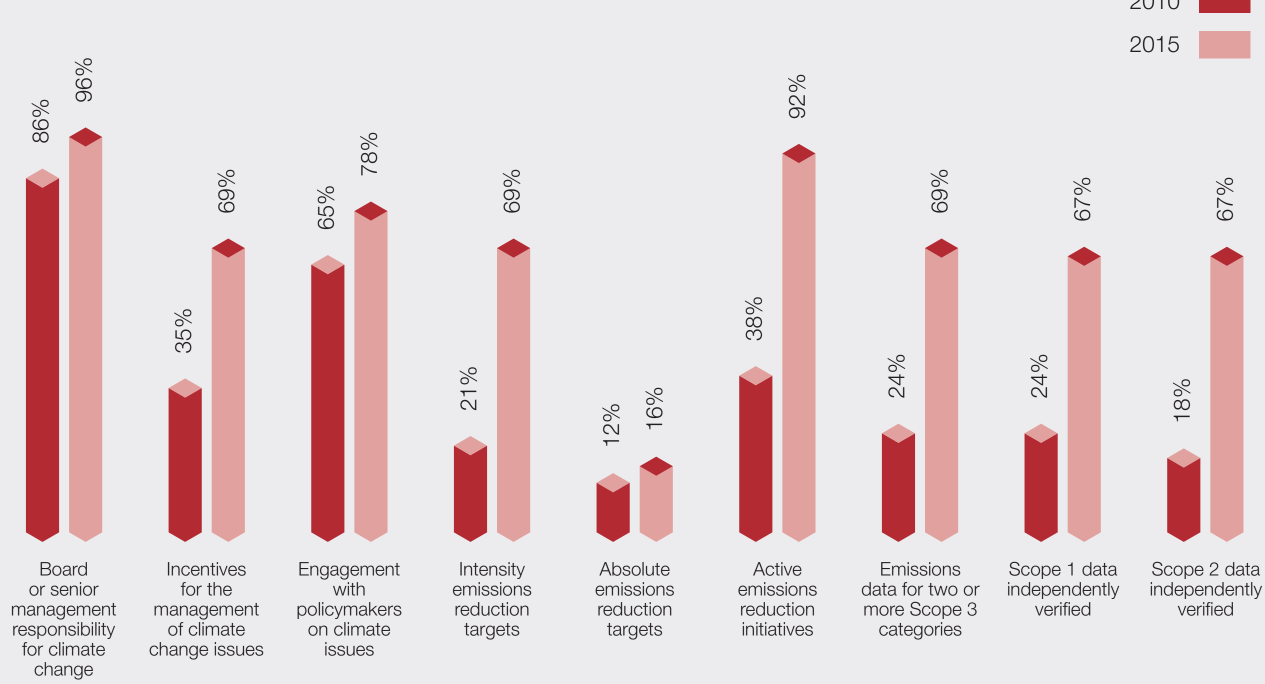
2. 2015 performance bands in India



3. Disclosure scores over time in India



4. Improving climate actions in India



36

point increase in average disclosure score since 2010

In other aspects of emissions disclosure and performance, Indian companies show significant improvements since 2010. For example, verification of emissions data and disclosure of Scope 3 emissions is now in line with, or slightly above, the global benchmark.

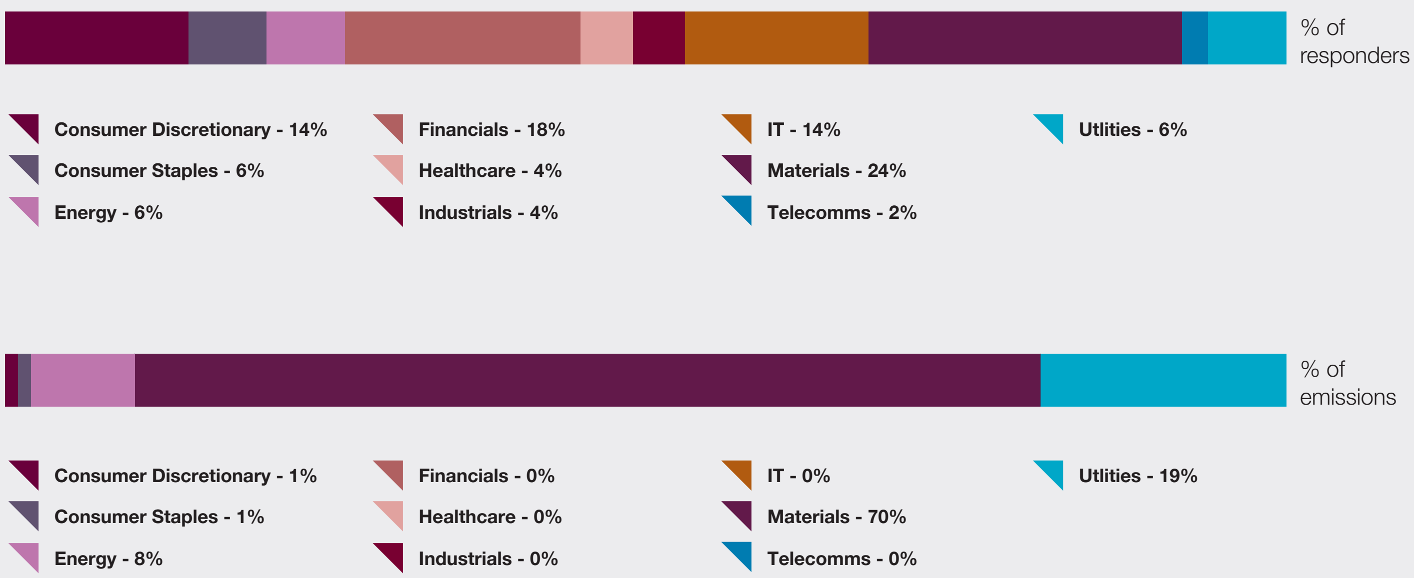
Some Indian companies recognize the threat posed by climate change. **Tata Global Beverages**, for example, notes that, "the physical impacts of climate change on the sourcing of tea/coffee is impacting the buying department's sourcing strategy". The company is moving towards buying from Rainforest Alliance Certified farms for some brands, and is piloting a number of strategic climate change initiatives. The Government, too, is acting, with its climate change plan ahead of the COP21 Paris climate talks pledging dramatic increases in renewable energy penetration and a one-third cut in emissions intensity.

The plan also cites CDP's climate change program, in a development that will hopefully encourage more Indian companies to participate: given the size of India's economy, rates of corporate climate disclosure are low.

Emissions from responding companies have risen over the period. Comparing companies that reported in both 2010 and 2015, Scope 1 emissions were 135% higher in 2015. Such a rise is unsurprising given economic growth and improvements in reporting practices, which tend to more accurately reflect actual emissions. In that regard, it is noteworthy that just 16% of responding companies have adopted absolute emissions targets – considerably below the global average of 44% – while 69% have opted for intensity targets, above the global average of 50%, reflecting the focus of the government on reducing carbon intensity.

> **Our targets for the next 5 years and beyond are based on science based methodologies like the Sectoral Decarbonization approach and aligned with RCP2.6 scenario as recommended by IPPC. Our board is supportive of our GHG reduction targets program and a formal ratification is expected from the chairman by end of 2015. Our activities will continue to focus on an accelerated rate of energy efficiency and renewable energy sourcing.**
>
> **Wipro**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in India



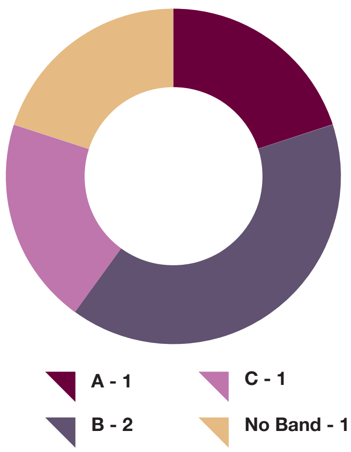
Ireland

Ireland	2010	2015
Analyzed responses†	17 (3)	11
Market cap of analyzed companies US$m	155,699	115,029
Scope 1	17.2 $MtCO_2e$	21.1 $MtCO_2e$
Scope 2	5.9 $MtCO_2e$	2.5 $MtCO_2e$
Scope 1 like for like: 11 companies	15.9 $MtCO_2e$	21.1 $MtCO_2e$
Scope 2 like for like: 11 companies	5.6 $MtCO_2e$	2.5 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis. 6 of the 17 2010 companies are still responding in 2015, but are now counted in the UK sample.

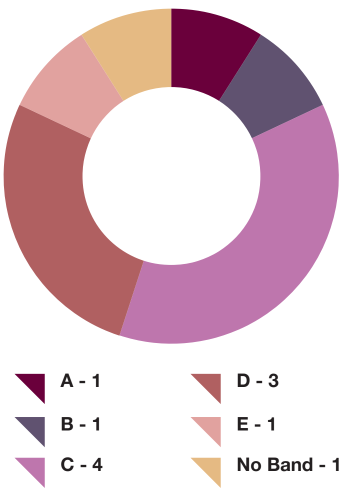
Irish companies disclosing to CDP's climate change program have demonstrated strong progress since 2010. Average disclosure scores have risen to 86 from 58. On four out of nine indicators, Irish companies show better performance compared to the global sample. This solid performance contrasts with 2010, when they were below average on all but one.

1. 2010 performance bands in Ireland*

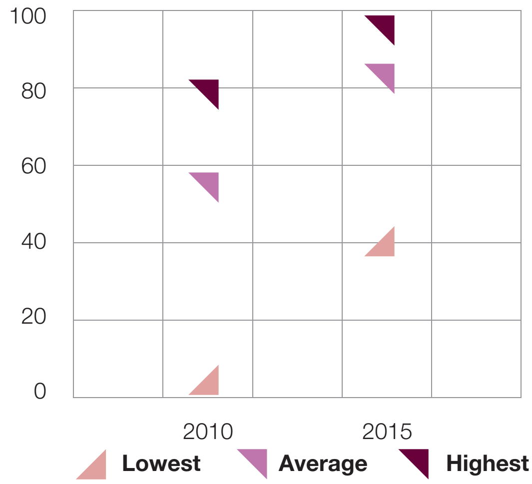


* In 2010 only 5 Irish companies in Global 500 were scored for performance

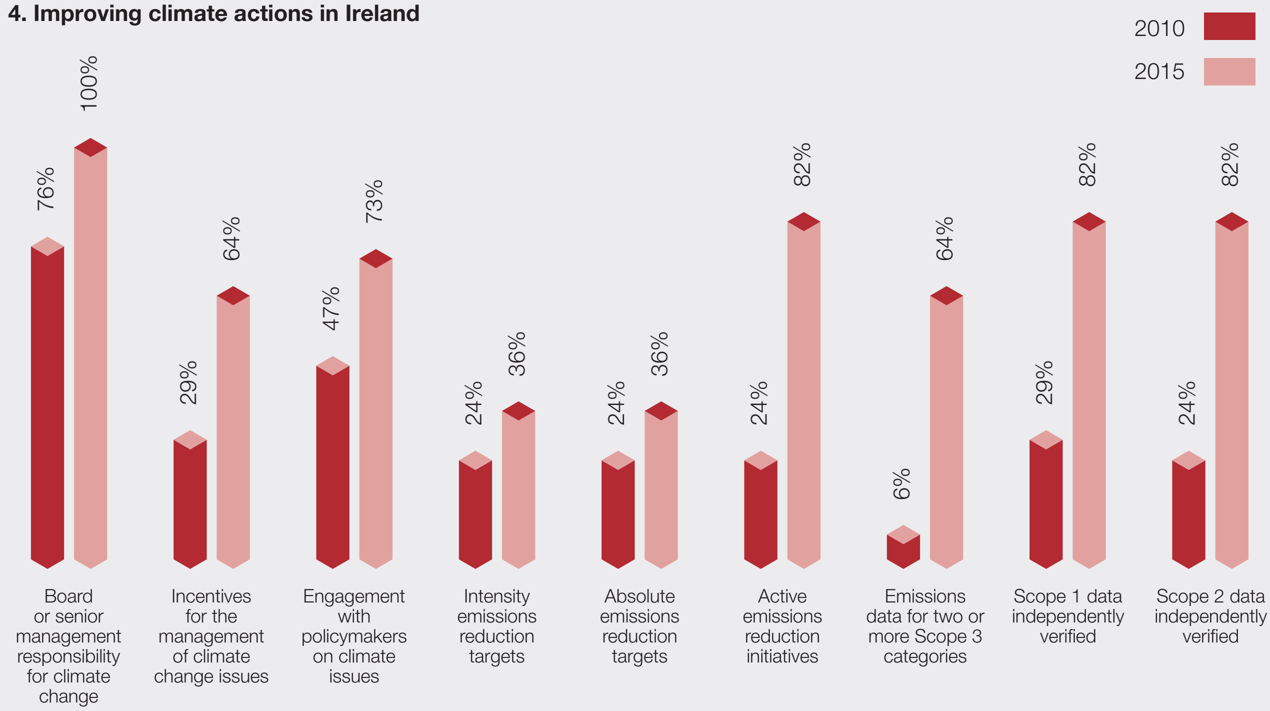
2. 2015 performance bands in Ireland



3. Disclosure scores over time in Ireland



4. Improving climate actions in Ireland



100%

of Irish companies report Board or senior management responsibility for climate change

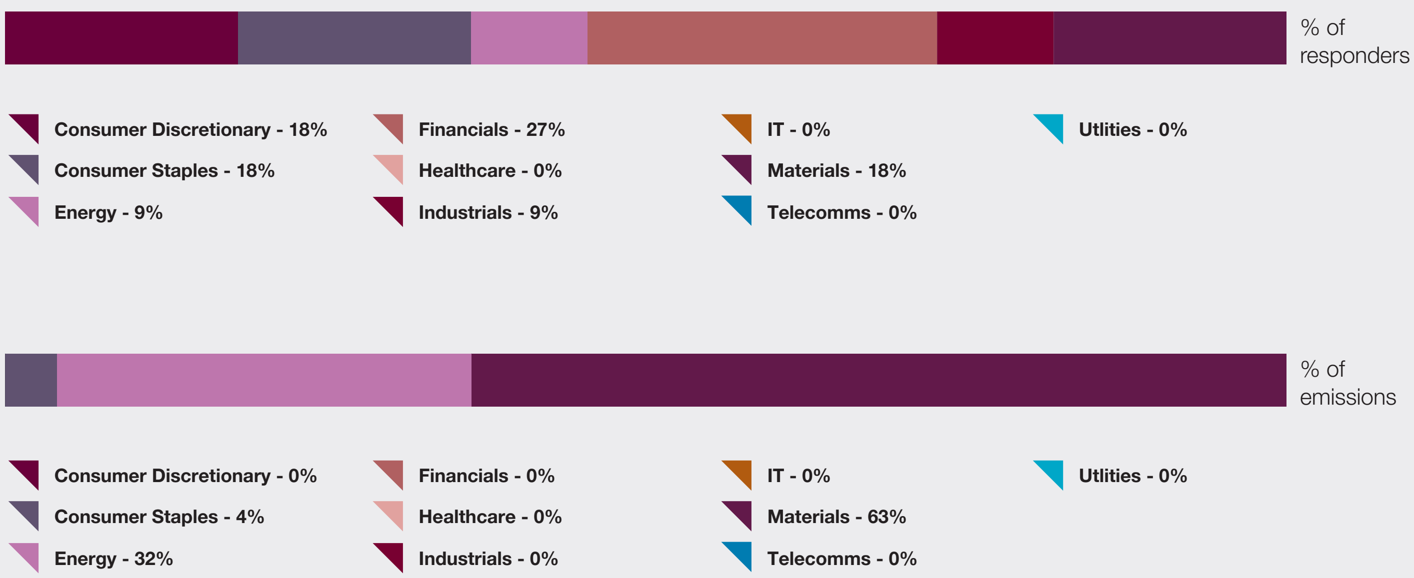
Some – such as A Lister **Kingspan** – are seizing opportunities related to climate change, namely the building supplies company's development of an on-site renewables product range.

Although a smaller number of companies disclosed this year compared to 2010, the sample reports higher greenhouse gas emissions. It is likely that these higher numbers are a function of more accurate reporting of emissions by the companies involved.

It is encouraging that non-public organizations such as **M50 Concessions** have started disclosing to CDP. The improving performance of those companies continuing to report on climate risks needs to be replicated more widely across the Irish economy.

> **AIB has experienced significant monetary savings through the adoption of its energy saving programme which includes; (a) Investment in a combined heat and power plant (b) the procurement of 100% green electricity wherever feasible, (c) engagement of a single supplier of gas and electricity to ease and improve the collection of energy consumption data …energy reduction has also been achieved via thin-client technology to replace the traditional PC workstation.**
>
> **Allied Irish Banks**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Ireland



Profile: Kingspan Group Plc, Industrials

As a leading building products manufacturer with facilities across the world, the climate change agenda is at the heart of the Kingspan Group's vision and activities. We recognize the significance of climate change to global society and the central importance of addressing the built environment – both existing and new build - as part of efforts to mitigate greenhouse gas emissions.

Product and service innovation to help achieve optimum building energy efficiency and deliver greenhouse gas emission reductions is at the heart of our approach. Our insulation materials such as Kooltherm, Optim-R and recently launched IPN Quadcore provide the most thermally efficient materials available in their respective market sectors.

We are dedicated to achieving our net zero energy commitment by 2020 and have developed a three step strategy to aid us in achieving our renewable energy goal – 'Save More' – 'Generate More' – 'Buy More'. As of 2014, 28% of the Group's energy usage was from renewable sources and we are currently on track to exceed our interim target of 50% in 2016.

Kingspan supports a strong global agreement on climate change as it will help to meet international development aims, provide a clear signal to business to guide investment toward low carbon outcomes and bring huge benefits to the natural environment.

