CDP DRIVING SUSTAINABLE ECONOMIES

CDP Climate Change Report 2015, India Edition

India Inc. prepares to tackle environmental risks

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

Report writer and global implementation partner

accenture strategy

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)	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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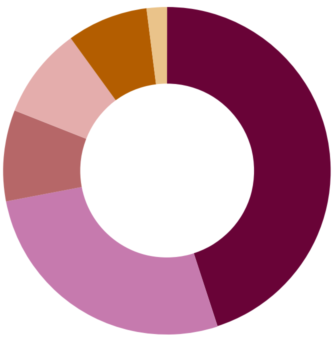
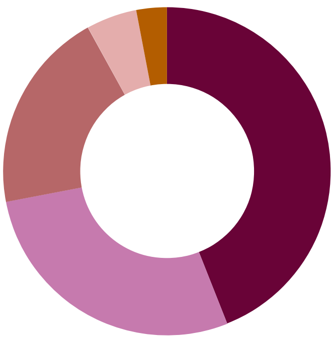
Investor Signatories and Members

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%

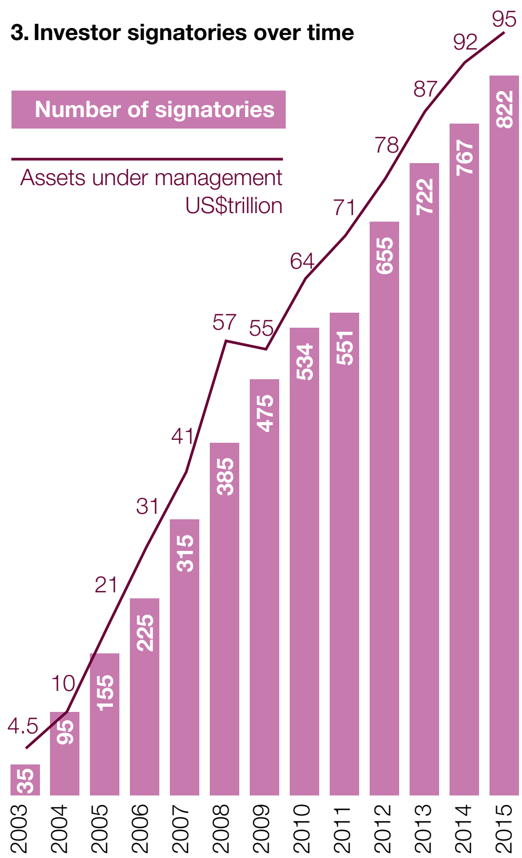
CDP investor initiatives – backed in 2015 by more than 822 institutional investors representing in excess of US$95 trillion in assets – give investors access to a global source of year-on-year information that supports long-term objective analysis.

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

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.

प्रकाश जावडेकर
Prakash Javadekar

सत्यमेव जयते

राज्य मंत्री (स्वतंत्र प्रभार)
MINISTER OF STATE (INDEPENDENT CHARGE)
पर्यावरण, वन एवं जलवायु परिवर्तन
ENVIRONMENT, FOREST & CLIMATE CHANGE
भारत सरकार / GOVERNMENT OF INDIA

Foreword- Climate Change Report

India is all set on the path of rapid economic growth, and while this means millions coming out of poverty, improved infrastructure and better healthcare, the energy required to fuel this growth can have a huge environmental cost if not managed carefully. India in its INDC (Intended Nationally Determined Contribution) released on 2nd Oct 2015, committing to cut its emission intensity by 33-35% by 2030 from 2005 levels along with increasing the share of non-fossil fuel energy in its total mix to 40%. This is an ambitious target to which we are committed and the government would require complete support of the India Inc. to achieve this.

I am encouraged by the results of this year's CDP report, indicating that the Indian companies have indeed understood the mantra of sustainable growth- that going green makes sound business sense. Reporting companies are now making long term investment in low carbon energy purchase, renewable installations and greener infrastructure more than ever before. This will not only help their profitability but improve their resilience against fluctuating fuel prices, unreliability of energy supply and any upcoming energy or environmental regulation.

Over last 3 years Indian companies have come a long way in their journey towards transparent disclosure of their climate change related information. The fact that the percentage of responding companies achieving a CDP disclosure score of over 90 increased from 11% in 2013 to 65% in 2015, speaks a lot about the importance accorded by the Indian companies to this issue.