Gene M Murtagh,
Chief Executive Officer,
Kingspan Group Plc

This profile is collaborative content sponsored by Kingspan Group Plc

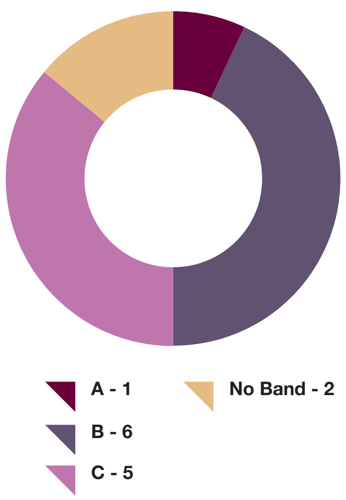
Italy

Italy	2010	2015
Analyzed responses†	21	47 (4)
Market cap of analyzed companies US$m	462,382	384,759
Scope 1	248.6 $MtCO_2e$	228.6 $MtCO_2e$
Scope 2	9.4 $MtCO_2e$	17.1 $MtCO_2e$
Scope 1 like for like: 20 companies	227.7 $MtCO_2e$	200.8 $MtCO_2e$
Scope 2 like for like: 20 companies	9.3 $MtCO_2e$	9.3 $MtCO_2e$

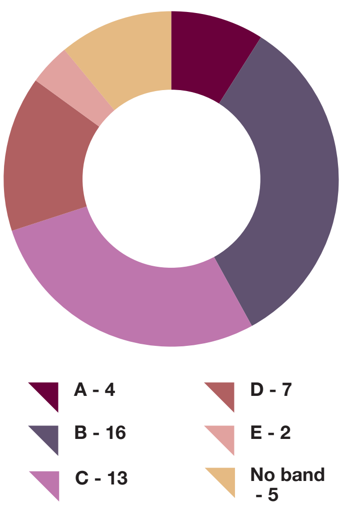
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

More than double the number of Italian companies disclosed to CDP's climate program in 2015 than in 2010 and those companies generally scored highly in both carbon disclosure and performance. This is partly due to a high proportion of companies setting absolute emissions targets: 66%, which has risen from 33% in 2010 and compares very favorably with the global benchmark of 44%. Further, Italian

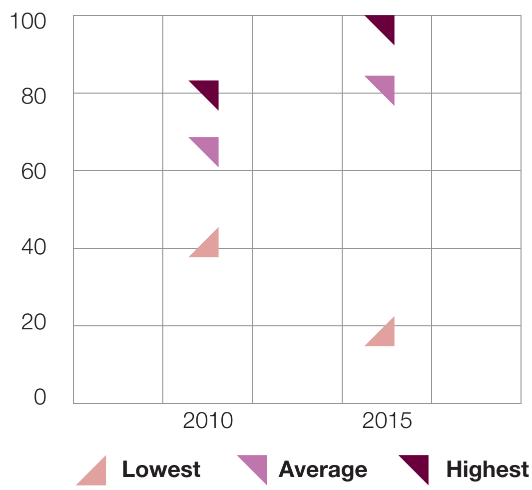
1. 2010 performance bands in Italy



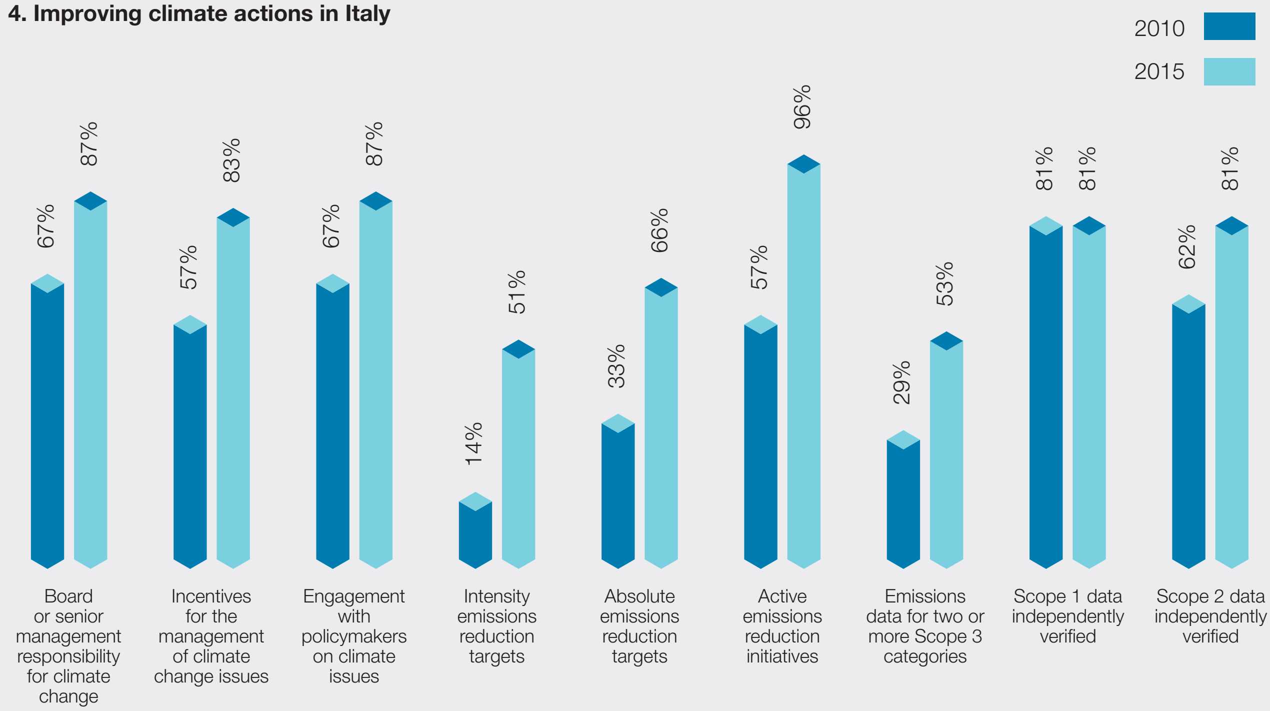
2. 2015 performance bands in Italy



3. Disclosure scores over time in Italy



4. Improving climate actions in Italy



27

million tCO_2e reduction in Scope 1 emissions from the 20 Italian companies reporting in both 2010 and 2015 .

companies exhibit an improving approach to the value of reporting reliable data, with 81% having their Scope 1 and 2 emissions externally verified. This places Italy ahead of the global benchmark of 64%.

The average disclosure score has subsequently jumped to 85 points, up from 67 in 2010.

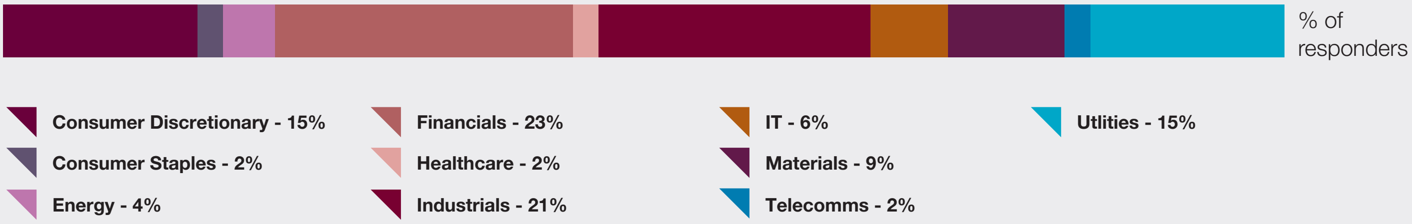
This improving governance of Italian companies is driving better action: The number of emission reduction projects undertaken has risen to 314 projects in 2015, representing an increase of 73%. More than half the sample is using renewable energy to reduce its emissions (51% compared with global average of 36%). Some companies, such as online fashion retailer **YOOX**, are further strengthened their focus on renewable energy, by signing up to the RE100 initiative, which involves committing to source 100% of their power from renewable sources.

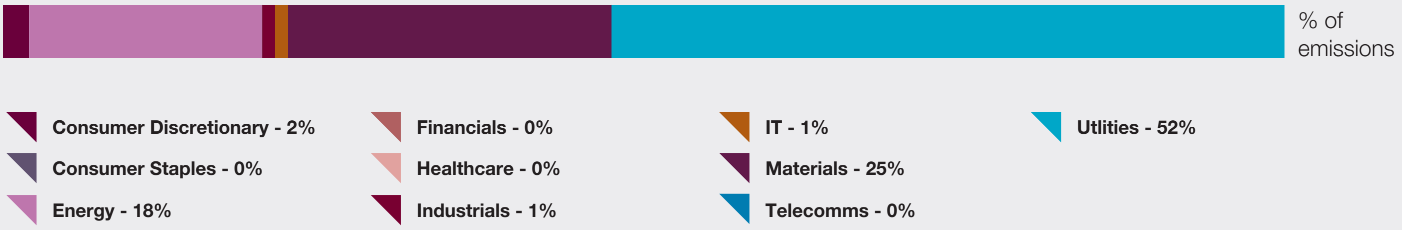
On average, companies purchasing renewable energy in 2015 are carrying out five times the number of emissions reduction activities they were carrying out in 2010. This shows their growing understanding, or capacity to realize the benefits, of lower carbon business.

This strong performance has delivered emissions reductions: Italian companies that participated in CDP's climate change program in both 2010 and 2015 have successfully reduced their Scope 1 emissions by 27 million tCO_2e.

> **As a financial intermediary we consider those risks and emissions linked to our customers businesses and contribute to innovation through loans for the installation of renewable energy and support for technological R&D in clean energy.**
>
> **Intesa Sanpaolo**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Italy





Profile: Enel SpA, Utilities

Climate change is a reality. The upcoming COP 21 conference offers an historical opportunity to accelerate the transition to a low carbon economy. As a business, and as citizens, we expect the international community to deliver an ambitious - as well as realistic and tangible - commitment to contain the effects of climate change.

Enel, as a global utility, takes environmental sustainability seriously and is already working hard to contain the emissions related to its activity. Around 47% of the energy currently generated by the Group is from CO_2 free sources, and we are confident of beating our target of carbon neutrality by 2050, consistent with the level of de-carbonization required to limit global warming to 2 degrees and therefore a Science Based Target. We will devote €8.8bn for renewables growth by 2019, which means over 7 GW of new clean power capacity, a 50% increase compared to our previous plan.

On top of that, Enel will continue to leverage the most advanced and sustainable technologies to accelerate the process of de-carbonization over the next few years. We urge other companies and nations to join this global effort in advancing technologies, upgrading infrastructures and driving efficiency since being sustainable today means being competitive tomorrow.

Francesco Starace,
Chief Executive Officer,
Enel SpA

This profile is collaborative content sponsored by Enel

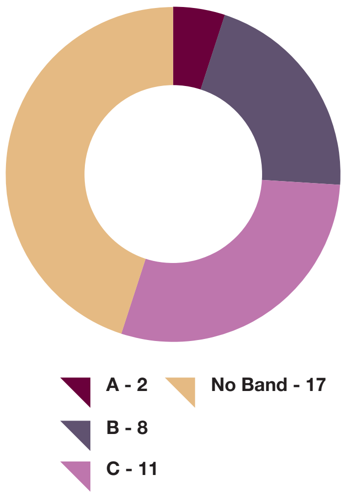
Japan

Japan	2010	2015
Analyzed responses†	201 (13)	230 (16)
Market cap of analyzed companies US$m	2,119,195	2,652,961
Scope 1	623.6 $MtCO_2e$	473.2 $MtCO_2e$
Scope 2	91.3 $MtCO_2e$	202.5 $MtCO_2e$
Scope 1 like for like: 161 companies	327.1 $MtCO_2e$	375.2 $MtCO_2e$
Scope 2 like for like: 161 companies	85.7 $MtCO_2e$	119.6 $MtCO_2e$

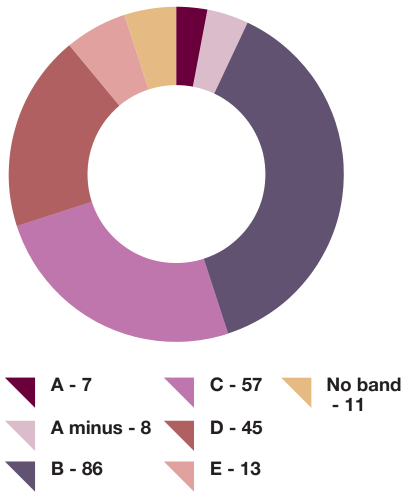
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

More Japanese companies are disclosing to CDP than in 2010. The quality of their disclosures is also substantially better, with an average disclosure score of 89, above the global average of 84, and considerably higher than the 52 achieved in 2010. They are also adopting emissions targets at a high rate, with 69% opting for absolute targets and 67% setting intensity goals, above the global averages of 44% and 50% respectively.

1. 2010 performance bands in Japan

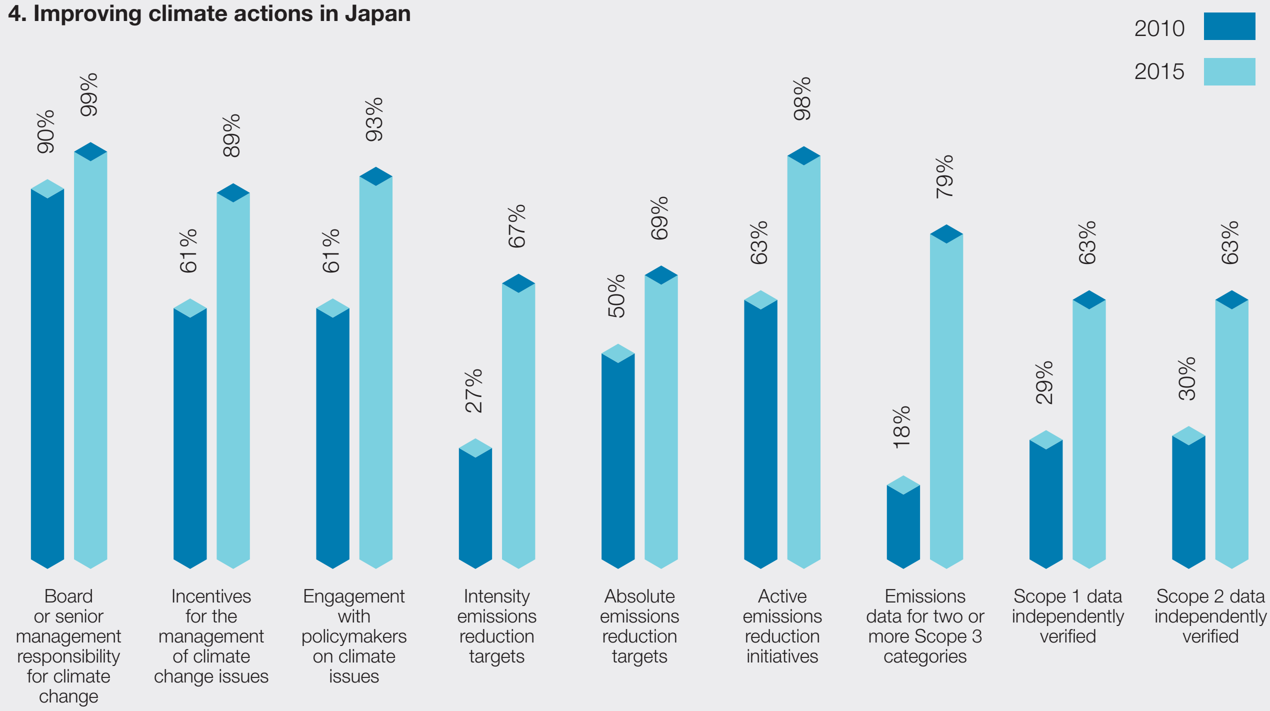


2. 2015 performance bands in Japan



3. Disclosure scores over time in Japan

4. Improving climate actions in Japan



98%

of Japanese companies have initiatives in place to reduce emissions.

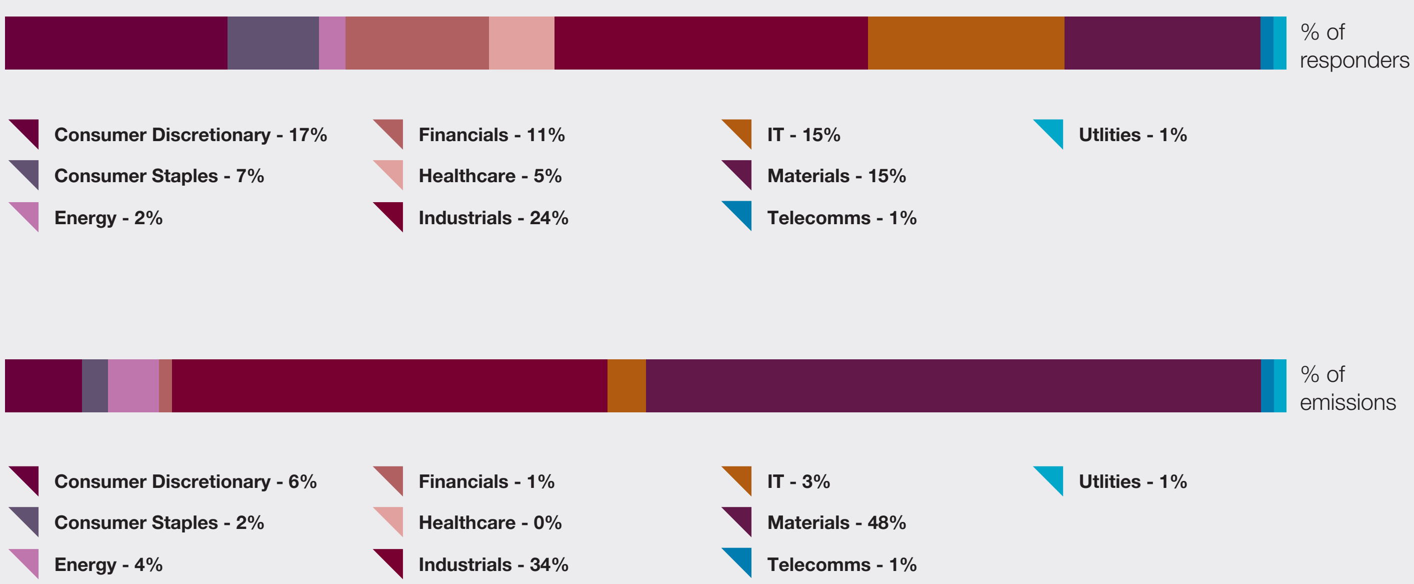
Japanese companies demonstrate high levels of emissions reduction activity, with no fewer than 98% of those analyzed initiating projects this year, compared with the global average of 89%. There has been a tripling in the number of activities reported in 2015 compared with 2011, to 722 from 204. Energy efficiency projects remain particularly popular – reflecting Japan's traditional focus on this area since the oil shocks of the 1970s, and a renewed attention to energy use in the wake of the Fukushima nuclear disaster of 2011. For example, **Sony Corporation**, will generate annual savings of ¥190 million (US$1.6 million) through various energy efficiency projects.

Uptake of renewable energy remains relatively less favored. Seventy companies (30%) report that they are consuming renewable energy to reduce emissions. While this is higher than in 2011, it still lags the global average of 36%. This likely reflects relatively limited policy support for renewable energy until recently, and the difficulties many projects face in accessing the electricity grid.

However, despite strong performance in many regards, emissions in Japan are still headed in the wrong direction. The 161 companies analyzed in both 2010 and 2015 increased their Scope 1 emissions by 14.7%, and their Scope 2 emissions by 39.5%. This latter is a consequence of Fukushima, which has led to the increased use of fossil fuels for electricity generation.

> **The damage to our plants due to floods as a result of climate change-induced changes in precipitation is one of the risks as it damages the continuity of our business activities. This in turn calls for enhancing our strategy, such as introducing more equipment with higher water efficiency.**
>
> **Suntory Beverage & Food**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Japan



Korea

Korea	2010	2015
Analyzed responses†	77 (7)	74 (4)
Market cap of analyzed companies US$m	478,499	639,267
Scope 1	113.1 $MtCO_2e$	140.9 $MtCO_2e$
Scope 2	21.8 $MtCO_2e$	47.4 $MtCO_2e$
Scope 1 like for like: 41 companies	97.9 $MtCO_2e$	111.7 $MtCO_2e$
Scope 2 like for like: 41 companies	19.9 $MtCO_2e$	35 $MtCO_2e$

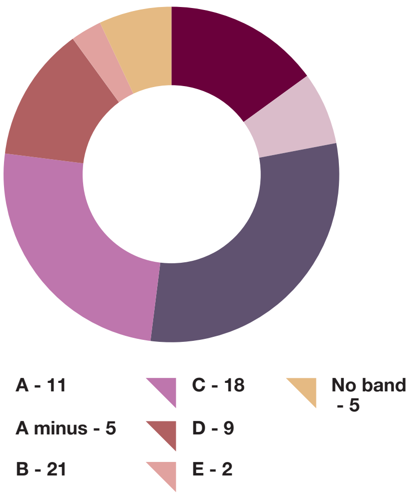
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

In 2015, Korea introduced a carbon trading system, taking an emphatic step forward in its efforts to tackle greenhouse gas emissions. Efforts on the corporate side are equally encouraging with 11 out of 74 participating companies (14%) achieving a place on the A List which is three times the global average.

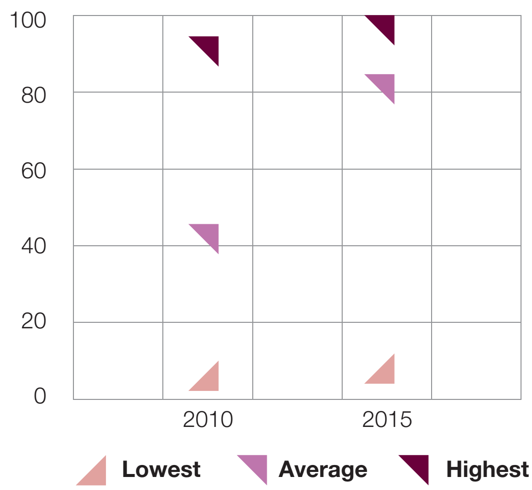
1. 2010 performance bands in Korea*

* in 2010 only 5 Korean companies in Global 500 were scored for performance

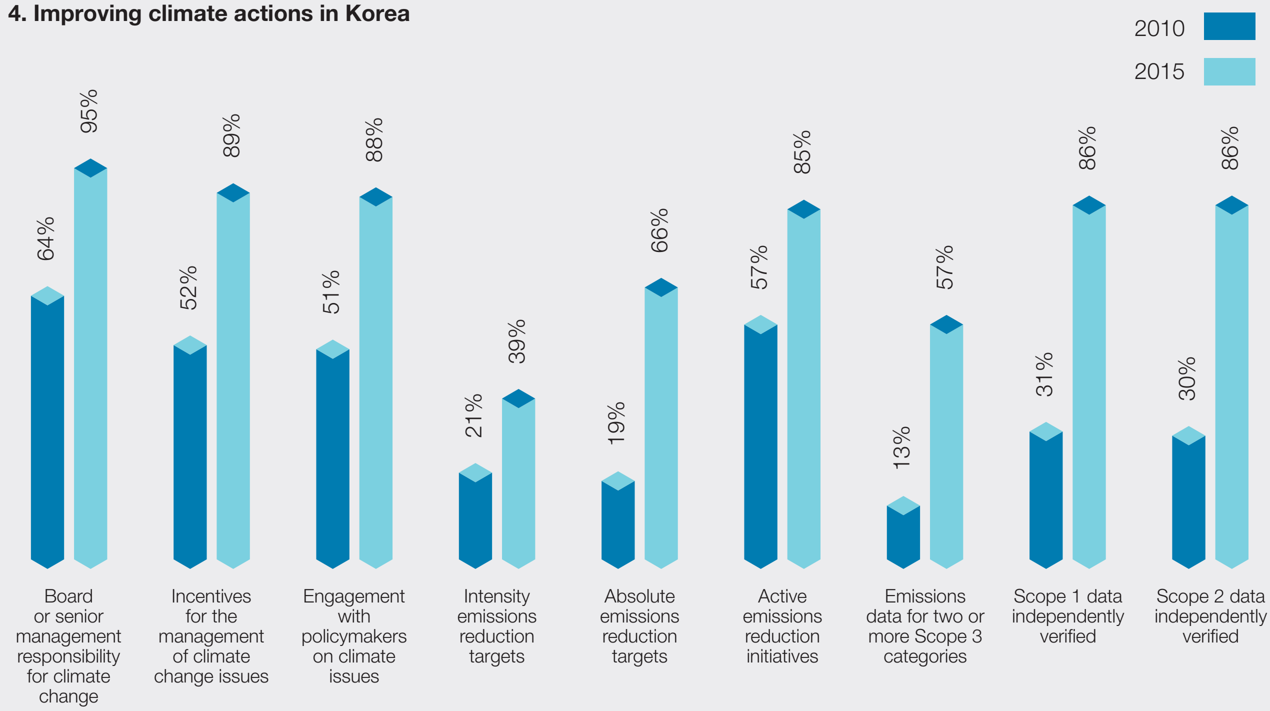
2. 2015 performance bands in Korea



3. Disclosure scores over time in Korea



4. Improving climate actions in Korea



of Korean companies are in the A list

Results from CDP's climate change program this year show Korean companies improving their disclosure scores, undertaking a larger number of emissions reduction activities, and setting emissions reduction goals.

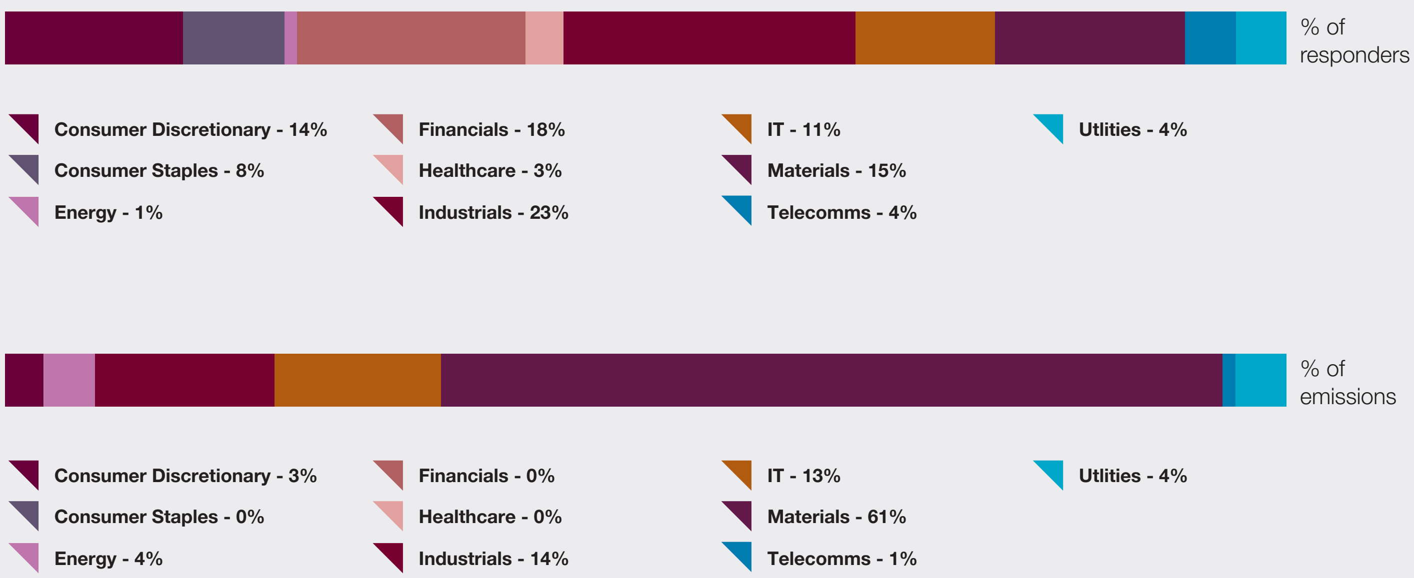
This year, companies have initiated 250 projects to reduce emissions, a 26% increase in the number of projects in 2011, for when comparable data is available. This compares favourably with the average global increase of 14%. The percentage of Korean companies consuming renewable energy to reduce their emissions has grown quickly by 31% since 2011.

There has been a particularly marked improvement in the percentage of companies verifying Scope 1 and Scope 2 emissions, to 86% – above the global average of 64% – from around 30% in 2010. In addition, two-thirds of companies have absolute emissions targets, against 44% for the global sample, which is likely to be a result of the introduction of an emissions trading scheme.

However, if the emissions performance of Korean companies disclosing to CDP is any guide, the trading program comes none too soon. Between 2010 and 2015, companies disclosing in both years increased their Scope 1 and 2 emissions.

> **Samsung Group made an agreement with the Korean government that Samsung will invest 7.6 trillion KRW (US$6.7billion) to establish R&D and manufacturing facilities for green energy related facilities from 2021 to 2025. Samsung also plans to build additional facilities of Energy Storage Systems, wind power generators, and solar cells by 2030 as second phase of green energy development.**
>
> **Samsung Electronics**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Korea



Profile: Shinhan Financial Group, Financials

> In 2010, Shinhan Financial Group established the Green Management System for energy and GHG data management and is constantly managing the GHG inventory. In 2013, we sought to upgrade the Green Management System to systematically manage the 12 environmental and sustainability management indicators of the holding company and the 6 affiliates (Shinhan Bank, Shinhan Card, Shinhan Investment Corp., Shinhan Life Insurance, Shinhan Capital, and Shinhan BNP Paribas Asset Management).
>
> We have been carrying out energy saving and GHG reduction activities such as controlling indoor temperature during summer and winter, replacing LED lights, and purchasing green IT products; furthermore, we are operating an environmentally friendly data center that is equipped with solar panels, LED lights, a wastewater recycling system, as well as an ice thermal system. We also hired an external expert as a consultant to better operate the energy management system (ISO 50001) and effectively respond to the GHG & Energy Target Management System.
>
> **Shinhan Financial Group**

This profile is collaborative content sponsored by Shinhan Financial Group

Latin America

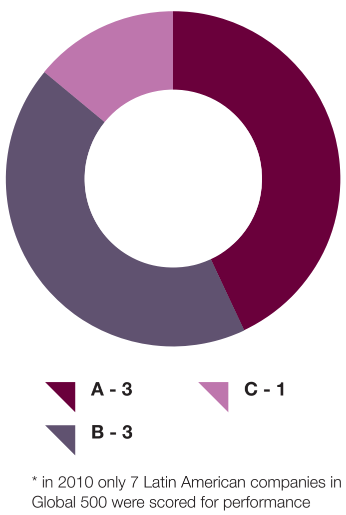
Latin America	2010	2015
Analyzed responses†	17 (10)	25 (9)
Market cap of analyzed companies US$m	687,802	298,585
Scope 1	137.1 $MtCO_2e$	67.8 $MtCO_2e$
Scope 2	7.2 $MtCO_2e$	10 $MtCO_2e$
Scope 1 like for like: 5 companies	135.5 $MtCO_2e$	55.3 $MtCO_2e$
Scope 2 like for like: 5 companies	6.9 $MtCO_2e$	4.6 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

In the past five years, Latin American companies have demonstrated strongly improved performance across a number of metrics, and the sample has significantly reduced its emissions as a whole.

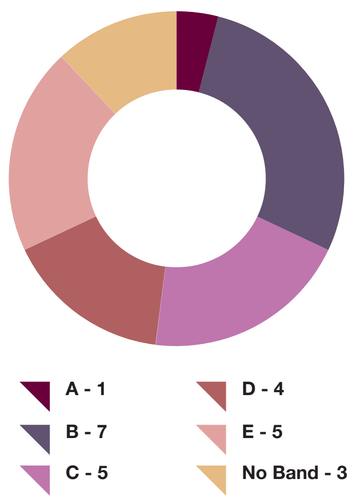
Further, looking specifically at the five companies that participated in CDP's program for climate change management in both 2010 and 2015, there are substantial Scope 1 and Scope 2 emissions reductions – of an average of 59% and 32% respectively.

1. 2010 performance bands in Latin America*

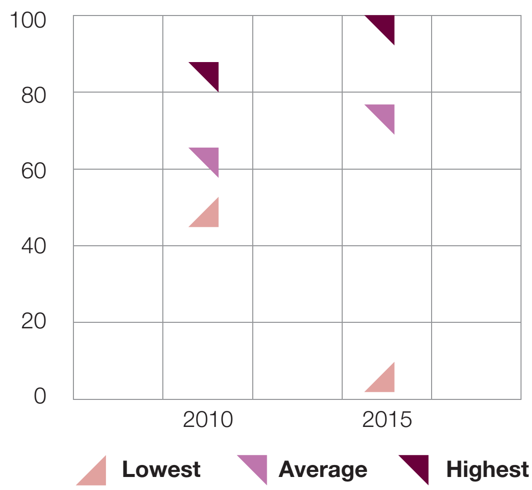


* in 2010 only 7 Latin American companies in Global 500 were scored for performance

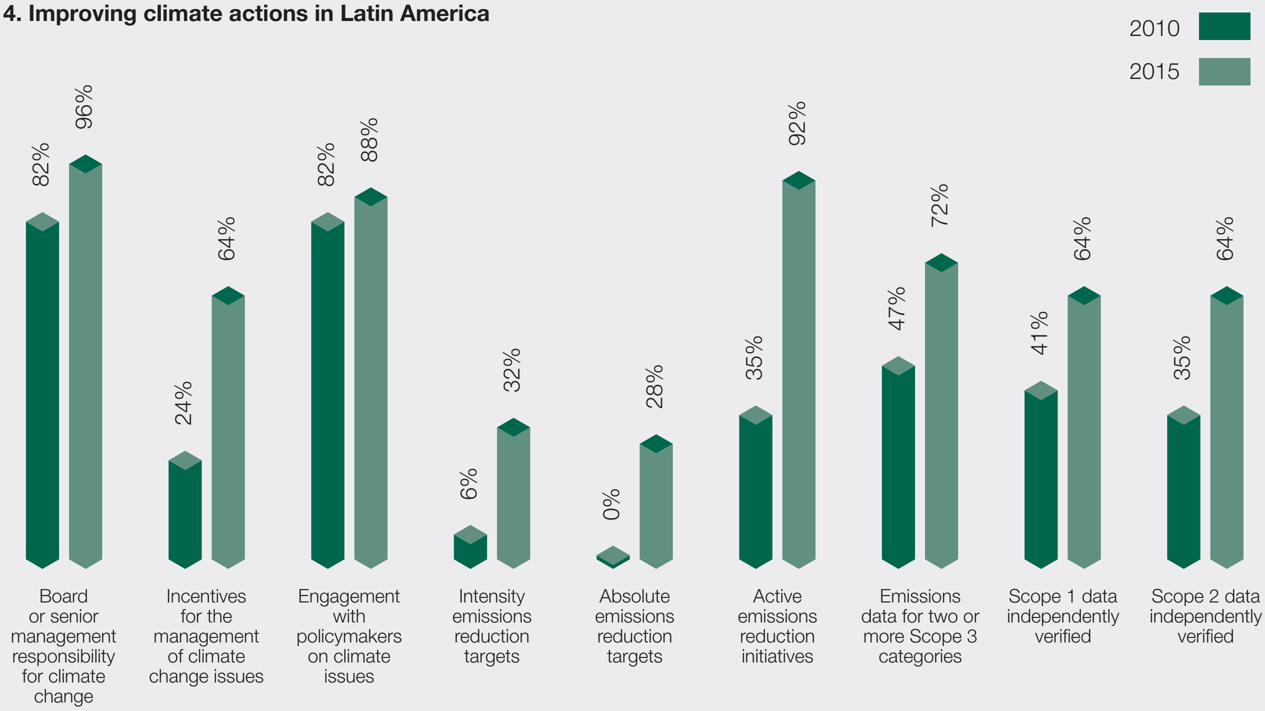
2. 2015 performance bands in Latin America



3. Disclosure scores over time in Latin America



4. Improving climate actions in Latin America



57%

increase between 2010 and 2015 in the proportion of Latin American companies undertaking emission reduction activities

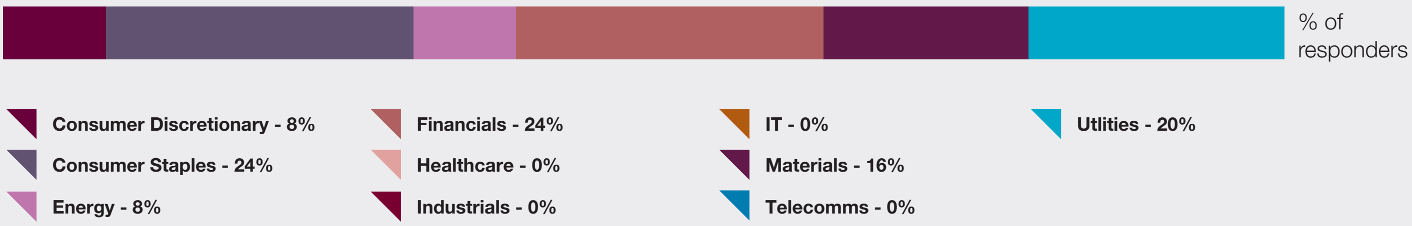
Companies in this region demonstrate some of the greatest change in the past five years and have helped place Latin America in a strong position against the global benchmark. For example, the percentage of companies with incentives for climate management has almost tripled in just five years.