I commend CDP India for highlighting the great work by local corporates that have shown that they are second to none in building a green world. This bodes well for our clean future.

Jai Hind!

(Prakash Javadekar)

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www.twitter.com/prakashjavadekar e-mail :mefcc@gov.in
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Accenture Strategy Commentary

Sanjay Dawar
Managing Director and Lead,
Accenture Strategy, India

Vishvesh Prabhakar
Managing Director,
Sustainability,
Accenture Strategy, India

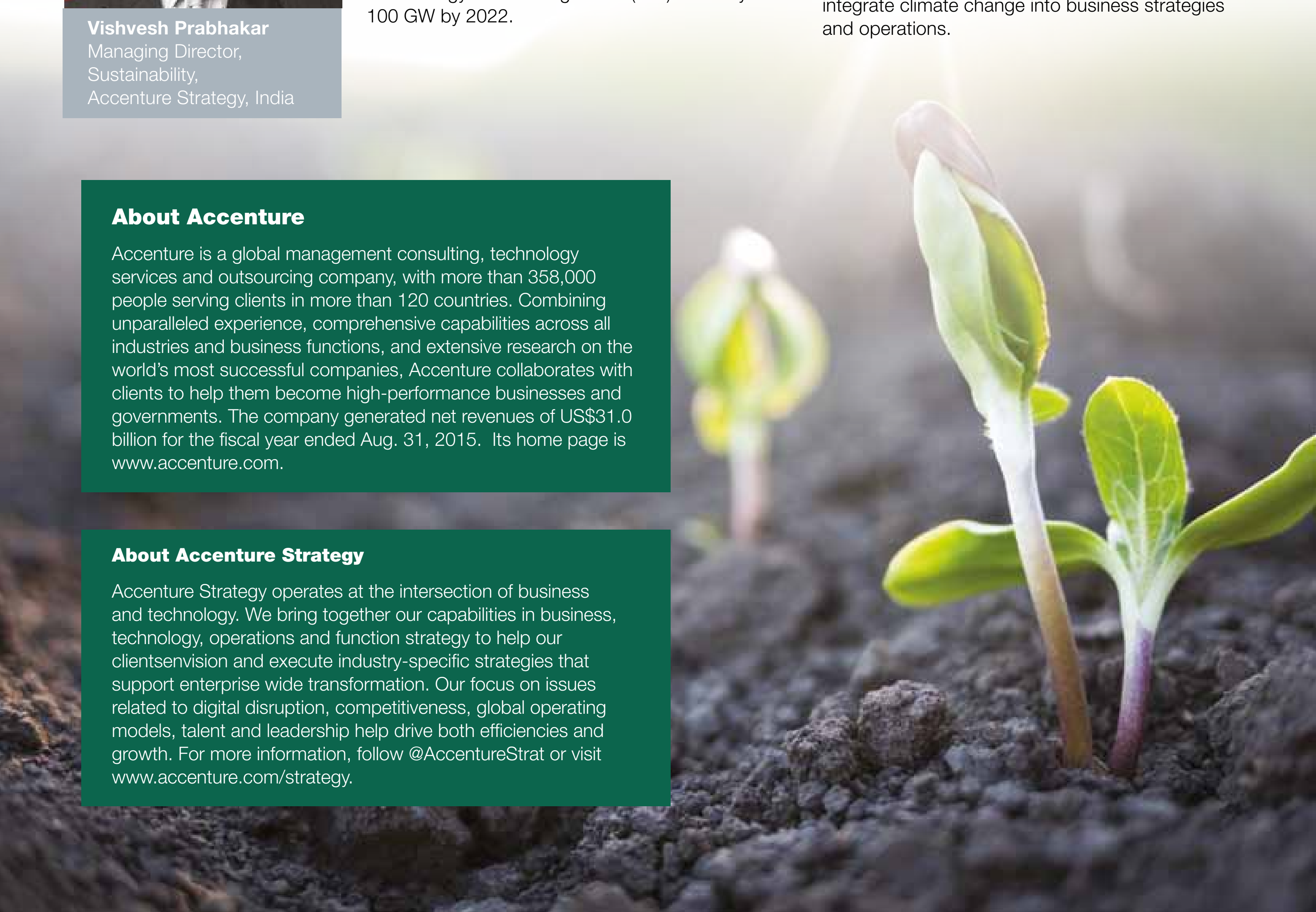
On behalf of Accenture Strategy, we would like to thank all the current Indian institutional investor signatories and the 62 responding companies for their ongoing commitment to address climate change. By increasing transparency and actively engaging in climate change management, Indian companies are paving the way for sustainable growth and high performance in the future. This year, CDP India responses accounted for approximately 14% of the country's total emissions.