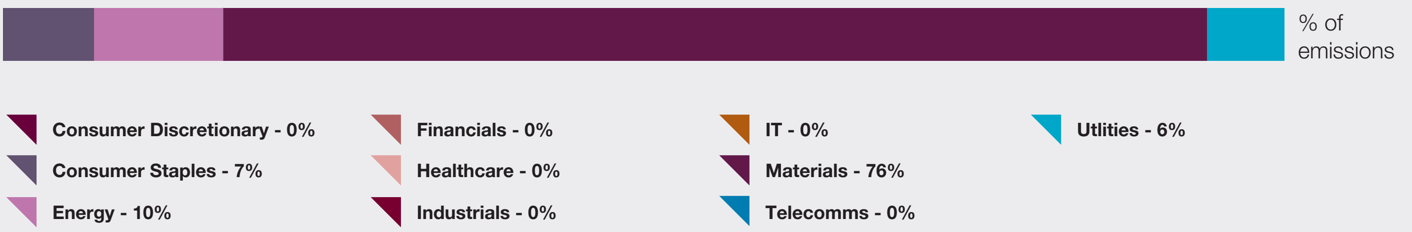
Companies are better at reporting information too: The average disclosure score has risen to 77 from 66, although this lags the global average. Some companies in the region are showing climate leadership, such as **Grupo Financiero Banorte**, which is planning to introduce an internal carbon price as a tool to inform decision making. It will join three other participating companies in the region that are already using carbon pricing.

There is, however, a clear pathway for building on the momentum seen since 2010. Particular attention should be paid to absolute and emissions reduction targets, which compare unfavorably with the global benchmarks of 44% and 50%. Generally, the companies that are disclosing to CDP are doing well but represent a small sample size, suggesting missed opportunity in the region.

> **Development and implementation of a Carbon Footprint methodology and tool for our main businesses (cement, aggregates, and ready-mix concrete) marks the start of a new era of transparency regarding our full responsibility for climate change. This tool provides customers with the CO_2 footprint of the products we supply, so they can calculate the CO_2 footprint of their construction projects.**
>
> **Cemex**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Latin America





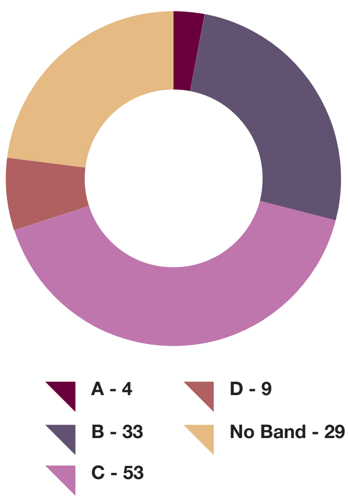
Nordics

Nordics	2010	2015
Analyzed responses†	130 (1)	147 (2)
Market cap of analyzed companies US$m	868,927	1,246,693
Scope 1	150.4 $MtCO_2e$	116.7 $MtCO_2e$
Scope 2	22.5 $MtCO_2e$	22.8 $MtCO_2e$
Scope 1 like for like: 94 companies	133.1 $MtCO_2e$	109.5 $MtCO_2e$
Scope 2 like for like: 94 companies	18.5 $MtCO_2e$	19 $MtCO_2e$

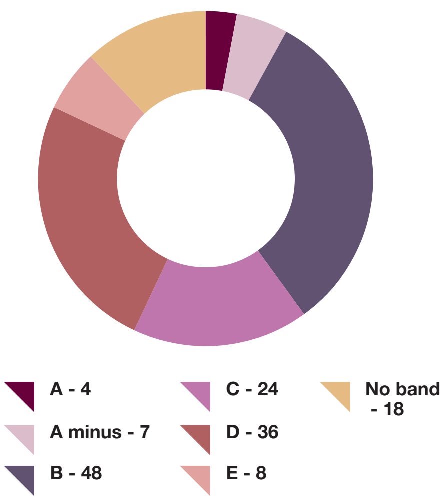
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

Since 2010, Nordic companies using CDP to manage their climate impacts have reduced their Scope 1 emissions by 17%. At the same time, the number of participating companies has risen to 147 from 130.

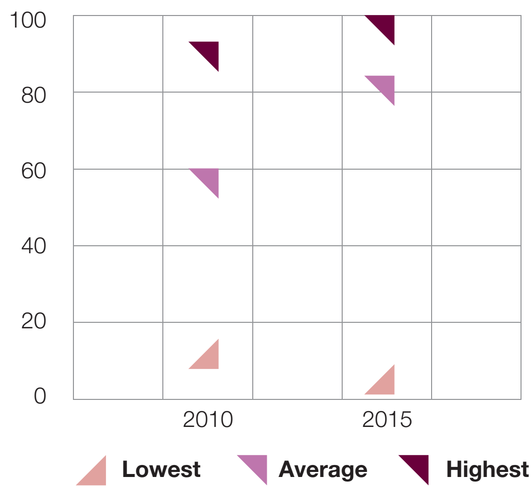
1. 2010 performance bands in Nordic



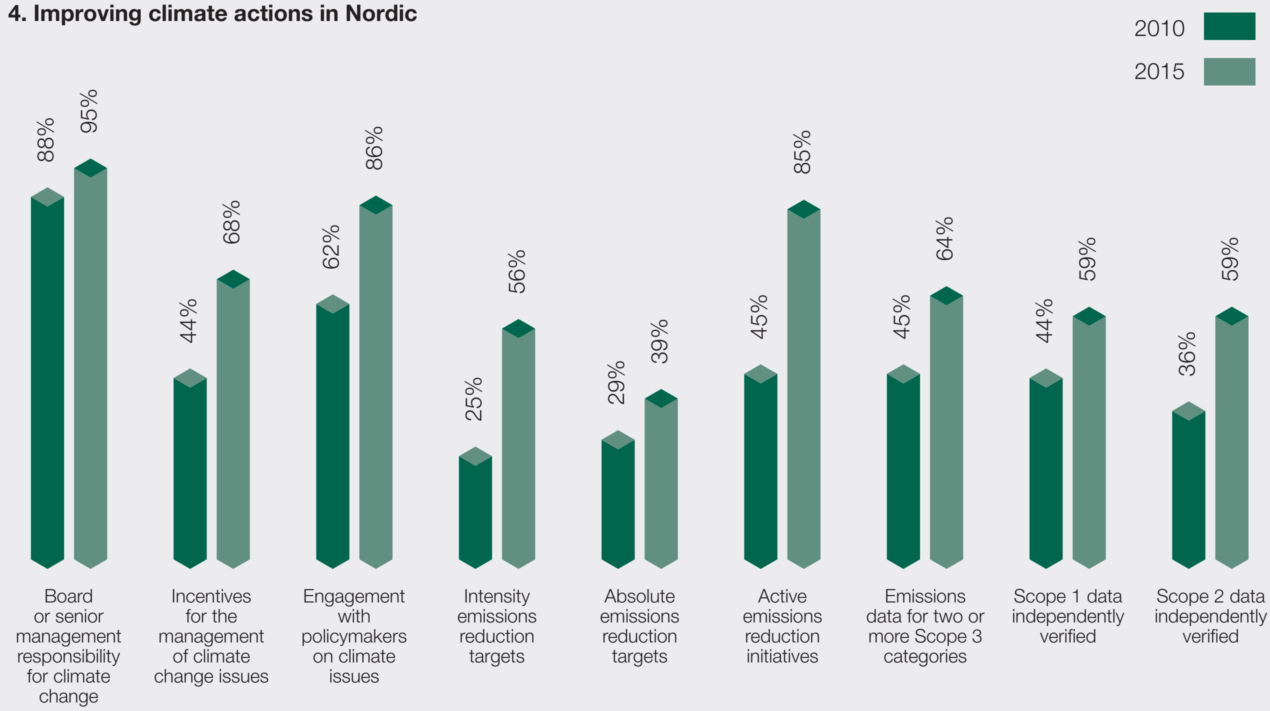
2. 2015 performance bands in Nordic



3. Disclosure scores over time in Nordic



4. Improving climate actions in Nordic



17%

decrease in Nordic companies' Scope 1 emissions between 2010 and 2015.

However, companies in the region are initiating fewer emission reduction activities, with 469 activities started this year, compared with 517 in 2011. Moreover, while 44% of companies report consuming renewable energy to reduce emissions – ahead of the global average of 36% – that figure has decreased by 1 percentage point since 2010.

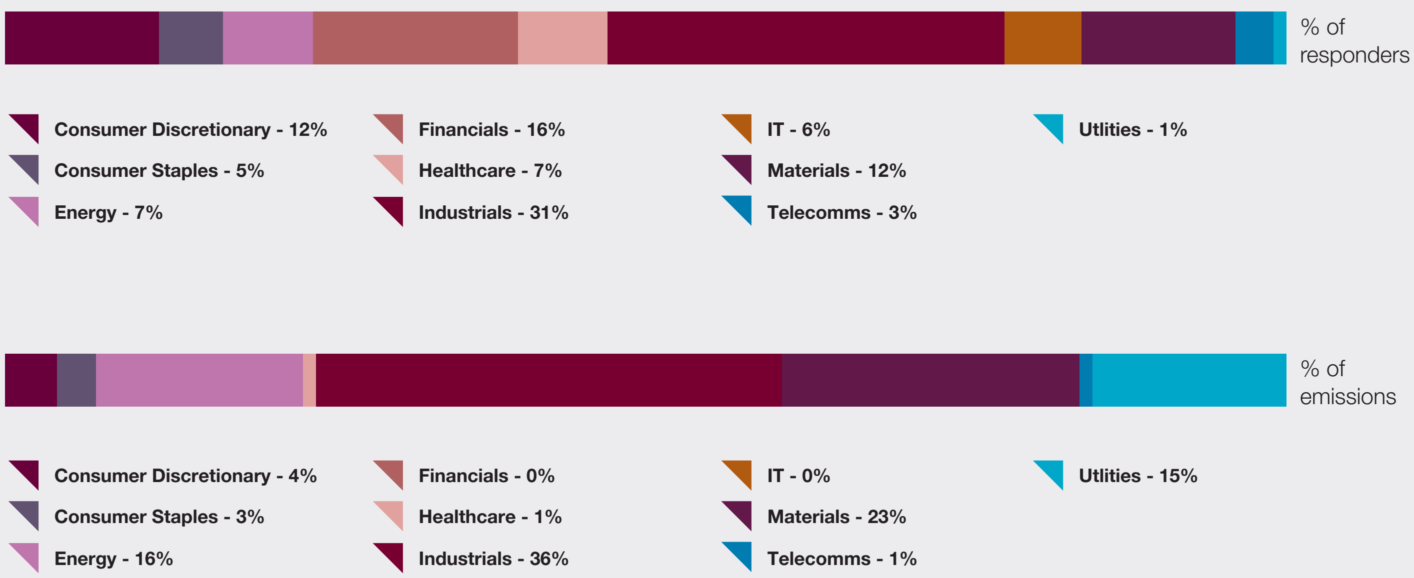
The data suggests, then, that the sample's strong performance in terms of emissions reductions is a function of the maturity of climate change management among companies in the region, and of more sophisticated assessment of those reduction activities that yield the greatest CO_2 and cost reductions. Activities started in earlier years are likely to be bearing fruit, especially those that sought to encourage behavioral change among staff, as these were the most popular type in recent years.

Nonetheless, Nordic companies would do well to redouble efforts, including in some areas where companies in the region are lagging. Only 68% of companies link management incentives to climate change, compared with a global average of 75%. And the percentage of Nordic companies setting absolute targets, at 39%, is below the global average of 44%.

> **Climate change is one of the megatrends driving our business and recognized in KONE strategy to be the forerunner in providing energy efficient elevator and escalator solutions for net zero energy buildings.**
>
> **KONE Oyj**

There is also a relatively small proportion using carbon pricing to guide internal investment decisions, with just 13 of the 147 companies doing so. One of these is biotech company **Novozymes**: "We believe that a carbon price will support climate change mitigation efforts globally and drive CO_2 reductions," the company says.

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Nordic



Profile: Metsä Board, Materials

Metsä Board supports a global deal at COP21, and we hope Paris delivers a positive conclusion. Our strategy in combating climate change concentrates on three areas: increasing use of bioenergy; improving energy efficiency; and light weighting our paperboards. In addition to environmental benefits, these actions improve cost efficiency and competitiveness in the value chain. Consumers, companies and the public sector are increasingly interested in a product's carbon footprint, reflected in their buying decisions.

By investing in bioenergy as well as energy and material efficiency, Metsä Board's CO_2 emissions decreased by 37% during 2009–2014. Last year 83% of energy purchased was CO_2 neutral, and improving energy efficiency at our mills is integral to all major investments in production capacity. For example 31 energy efficiency actions reduced consumption by 74 GWh, equivalent to a reduction in CO_2 emissions of 12 kton.

Our boards are made of pure and strong fresh fibres from northern forests. In lightweighting our boards, we have undertaken years of research into pulps and paperboard manufacturing, achieving a significant advantage over competitors' boards – as much as 30% lighter for the equivalent strength. So our boards need less raw materials, water and energy in manufacturing. There's less to transport, and at the end of their life cycle, our boards can be recycled.

Mika Joukio,
Chief Executive Officer,
Metsä Board

This profile is collaborative content sponsored by Metsä Board

Portugal

Portugal	2010	2015
Analyzed responses†	12	11 (1)
Market cap of analyzed companies US$m*	49,700	39,693
Scope 1	20.2 $MtCO_2e$	20.4 $MtCO_2e$
Scope 2	2.4 $MtCO_2e$	3.7 $MtCO_2e$
Scope 1 like for like: 6 companies	20.1 $MtCO_2e$	16.9 $MtCO_2e$
Scope 2 like for like: 6 companies	2.3 $MtCO_2e$	3.5 $MtCO_2e$

* market cap data was only available for 9 of these companies in 2010 and 10 of these companies in 2015

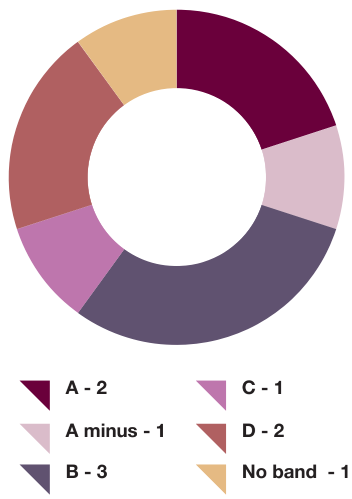
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

Portuguese companies exhibit a strong strategic approach to climate change relative to the global sample: 91% report at least two categories of Scope 3 emissions data, compared with 63% globally, and 82% externally verify both their Scope 1 and Scope 2 numbers, compared with 64% globally. This has helped raise the companies' average disclosure score to 90, up from a relatively high 75 in 2010.

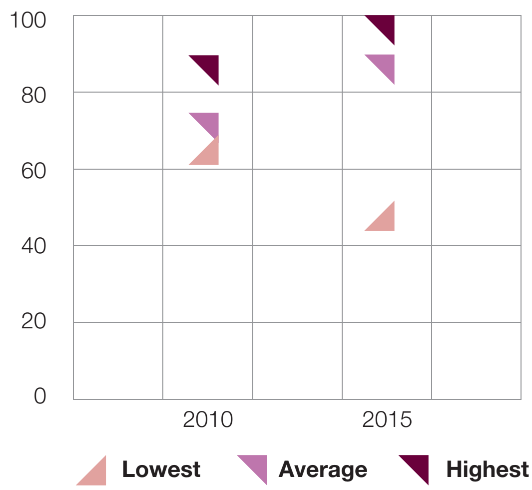
1. 2010 performance bands in Portugal*

* in 2010 only 6 Portuguese companies in Euro 300 were scored for performance

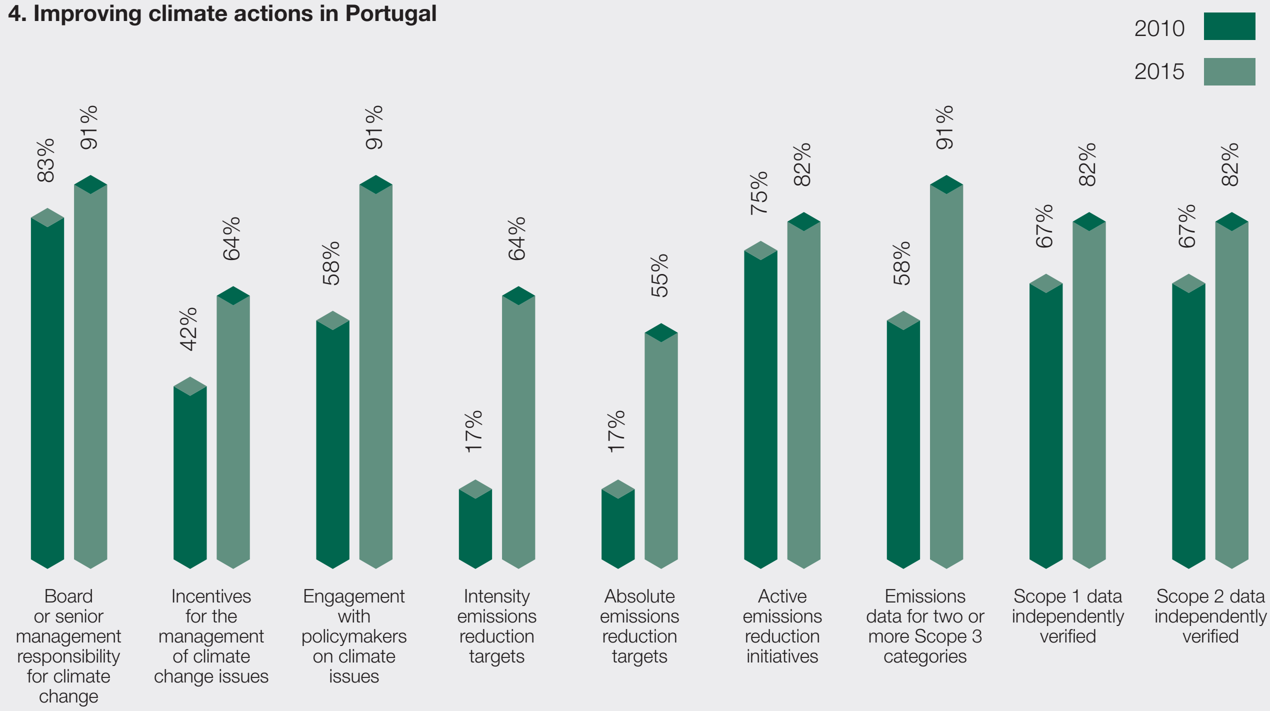
2. 2015 performance bands in Portugal



3. Disclosure scores over time in Portugal



4. Improving climate actions in Portugal



91%

of Portuguese companies report data for two or more categories of Scope 3 emissions

There is also a high percentage consuming renewable energy to reduce emissions – three quarters (73%) compared with the global average of just over a third (36%).

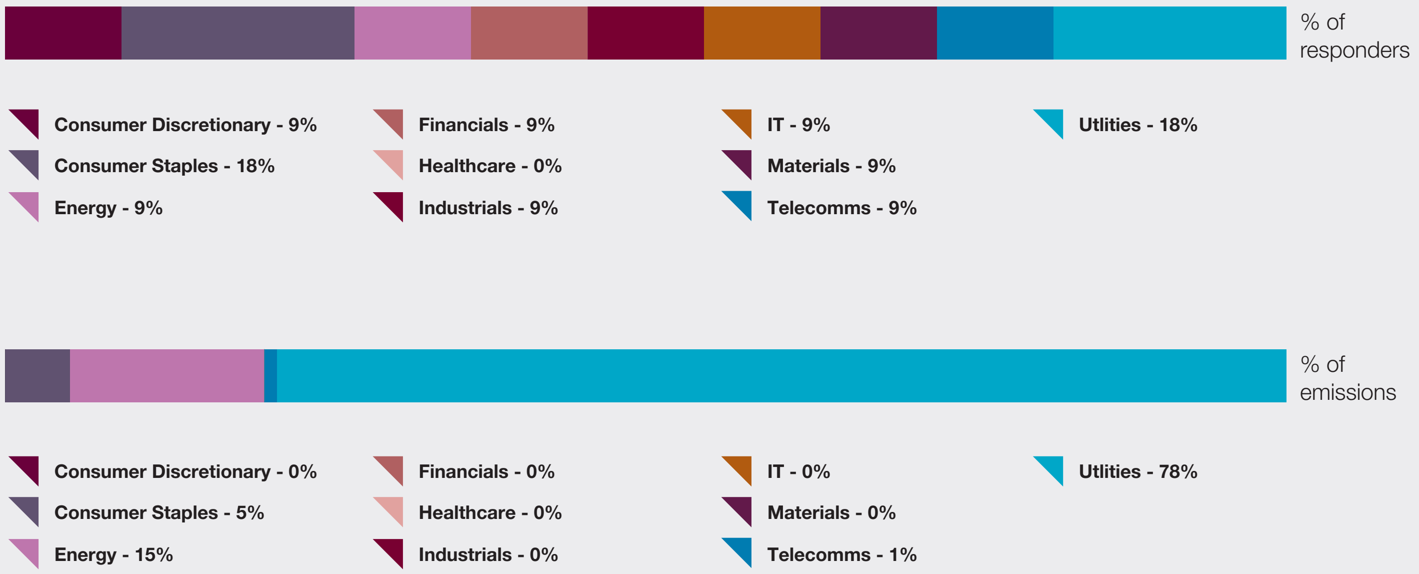
Leading Portuguese companies, such as energy firms **Galp Energia** and **EDP** – both on the Climate A List – demonstrate they are integrating climate change into corporate strategy. **Galp Energia** says it is "changing its core business focus" in response to climate, introducing new technologies and taking "a long-term perspective" in response to the issue.

Indeed, nearly all companies (91%) are engaged with policymakers on climate change. Portuguese companies also show strong support for an international climate agreement, with two-thirds (64%) in favor of a global deal at COP21 in Paris.

While it is a small sample it has been relatively stable over time and comparing companies that reported in both years, Scope 1 emissions have fallen 16% between 2010 and 2015, although Scope 2 emissions are up 49%.

> **EDP's long-term growth strategy is focused on renewable generation, with the goal of increasing the share of renewables on its generation portfolio from 69% in 2013 to 75% in 2017, and will continue to invest in smart grids, green energy retail, micro generation and energy services. EDP has set a long-term objective of reducing by 70% its CO_2 emissions per unit of electricity output in 2020, compared to 2008 levels.**
>
> **Energias de Portugal**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Portugal



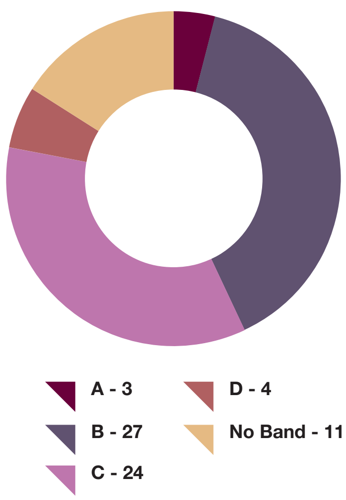
South Africa

South Africa	2010	2015
Analyzed responses†	71 (3)	74 (5)
Market cap of analyzed companies US$m	698,722	825,742
Scope 1	128.8 $MtCO_2e$	128.5 $MtCO_2e$
Scope 2	88.7 $MtCO_2e$	80.6 $MtCO_2e$
Scope 1 like for like: 58 companies	127.1 $MtCO_2e$	125.9 $MtCO_2e$
Scope 2 like for like: 58 companies	84 $MtCO_2e$	71.6 $MtCO_2e$

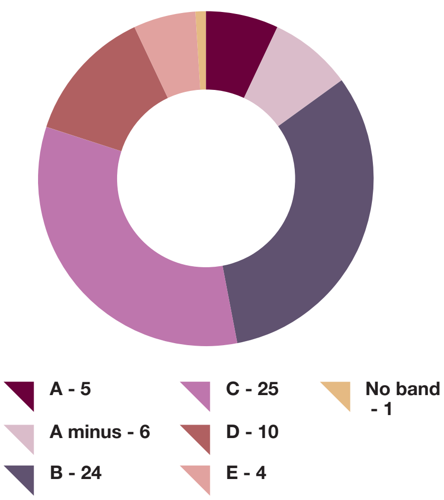
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

Between 2010 and 2015, South African companies participating in CDP's climate program generated a small decrease in Scope 1 emissions of 1% and a significant reduction in Scope 2 emissions of 14%. There has also been an increase in the number of companies reporting, to 79 from 74. For a developing economy, and one that is heavily dependent on coal-fired power, these results are an achievement.

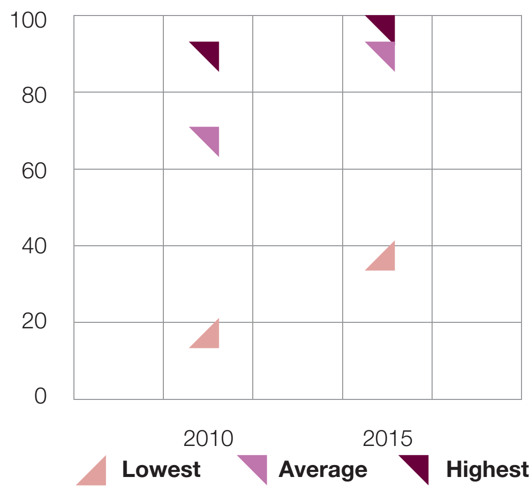
1. 2010 performance bands in South Africa



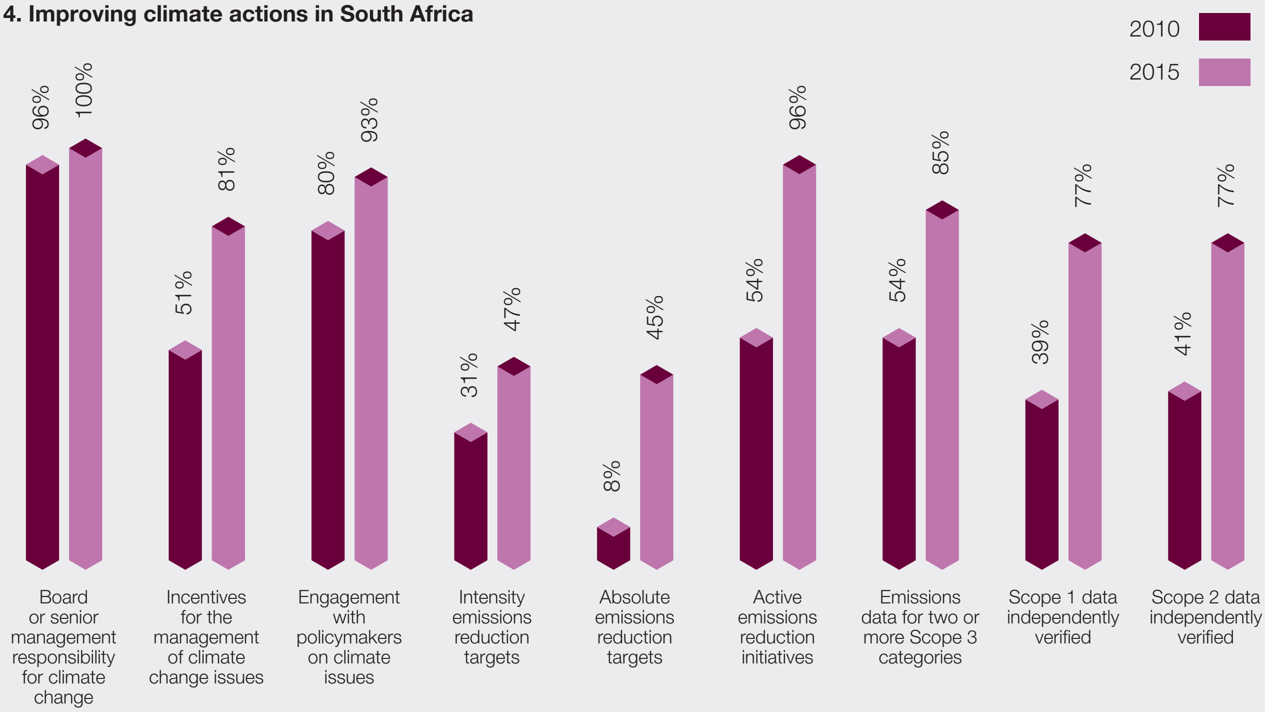
2. 2015 performance bands in South Africa



3. Disclosure scores over time in South Africa



4. Improving climate actions in South Africa



94

average 2015 disclosure score for South African companies

Participating companies demonstrate some of the highest quality disclosure practices in the world, and are leading performance across a number of other indicators.

South Africa's average disclosure score of 94 is 10 percentage points above the global average, and is up from 71 in 2010. Board oversight of climate change matters stands at 100%, and 81% of companies link management incentives to climate change, compared with a global average of 75%. Levels of external verification are at 77% compared with 64%. A relatively large number (19) use a carbon price to guide investments.

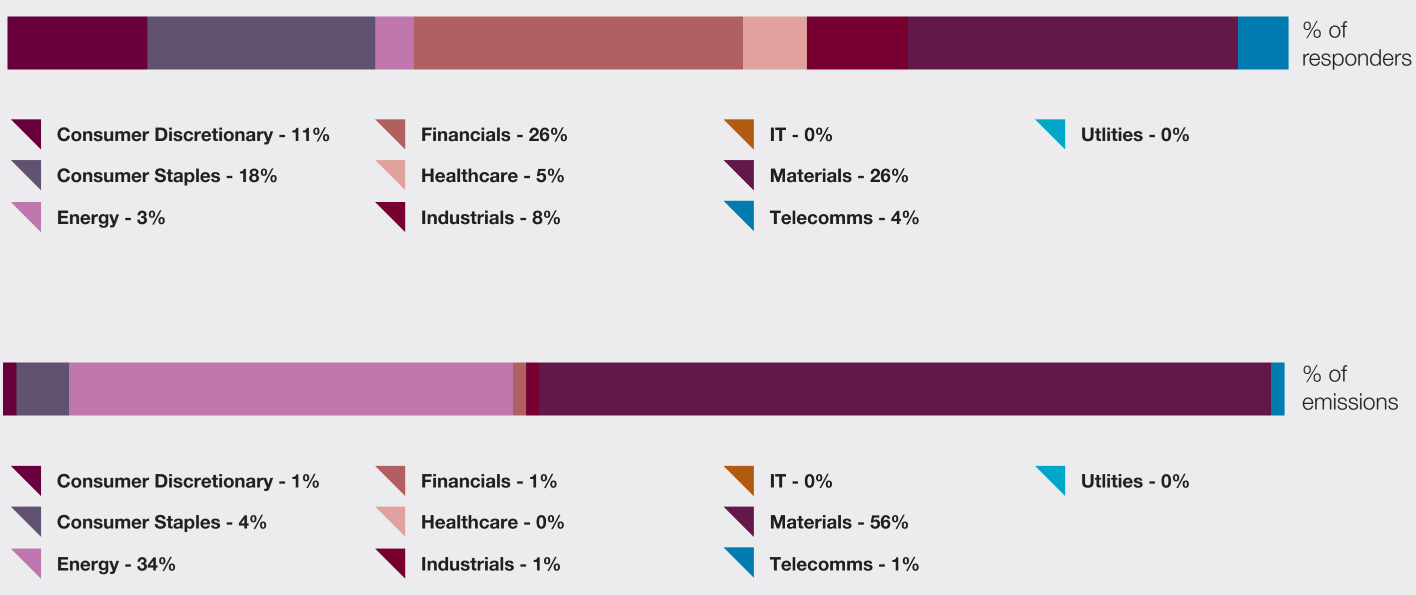
A higher proportion of South African companies track climate risk in their value chains than the global average: 85% report two or more types of Scope 3 data. And leading companies are working to reduce these risks: Brewer **SABMiller**, for example, has developed a detailed value chain carbon footprint, and has a target to reduce the intensity of this footprint by 25% by 2020.

Despite South African companies displaying leadership across a number of indicators, interestingly there has been a reduction in the number of reported renewable energy emissions reduction activities. While on a percentage basis, investment in renewable energy activities has decreased by only 1%, the number of activities reported declined from 43 in 2011 to 29 in 2015.

> **Kumba supports an international agreement… but cautions against agreements that may be detrimental to the development of emerging economies, such as South Africa. Therefore such an agreement should be based on multilateral discussions and must be legally binding. The agreement must contain both mitigation and adaptation actions and acknowledge the role of business towards a low carbon future.**
>
> **Kumba Iron Ore**

Purchasing and installing renewable energy remains a challenge for South African companies, who are limited by a regulated, state-owned electricity market, with no existing legal framework to purchase renewable energy or to sell excess power to the grid.