With a business-friendly government, India today is looking to begin writing an economic growth story that will enable it to lift millions of its citizens out of poverty. India has also announced target to cut intensity of carbon emissions by 33-35 percent by 2030 from 2005 levels and make its economy more energy efficient. Achieving this aspiration will require high and sustained economic growth that is buttressed by a sound strategy for energy security. India has taken a number of positive actions to combat climate change, which include increasing the excise duty on petrol and diesel, quadrupling the coal cess from Rs.50 per ton to Rs.200 per ton, and unveiling Indian Prime Minister Narendra Modi's ambitious plan to ramp up the production of solar energy from 20 Gigawatts (GW) currently to 100 GW by 2022.

Our analysis of the CDP India 2015 responses shows that organizations have already embarked upon their journey on this path of low carbon economy. Companies have shown willingness to shift from conventional process improvements to low carbon infrastructure measures reflected by a radical increase in investment of over 280% in these activities by reporting companies. However, market transformation is a huge task.

We are keen to help our respective stakeholders –investors, responding companies and the broader public –to identify opportunities and create sustainable value as the country makes a transition to a low-carbon and sustainable economy. We sincerely hope that this report serves this objective and is useful for driving transformation in your climate change initiatives.

Accenture Strategy India is pleased to be the official author of the 2015 CDP India 200 Climate Change Report for the third year in a row. We are the global implementation partner for CDP's reporting platform and database –the largest source of primary corporate climate change information in the world. Our enduring partnership with CDP stems from a common goal; namely, helping companies integrate climate change into business strategies and operations.



About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 358,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$31.0 billion for the fiscal year ended Aug. 31, 2015. Its home page is www.accenture.com.

About Accenture Strategy

Accenture Strategy operates at the intersection of business and technology. We bring together our capabilities in business, technology, operations and function strategy to help our clientsenvision and execute industry-specific strategies that support enterprise wide transformation. Our focus on issues related to digital disruption, competitiveness, global operating models, talent and leadership help drive both efficiencies and growth. For more information, follow @AccentureStrat or visit www.accenture.com/strategy.

Introduction

“…We, the present generation, have the responsibility to act as a trustee of the rich natural wealth for the future generations. The issue is not merely about climate change; it is about climate justice…”[2]

Narendra Modi
Indian Prime Minister

India is emerging both as an economic powerhouse and a global environmental leader. As India’s economy charges ahead, the country needs to produce more energy to provide a better life for its people, many of whom live in rural areas and are very poor. At the same time, India has recognized that tackling climate change is in its own national interests. The nation is taking concrete measures to constrain its own emissions and to protect its people from climatic disruptions. As it stands today, India is the world’s third largest emitter of greenhouse gas (GHG) emissions[1], however, it is one of the lowest per capita emitters of GHG in the world.

This year business response to climate change will be under the microscope as the world prepares for the much awaited COP21 conference in Paris. During this conference, all participating nations are expected to publicly disclose their proposed commitments and actions to reduce carbon emissions through their Intended Nationally Determined Contribution (INDCs). In parallel, heads of nations will attempt to arrive at a global agreement.

In 2009, India undertook the pledge to cut its greenhouse gas emissions intensity by 20 – 25% by 2020 compared with the 2005 level. There are differing views around how effective India has been in delivering on the 2009 commitments. India has now raised the bar by committing to a voluntary target of cutting its emission intensity of GDP by 33–35% by 2030 from 2005 level in its recently released INDC.

Prime Minister Narendra Modi has already announced the criticality of energy for India’s growth agenda. The Government of India has adopted a two pronged approach to meet the increasing energy demand of the population while ensuring minimum growth in greenhouse gas emissions to control climate change. On the supply side, the government is promoting use of renewable energy and shifting towards efficient technologies for coal based plants. On the demand side, efforts are being made to reduce energy demand through various innovative policy measures. The Government has initiated a number of schemes to promote energy conservation and energy efficiency.

Given this overall macro-context, this year’s CDP India report presents a unique platform to understand how Indian corporates view the challenge of driving growth while minimizing environmental impact, thereby supporting Government’s efforts to drive energy efficiency. The following section highlights the key observations and insights emerging from the analysis of CDP responses from the Indian organizations.