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in South Africa

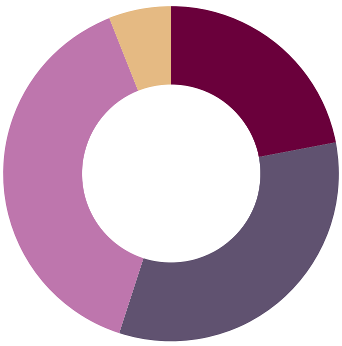


Spain

Spain	2010	2015
Analyzed responses	34	42
Market cap of analyzed companies US$m	751,580	698,047
Scope 1	309.3 $MtCO_2e$	318.7 $MtCO_2e$
Scope 2	47.1 $MtCO_2e$	27.3 $MtCO_2e$
Scope 1 like for like: 27 companies	286.8 $MtCO_2e$	288.6 $MtCO_2e$
Scope 2 like for like: 27 companies	45.8 $MtCO_2e$	25.8 $MtCO_2e$

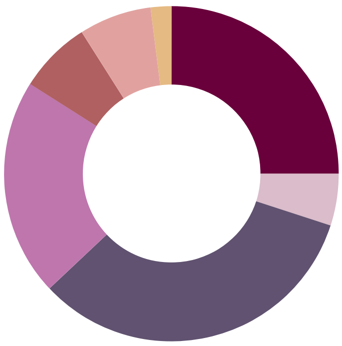
The number of Spanish companies participating in CDP's climate change program has grown significantly since 2010, to 42 from 34. And those companies that reported in both 2010 and 2015 have held their Scope 1 emissions to a small increase of 0.6%, while reducing Scope 2 emissions by an impressive 43%.

1. 2010 performance bands in Spain*

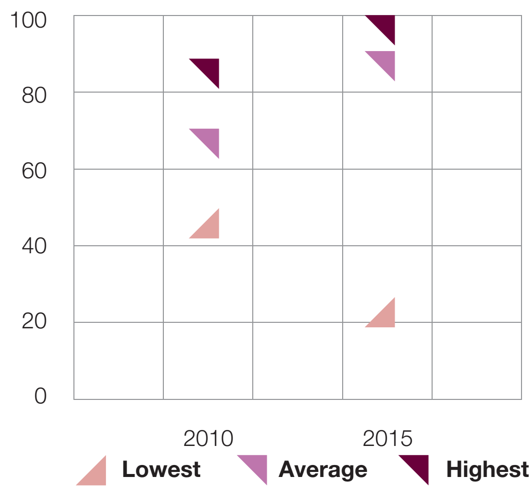


* in 2010 only 18 Spanish companies in Global 500 scored for performance

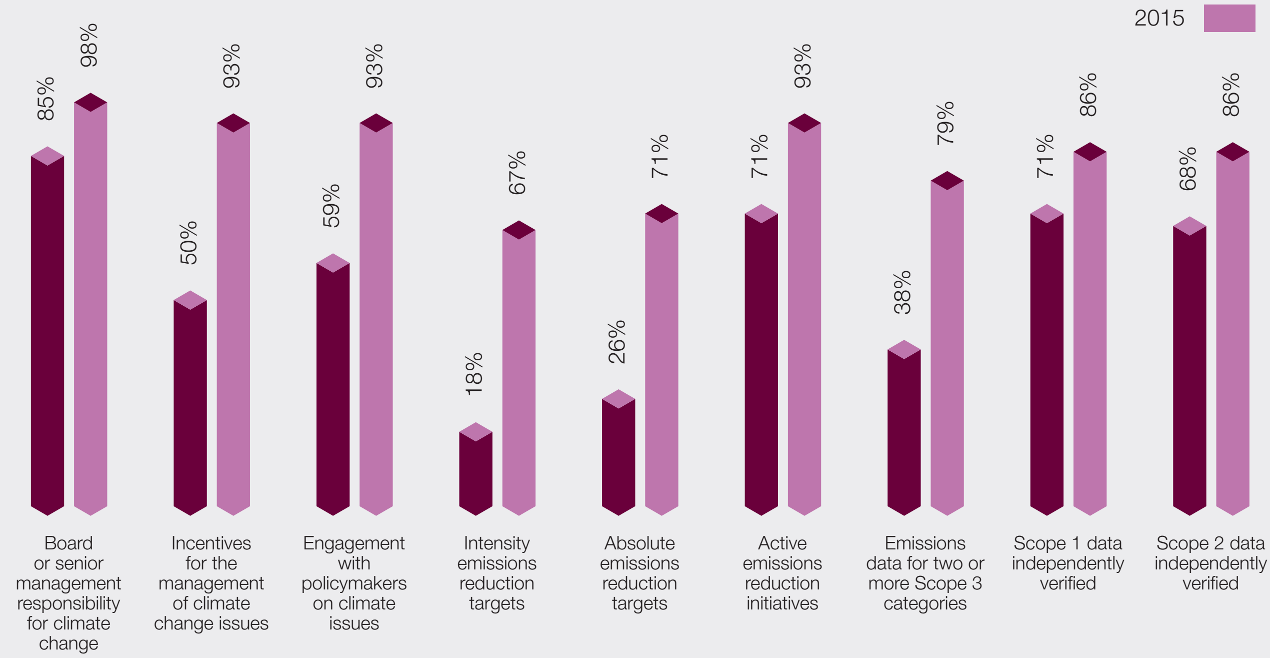
2. 2015 performance bands in Spain



3. Disclosure scores over time in Spain



4. Improving climate actions in Spain



91

average 2015 disclosure score for Spanish companies

Part of this positive result can be explained by the severity of Spain's economic downturn as can be seen in the reduced market capitalization figures. But a greater part is accounted for by the firm commitment of responding Spanish companies to addressing climate change, as demonstrated by high disclosure and performance scores.

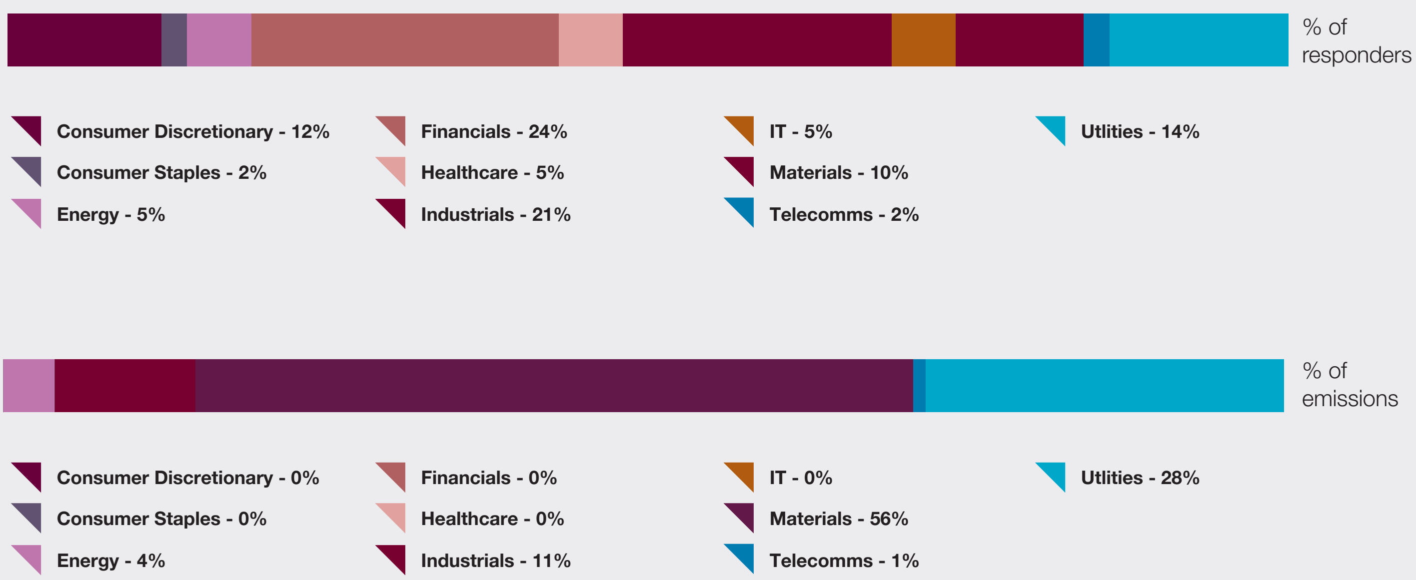
Spanish companies have improved significantly on disclosure metrics that were already relatively high in 2010. For example, 93% now undertake emission reduction activities, up from 71% in 2010. These figures compare, respectively, to global averages of 89% and 48%. Almost three-quarters (71%) have absolute emissions targets, such as **ACERINOX's** 20% reduction against 2005 levels by 2020. More than 90% of companies offer management incentives to manage climate change, compared with a global average of 75%.

More than half of companies (52%) consume renewables to reduce their emissions, compared with 36% globally, and that figure has risen by a quarter since 2010. The number undertaking specific renewable energy emission reduction activities has grown even more significantly, by 111%. This is despite deep government cuts in support for clean energy since the financial crisis.

> **Telefonica approved €30 million of global capex to implement energy and carbon reductions activities. The risk of growing electricity prices has influenced this business decision.**
>
> **Telefonica**

Given this commitment to addressing climate change, it is unsurprising that 70% support an international climate change agreement. However, despite the strong performance of those companies disclosing to CDP, the overall response rate – of just under half of the 85 companies that were approached – is lower than in other leading jurisdictions.

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Spain



Profile: ACCIONA, Utilities

For ACCIONA, with over 100 years of history and operations in more than 30 countries, sustainability and social well-being are the cornerstones of economic growth, environmental balance and social progress, governing the Company's strategy.

ACCIONA is convinced that carbon pricing is a key tool to create a low emission economy. We are leading, along with companies in all sectors and international public institutions, the task of obtaining an actual commitment from governments on this at COP21 in Paris

As strategic partners of WEF, we belong to the CEO Climate Leadership Group. We collaborate with We Mean Business and work with the World Bank in the Carbon Pricing Leadership Coalition. ACCIONA has begun to voluntarily incorporate CO_2 pricing to its investment decisions, anticipating what we hope will become a reality.

ACCIONA considers that the private sector has the responsibility of actively participating in the creation of a low carbon economy. In this regard some of the milestones achieved by the Company are; reducing its Carbon and Energy intensities by 71% over the last ten years, calculated the emission of greenhouse gases and water consumption associated with 100% of its supply chain and prevented the emission into the atmosphere of 16.3 million tons of CO_2 thanks to its production of 100% renewable energy.

Félix Rivas Anoro,
Procurement Executive Director Innovation, Environment and Quality Executive Director, ACCIONA

This profile is collaborative content sponsored by ACCIONA

Turkey

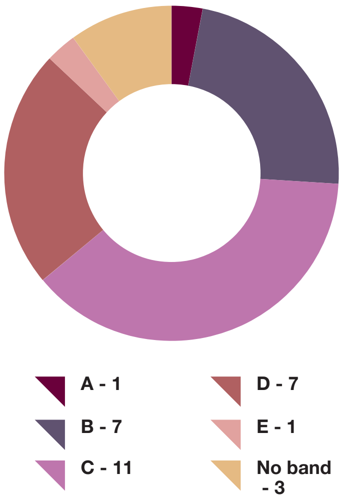
Turkey	2010	2015
Analyzed responses†	10	30 (5)
Market cap of analyzed companies US$m	51,601	102,409
Scope 1	4.8 $MtCO_2e$	20.7 $MtCO_2e$
Scope 2	0.34 $MtCO_2e$	2.3 $MtCO_2e$
Scope 1 like for like: 7 companies	2.8 $MtCO_2e$	3.9 $MtCO_2e$
Scope 2 like for like: 7 companies	0.29 $MtCO_2e$	0.20 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

Turkey has shown the largest percentage growth in the number of companies participating in CDP's climate change program over the last five years, with 35 companies now disclosing – two and a half times more than the 10 which disclosed in 2010. Meanwhile, the number of emission reduction activities they are undertaking has increased more than 300%. This is at least partly explained by the

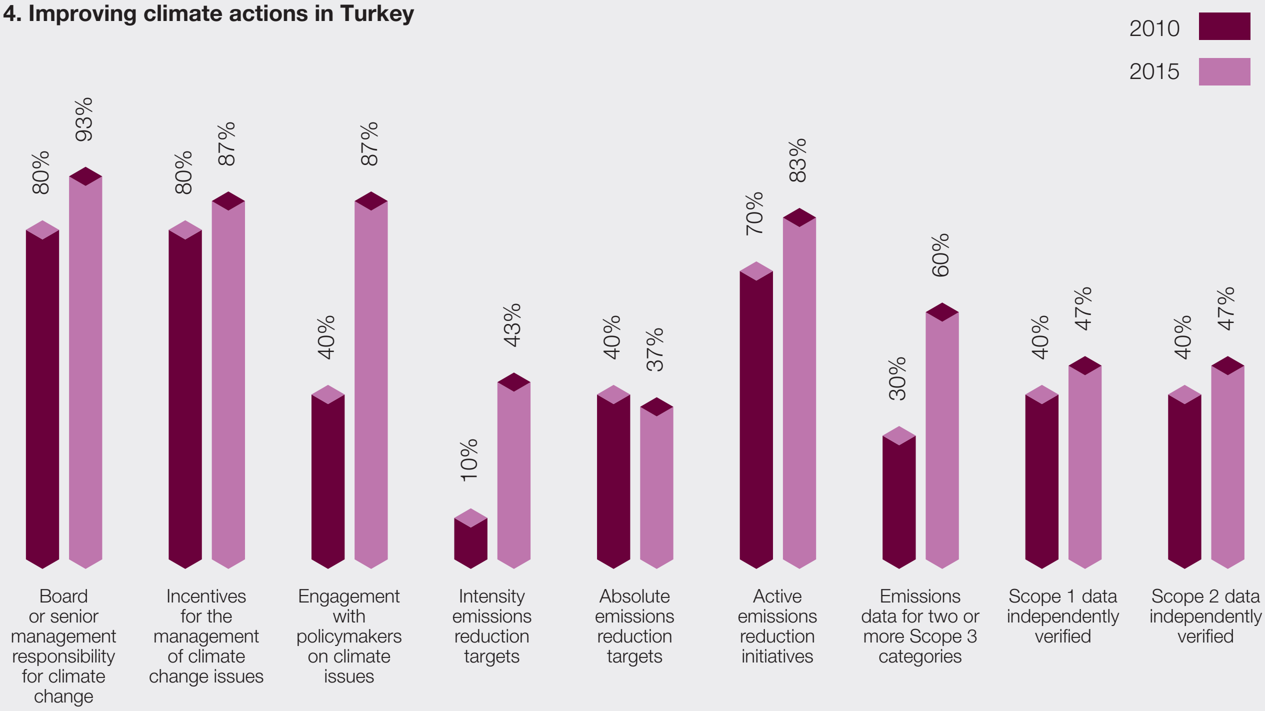
1. 2010 performance bands in Turkey

2. 2015 performance bands in Turkey



3. Disclosure scores over time in Turkey

4. Improving climate actions in Turkey



250%

growth in the number of Turkish companies participating in CDP's climate change program between 2010 and 2015

country's strong economic growth over recent years, and the increasing internationalization of its economy.

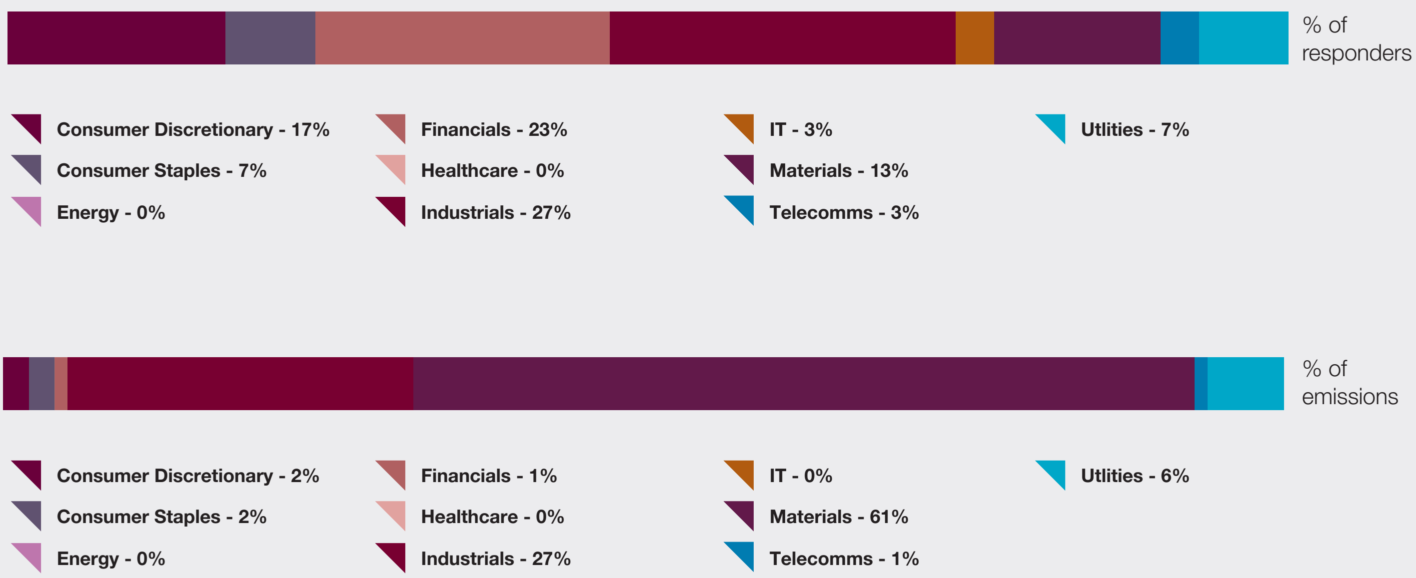
Turkish companies perform largely in line with global averages in terms of carbon disclosure and performance, although they lag somewhat in terms of target setting and the verification of emissions data. They also report significant opportunities from climate change: tire company **Brisa Bridgestone**, for example, cites a new concept tire that helps improve vehicle fuel efficiency and reduce emissions.

Turkish companies appear particularly mindful of the physical risks posed by climate change. Nine in ten report physical climate exposures, compared with the global average of 79%. This is up from 70% in 2010, which itself was above the global average, then, of 59%.

Given that only seven companies disclosed in both 2010 and 2015, emissions performance should be treated with caution. Scope 1 emissions have risen 39%, but Scope 2 emissions are down 30%.

> **Garanti Bank has identified that one of the most significant areas that customers need support is development of innovative products for renewables. Consequently, Garanti Bank has included a long-term target in its strategy related to developing products and services that help catalyze the transition towards a more sustainable economy… the technical and regulatory know-how accumulated in renewable energy continues to make Garanti Bank a preferred financing partner for investors in this field.**
>
> **T.Garanti Bankasi**

5.Proportion of 2015 companies and Scope 1 & 2 emissions by sector in Turkey



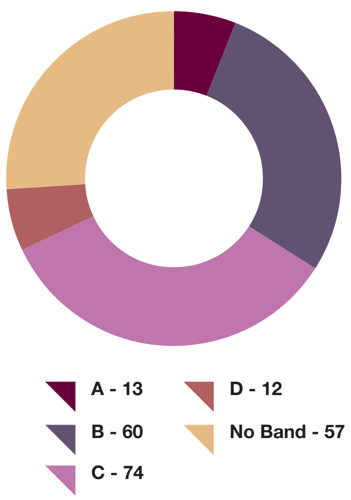
United Kingdom

UK	2010	2015
Analyzed responses†	219 (28)	232 (18)
Market cap of analyzed companies US$m	2,758,474	3,117,458
Scope 1	408.2 $MtCO_2e$	394 $MtCO_2e$
Scope 2	241.5 $MtCO_2e$	121.1 $MtCO_2e$
Scope 1 like for like: 170 companies	224.9 $MtCO_2e$	280.8 $MtCO_2e$
Scope 2 like for like: 170 companies	104 $MtCO_2e$	102.1 $MtCO_2e$

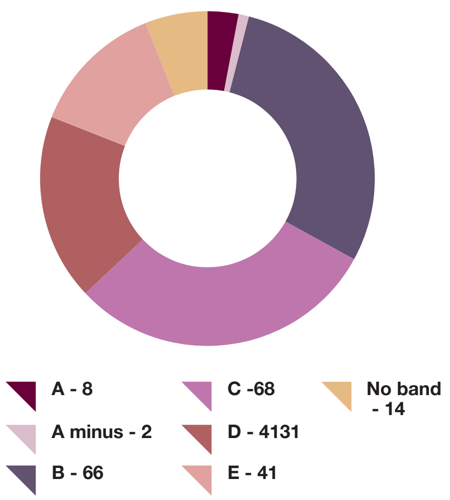
† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

UK companies in the FTSE 350 demonstrate considerable improvement in climate management and disclosure in the five years since 2010. The percentage initiating emissions reduction activities in 2015 has risen significantly, to 89% from 47% in 2010. This is coupled with growth in the number of members of the FTSE 350 equity index disclosing to CDP, which has risen to 232 from 219.

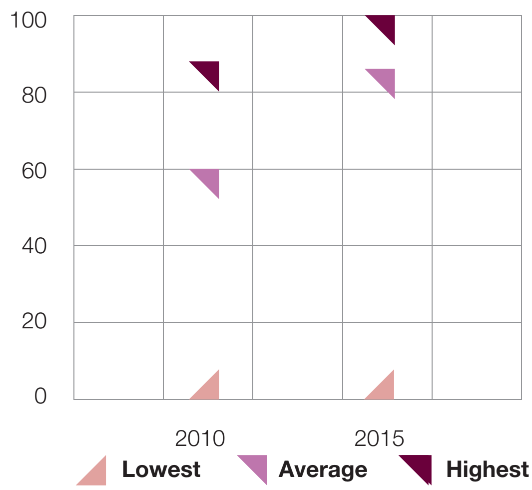
1. 2010 performance bands in UK



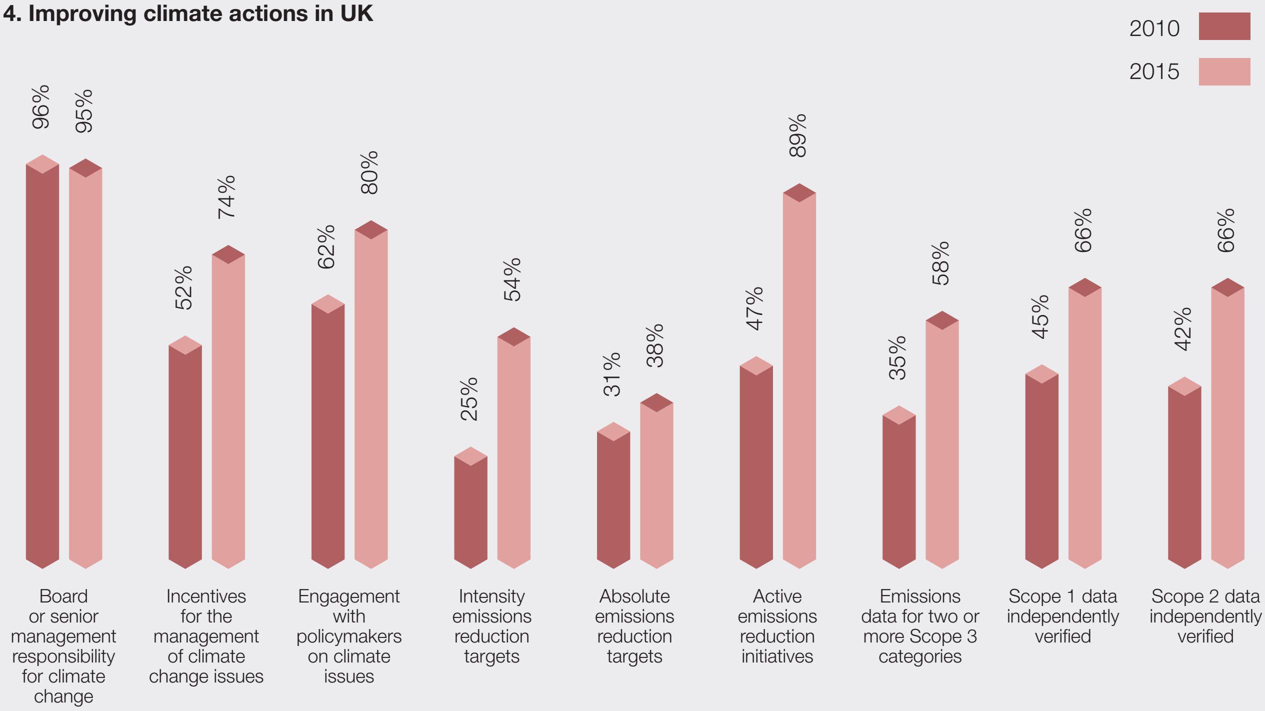
2. 2015 performance bands in UK



3. Disclosure scores over time in UK



4. Improving climate actions in UK



42%

increase in companies reporting active emissions reductions since 2010

UK companies report 1,090 projects in 2015, up from 832 in 2011 – a 31% rise that compares impressively with an average rise globally of 14%. Energy efficiency remains the most popular project type: for example, **Standard Chartered** has generated US$740,000 of financial savings through its energy efficiency investment program.

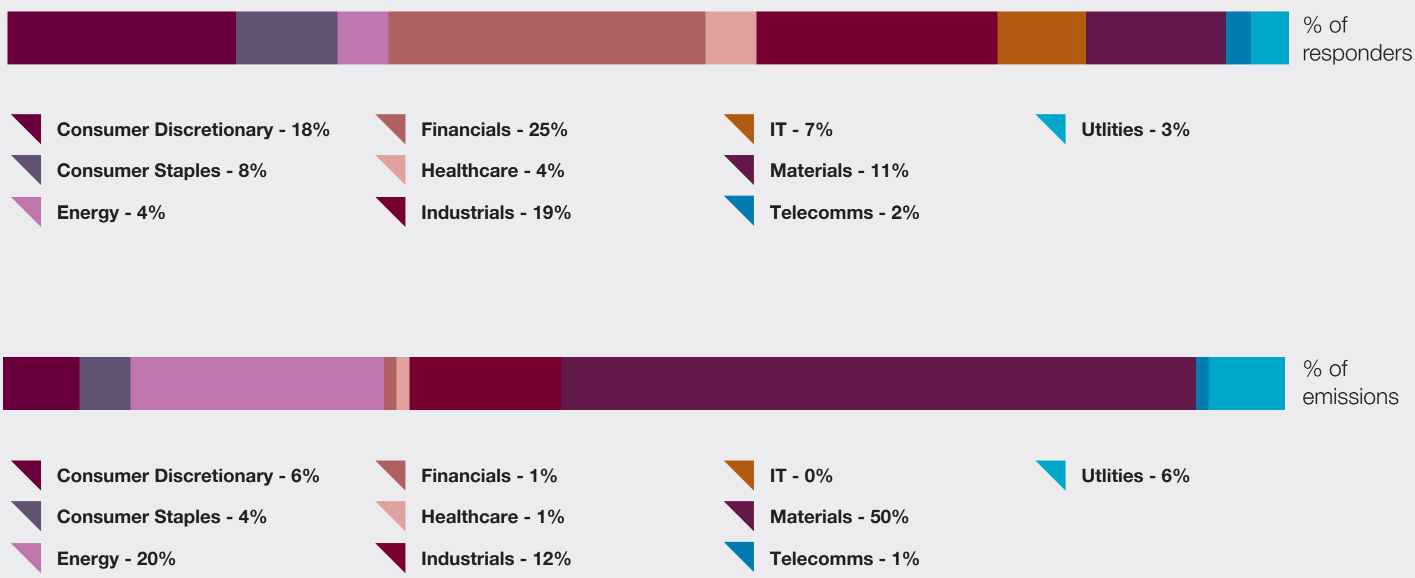
Strong engagement with the climate agenda is likely to have been supported by the relative stability of climate policy in recent years, underpinned by the UK's binding targets under the Climate Change Act. However, recent signals from the UK indicate a significant weakening of the government's political will to address climate change, which may well be reflected in corporate climate performance in future.

Rather than backtracking on climate policy, the UK needs to redouble its efforts. Although emissions for this sample have decreased, those companies disclosing to CDP in both 2010 and 2015 have been unable to constrain emissions growth, with Scope 1 emissions increasing by an average of 24%. Participants have, however, delivered a 1.8% reduction in Scope 2 emissions, as the gradual decarbonization of the UK electricity mix continues.

Some leading UK companies are looking beyond short-term policy signals to position themselves for a low-carbon future: Building supplies company **Marshalls** has committed to reduce emissions by 80% by 2050, while pharmaceuticals giant **GlaxoSmithKline** has pledged a 100% reduction by that point.

> **We've invested over £5 million in renewables in the development of our main campuses in England and Scotland, which in 2013/14 accounted for 7% of our energy usage, saving >£800k per year in avoided energy costs and worked to futureproof our energy supply at these key sites, reducing our reliance on fossil fuels. The CCHP and wind turbine at our Osterley site produce 40% of Sky Studio's energy, and our new building The Hub is fitted with 753m² of solar panels.**
>
> **Sky UK**

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in UK



Profile: BT Group, Telecommunication Services

When I think about the future, I see two potential paths. One is where humankind does nothing. We ignore the climate science and don't change the way we do business. The second is where we take meaningful action. It's clear to businesses like ours which the right path is.

I've seen the power of technology to connect. And I know, brought to life every day at BT, the power of communications technology as a tool to tackle climate change. The fact that ICT solutions have the potential to remove 9.1Gt of CO_2 from industrial production means we at BT, a world-leading communications company, have a huge responsibility.

It determines how, and where we invest. From the resources required to have all our electricity from renewables, to product innovations which reduce carbon impact and energy use.

But continued investment for any business needs clarity and certainty. A framework of new financial instruments to stimulate investment in alternative energy and efficiency projects, as well as green bonds, is overdue. And perhaps most importantly, when our political leaders gather in Paris we need a strong global climate deal which limits temperature rises to 2°C.

Together, we can create a better world.

Niall Dunne,
Chief Sustainability Officer,
BT Group

This profile is collaborative content sponsored by BT Group

Profile: SSE, Utilities

SSE is a leading generator of renewable energy with its heritage in the hydro-electricity revolution that took place in the North of Scotland some seventy years ago. We were producing power from the plentiful supplies of Scottish rainfall long before anyone understood the imperative to combat climate change.

SSE has long been at the forefront of the low carbon energy industry. Seven years of continuous investment in renewable energy - £4bn since 2007 – is paying dividends. Last year (2014/15) SSE produced more renewable electricity than any other company in the UK and Ireland (8,466MWh) from the most diverse range of sources. The result of which is a shift in emphasis of our generational mix, with SSE's carbon emissions down by 34% in 2014/15.

But more needs to be done. A healthy carbon price in the UK would do much to underpin the investment case for low carbon energy. SSE believes the best way to tackle climate change internationally is for a firm agreement in Paris to limit the quantity of carbon emissions worldwide – and importantly – we need a robust global mechanism for creating a price for carbon too.

Martin Pibworth,
Managing Director,
SSE Wholesale

USA

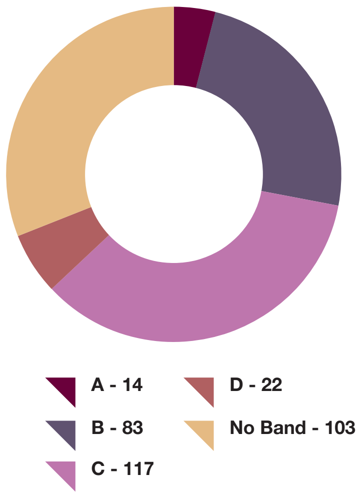
USA	2010	2015
Analyzed responses†	346 (6)	334 (16)
Market cap of analyzed companies US$m	8,996,809	15,517,298
Scope 1	1,540 $MtCO_2e$	1,315 $MtCO_2e$
Scope 2	288.9 $MtCO_2e$	327.1 $MtCO_2e$
Scope 1 like for like: 268 companies	1,127 $MtCO_2e$	1,121 $MtCO_2e$
Scope 2 like for like: 268 companies	254.3 $MtCO_2e$	295.6 $MtCO_2e$

† the number in brackets refers to companies that responded after the deadline, or referred to a parent company. They are not included in analysis.

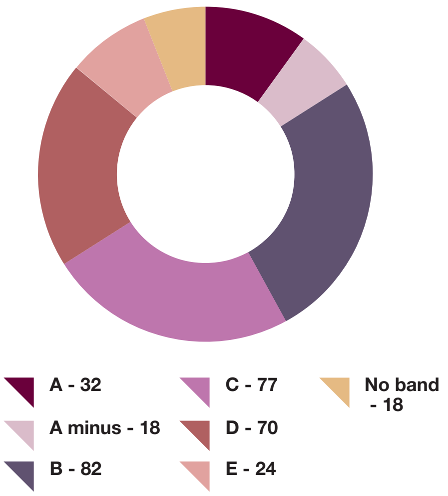
The constituents of the S&P500 equity index exhibit high levels of climate accountability, with some two-thirds (334) disclosing climate change information through CDP. Companies are also demonstrating a growing appetite for climate action, with a mainstreaming of climate change occurring over the last five years.

Board-level responsibility has jumped from two-thirds in 2010 to 95% in 2015. The percentage of companies setting absolute emissions targets has

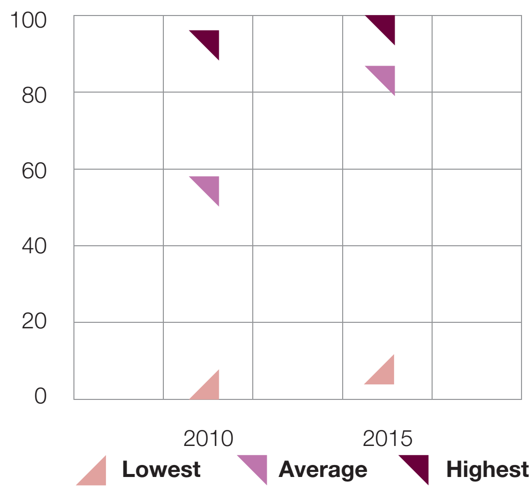
1. 2010 performance bands in USA



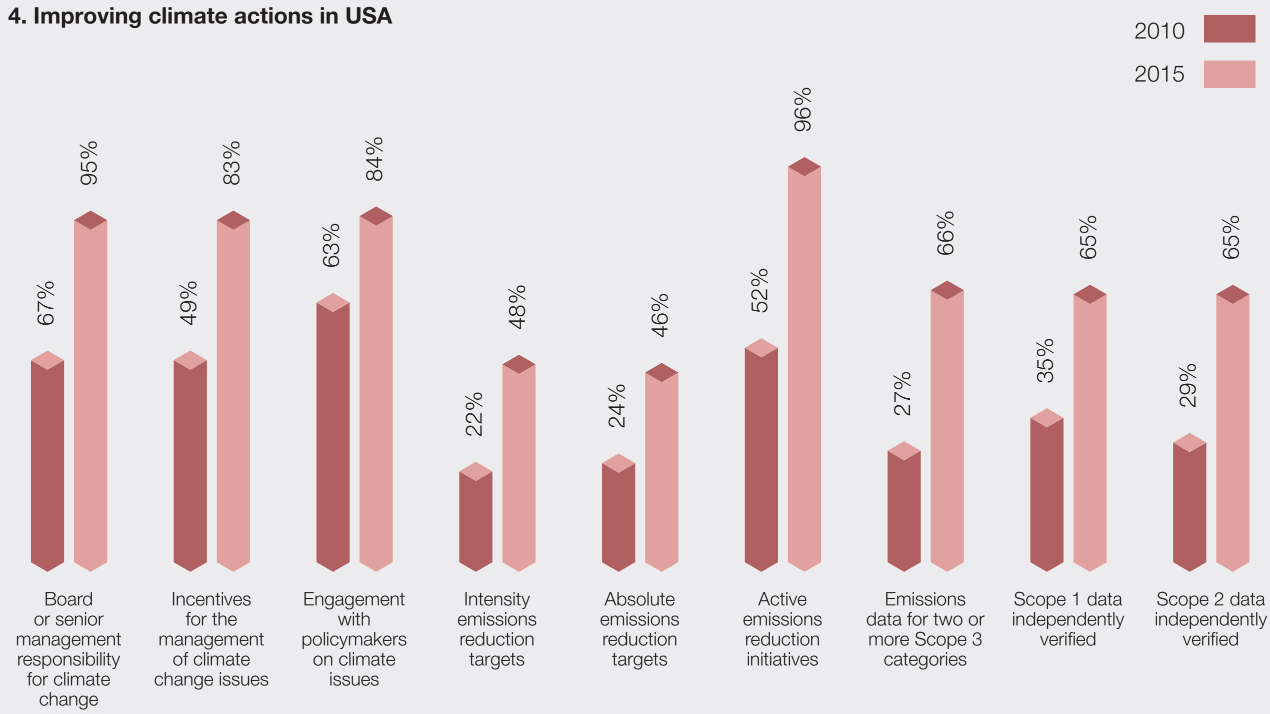
2. 2015 performance bands in USA



3. Disclosure scores over time in USA



4. Improving climate actions in USA



96%

of companies have initiatives in place to reduce emissions

increased from a quarter (24%) to almost half (46%), and those pursuing emissions reduction initiatives has increased from just over a half (52%) to almost all (96%). In addition, the proportion engaging in external emissions verification has doubled, to two-thirds.

When analyzing the 268 companies that disclosed in both 2010 and 2015, Scope 1 emissions are broadly flat (down just 0.5%). However, Scope 2 emissions are up 16%. And only 46% of companies are consuming renewable energy to reduce emissions – a decrease from 52% in 2011. This is a surprising finding, given the increased penetration of renewables into the US electricity mix and the growing popularity of renewables among CDP's global sample.

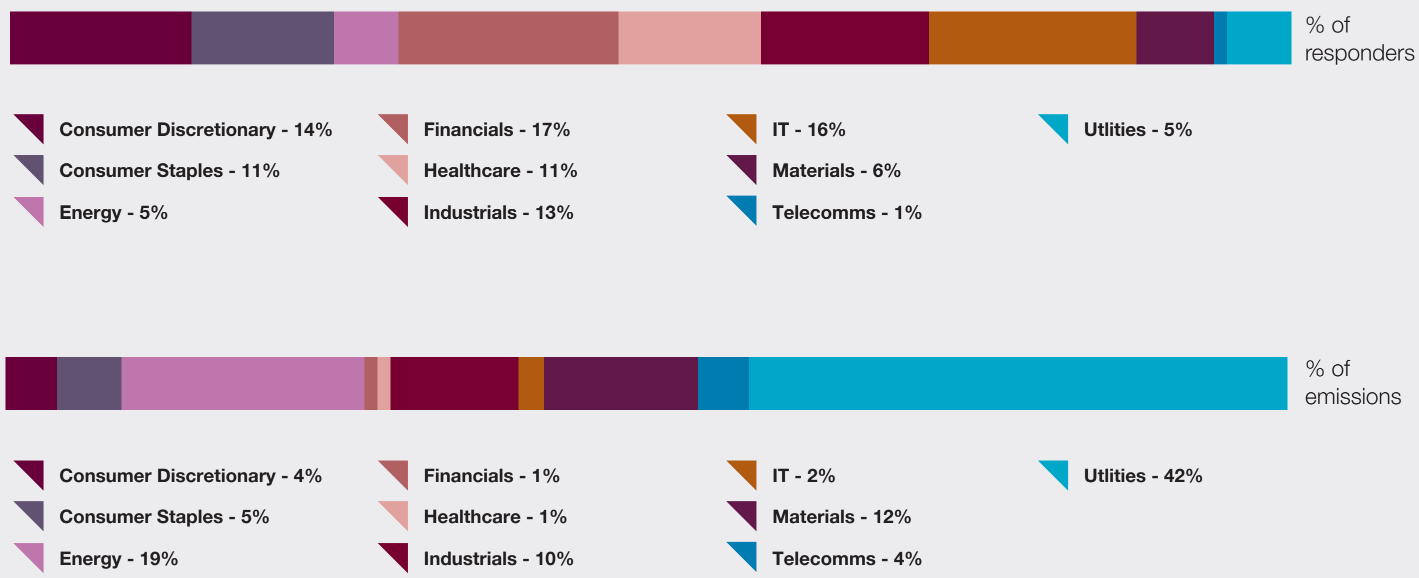
These findings indicate that governance, management and goal-setting structures are in place, but companies need to build on these foundations, set robust targets, and fully realize both the environmental and economic benefits provided by emissions reductions.

In support of continued reductions, the success of cap-and-trade programs on the East and West Coasts should encourage more companies to put a financial number on their carbon emissions, as should the administration's Clean Power Plan, which many analysts believe could see carbon pricing much more widely applied across the US. In fact, 74 companies in the S&P 500 report that they currently use an internal price on carbon or expect to in the next two years. For example, Energy giant **Exxon Mobil** states: "We address the potential for future climate change policy, including the potential for restrictions on emissions, by estimating a proxy cost of carbon. This cost, which in some geographies may approach US$80 per ton by 2040, has been included in our outlook for several years."

Apple's executive leadership believes that a strong, effective agreement at COP21 is an important element of harnessing the business community in the global fight against climate change. Making renewable energy more predictable, accessible, and economical will accelerate the transition from fossil fuels to clean sources of electricity…we have shown that data centers, which consume tremendous amounts of electricity, can run on renewable energy generated from solar, wind and micro-hydro sources.

Apple Inc.

5. Proportion of 2015 companies and Scope 1 & 2 emissions by sector in USA



Profile: BNY Mellon, Financials

As a global investments company, BNY Mellon plays a central role in supporting markets and promoting sustainable practices.

In managing our own operations and supply chain, we strive for the highest standards of environmental performance and disclosure across our company. We are on track to achieve our new goal to reduce Scope 1 and Scope 2 carbon emissions by 40 percent by 2020 against our 2008 baseline emissions. But our potential to respond to the risks and opportunities associated with climate change does not stop with our own operations.

Our ability to reduce carbon impact also lies in what we can achieve through investments and how we serve our clients. We believe the power of investments can be harnessed to help our clients succeed and positively impact social and environmental change. For that to happen, the industry's approach to impact measurement and transparency must evolve.

By voluntarily reporting our own progress to CDP, we underscore our commitment to advancing measurement, transparency and performance. CDP's ranking is one way that institutional investors can understand how climate change affects their investments. We are proud of our leadership in climate change accountability as we seek to power global investments and growth, earn the trust of our clients and stakeholders, and innovate for a better world.

BNY Mellon

This profile is collaborative content sponsored by BNY Mellon

Profile: Carnival Corporation & plc, Consumer Discretionary

Carnival Corporation & plc is the largest cruise company in the world, with a portfolio of 10 global cruise brands. We host over 10 million guests each year and visit over 725 ports of call around the world. Sustainability is a core guiding principle as our business is dependent on healthy oceans and communities.

In 2014, we met our goal to reduce the intensity of CO_2e emissions by 20% one year ahead of schedule. This year we announced our 2020 sustainability goals focused on reducing our carbon footprint while enhancing the health, safety and security of our guests and crewmembers and ensuring sustainable business practices across our brands and business partners. Three of the ten goals focus on reducing emissions, including installing exhaust gas cleaning systems, increasing cold ironing capacity and further reducing the intensity of our CO_2e emissions.

We are spearheading a new era in the use of low carbon fuels, by using liquefied natural gas to generate 100% of the ship's power in four new ships. Continuing our sustainability journey, our newest brand Fathom is pioneering impact travel with purpose-driven activities and programs that enable guests to make a real sustainable impact on the communities we travel to.

Arnold W. Donald,
President and Chief Executive Officer,
Carnival Corporation & plc

This profile is collaborative content sponsored by Carnival Corporation & plc

Profile: Stanley Black & Decker, Industrials

At Stanley Black & Decker we are ECOSMART. Our culture is committed to improving the sustainability of our operations, our products, and our communities. We challenge ourselves to seek new and better ways to deliver on our economic, environmental and social responsibilities, and we work with our suppliers and customers to do the same. Our ECOSMART culture helps us identify environmental strategies that ensure we stay ahead of climate-related influences and reduce the environmental impact of our operations.

In Rialto, California, 11,000 solar panels provide 2.5 megawatts of clean renewable energy at our West Coast Distribution Center. We produce 30,000 megawatt hours of energy per year through our Windsor, Connecticut hydroelectric facility. In Hellaby, England, we've eliminated nearly 110 tons of waste in just three years. And with an advanced plating line in Taichung, Taiwan, we're reducing energy consumption by 300,000 kilowatts per year.

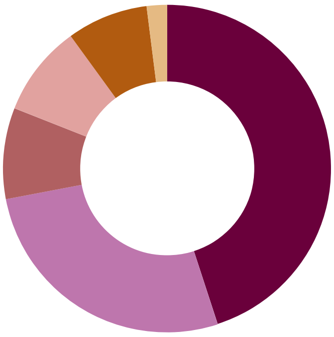
And this is just the beginning. With ECOSMART, we will continue to reinforce our position as a sustainable business leader, now and well into the future.

John Lundgren,
Chairman & Chief Executive Officer,
Stanley Black & Decker

This profile is collaborative content sponsored by Stanley Black & Decker

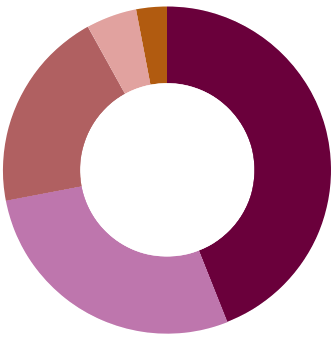
Appendix 1
Investor signatories and members

1. Investor signatories by location



- **Europe** - 383 = 46%
- **North America** - 220 = 26%
- **Latin America & Caribbean** - 75 = 9%
- **Asia** - 78 = 9%
- **Australia and NZ** - 67 = 8%
- **Africa** - 16 = 2%

2. Investor signatories by type



- **Asset Managers** - 364 = 44%
- **Asset Owners** - 252 = 30%
- **Banks** - 162 = 19%
- **Insurance** - 37 = 5%
- **Others** - 19 = 2%

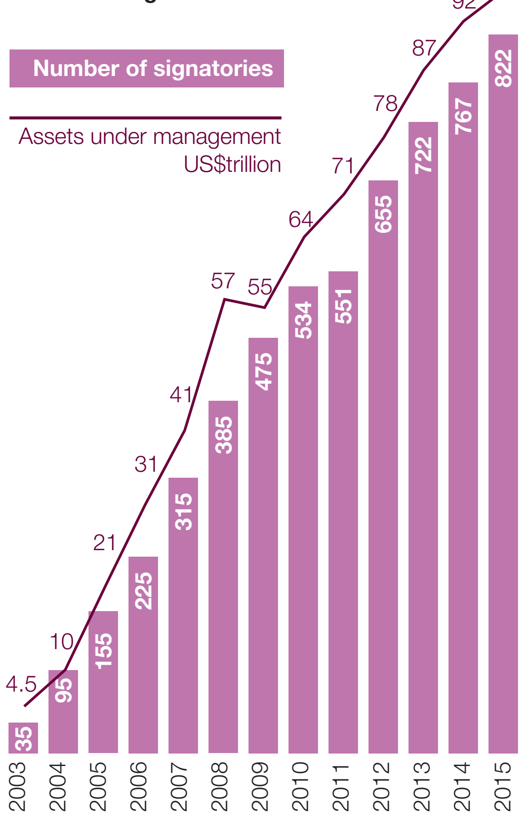
CDP investor initiatives – backed in 2015 by more than 822 institutional investors representing in excess of US$95 trillion in assets – give investors access to a global source of year-on-year information that supports long-term objective analysis.

This includes evidence and insight into companies' greenhouse gas emissions, water usage and strategies for managing climate change, water and deforestation risks. Investor members have additional access to data tools and analysis.

to become a member visit:
https://www.cdp.net/en-US/Programmes/Pages/what-is-membership.aspx

To view the full list of investor signatories please visit:
https://www.cdp.net/en-US/Programmes/Pages/Sig-Investor-List.aspx

3. Investor signatories over time



Investor members

ABRAPP - Associação Brasileira das Entidades Fechadas de Previdência Complementar
AEGON N.V.
Allianz Global Investors
ATP Group
Aviva Investors
AXA Group
Bank of America Merrill Lynch
Bendigo & Adelaide Bank Limited
BlackRock
Boston Common Asset Management, LLC
BP Investment Management Limited
California Public Employees' Retirement System
California State Teachers' Retirement System
Calvert Investment Management, Inc.
Capricorn Investment Group, LLC
Catholic Super
CCLA Investment Management Ltd
ClearBridge Investments
DEXUS Property Group
Environment Agency Pension fund
Etica SGR
Eurizon Capital SGR
Fachesf
FAPES
Fundação Itaú Unibanco
Generation Investment Management
Goldman Sachs Asset Management
Henderson Global Investors
HSBC Holdings plc
Infraprev
KeyCorp
KLP
Legg Mason Global Asset Management
London Pensions Fund Authority
Maine Public Employees Retirement System
Morgan Stanley
National Australia Bank Limited
NEI Investments
Neuberger Berman
New York State Common Retirement Fund
Nordea Investment Management
Norges Bank Investment Management
Overlook Investments Limited
PFA Pension
Previ
Real Grandeza
Robeco
RobecoSAM AG
Rockefeller Asset Management, Sustainability & Impact Investing Group
Royal Bank of Canada
Sampension KP Livsforsikring A/S
Schroders
SEB AB
Sompo Japan Nipponkoa Holdings, Inc
Sustainable Insight Capital Management
TD Asset Management
Terra Alpha Investments LLC
The Wellcome Trust
UBS
University of California

Appendix 2:
Largest non-responders by market capitalization

Consumer Discretionary	Country
Amazon.com Inc.	USA
Comcast Corporation	USA
Fuji Heavy Industries Ltd.	Japan
Hermes International	France
Luxottica Group	Italy
Netflix, Inc.	USA
Saic Motor Corporation	China
Tesla Motors, Inc.	USA
The Priceline Group Inc	USA
Time Warner Cable Inc.	USA
Consumer Staples	
Alimentation Couche-Tard Inc.	Canada
Grupo Modelo S.A.	Mexico
Hengan Intl Group	China
Kweichow Moutai	China
Lorillard Inc.	USA
Magnit	Russia
Monster Beverage Corporation	USA
Thai Beverage PCL	Thailand
Tyson Foods, Inc.	USA
Want Want China Holdings Ltd.	Hong Kong
Energy	
Churchill Mining PLC	United Kingdom
Energy Transfer	USA
Enterprise Products Partners L.P.	USA
Kinder Morgan Inc.	USA
Oil & Natural Gas	India
Phillips 66	USA
Reliance Industries	India
Rosneft OAO	Russia
Valero Energy Corporation	USA
Williams Companies, Inc.	USA
Financials	
AIA Group Ltd.	Hong Kong
American Tower Corp.	USA
Bank of China	China
Berkshire Hathaway	USA
Cheung Kong	Hong Kong
DBS Group Holdings	Singapore
Industrial Bank	China
Munich Re	Germany
Public Storage	USA
Sun Hung Kai Properties	Hong Kong
Health Care	
Alexion Pharmaceuticals	USA
Cerner Corp	USA
Gilead Sciences, Inc.	USA
HCA	USA
Illumina Inc	USA
McKesson Corporation	USA
Mylan Inc.	USA
Perrigo Co.	Ireland
Sun Pharmaceutical Industries	India
Vertex Pharmaceuticals Inc	USA

Industrials	Country
Caterpillar Inc.	USA
China Shipbuilding Industry Co Ltd	China
CITIC Pacific	Hong Kong
Daqin Railway	China
General Dynamics Corporation	USA
Hutchison Whampoa	Hong Kong
Industries Qatar	Qatar
Jardine Matheson	Hong Kong
Nidec Corporation	Japan
Precision Castparts Corp.	USA
Information Technology	
ASML Holding	Netherlands
Avago Technologies	Singapore
Baidu Inc	China
Electronic Arts Inc.	USA
Facebook	USA
Hanergy Thin Film Power Group Ltd	China
Keyence Corporation	Japan
MediaTek	Taiwan
Nintendo Co., Ltd.	Japan
Tencent Holdings	China
Materials	
Baoshan Iron & Steel	China
CF Industries Holdings, Inc.	USA
Formosa Plastics Corp	Taiwan
Grupo Mexico S.A.B. de CV	Mexico
LyondellBasell Industries Cl A	USA
MMC Norilsk Nickel OSJC	Russia
Nan Ya Plastics	Taiwan
Nucor Corporation	USA
Siam Cement	Thailand
Southern Copper Corporation	Peru
Telecommunication Services	
Advanced Info Service	Thailand
America Movil	Mexico
Axiata Group Berhad	Malaysia
Bharti Airtel	India
China United Network Communications	China
Maroc Telecom	Morocco
SBA Communications Corp.	USA
SoftBank Corporation	Japan
Telekomunikasi Indonesia	Indonesia
VimpelCom Ltd	Netherlands
Utilities	
China Yangtze Power Co., Ltd.	China
Dominion Resources, Inc.	USA
Edison International	USA
Hong Kong & China Gas Company Limited	Hong Kong
NextEra Energy, Inc.	USA
PPL Corporation	USA
Public Service Enterprise Group Inc.	USA
Saudi Electricity	Saudi Arabia
Tenaga Nasional	Malaysia
The Southern Company	USA

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DRIVING SUSTAINABLE ECONOMIES

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