CDP was acknowledged in India’s INDC released on 2 October 2015 as an organization that helps companies address climate change issues.

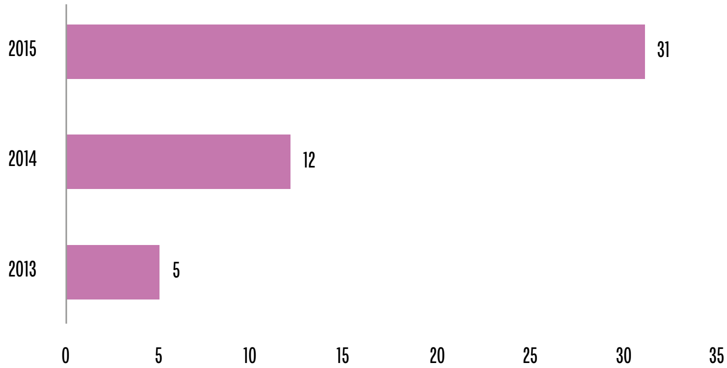
[1] http://carbon-pulse.com/india-to-set-carbon-intensity-target-in-indc-media/

[2] Source: PM’s address At “Samvad”- Global Hindu-Buddhist Initiative on Conflict Avoidance and Environment Consciousness

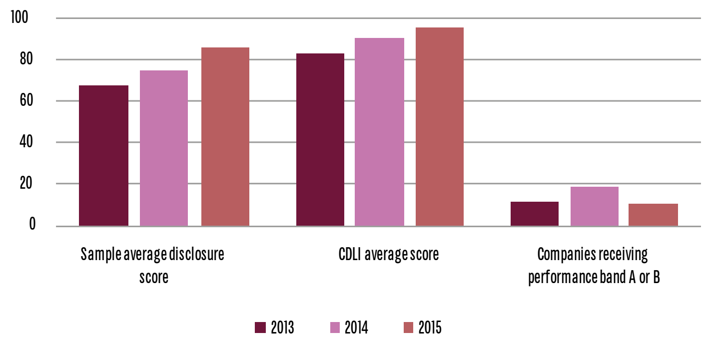
2015 Leaders

Maintaining continual improvement year on year, Indian companies have once again beaten previous year's scores. Despite raising the benchmark cut-off score for inclusion in CDLI (Climate Disclosure Leadership Index) from 80 in 2014 to 90 in 2015, the number of qualifying companies has increased dramatically from 23 to 31, a jump of 35%. This remarkable improvement demonstrates that Indian companies are not only maintaining their consistency of response but are putting sincere effort in improving the completeness of their submissions to be shared with investors, governments and the public via CDP's platform. However, despite this encouraging uptrend, there were fewer companies in the top performance bands. This could be due to technical issues which we hope to address with the companies in the coming year.

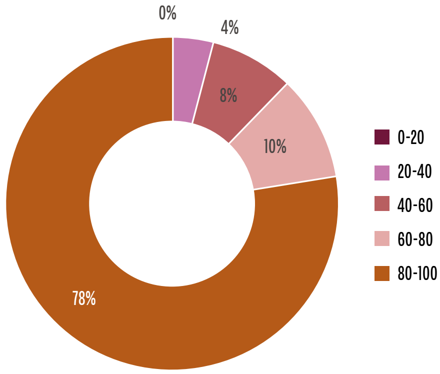
1. Companies with disclosure score above 90



2. Improving Quality Of Disclosures



3. Split Of Disclosure Scores



2015 India Climate Disclosure Leadership Index (CDLI)

Company Name	Disclosure Score	Sector
ITC Limited	100	CS
Tata Steel	100	MAT
Tech Mahindra	100	IT
Wipro	100	IT
IndusInd Bank	99	FIN
Infosys Limited	99	IT
Tata Chemicals	99	MAT
Tata Consultancy Services	99	IT
Tata Global Beverages	99	CS
ACC	98	MAT
GAIL	98	UTIL
Larsen & Toubro	98	IND
Mahindra & Mahindra	98	CD
Tata Communications	98	TCOM
Tata Motors	98	CD
YES BANK Limited	98	FIN

Company Name	Disclosure Score	Sector
Ambuja Cements	97	MAT
Dr. Reddy's Laboratories	97	HC
Vedanta Ltd.	96	MAT
Essar Oil	95	EGY
Hindustan Zinc	95	MAT
Ultratech Cement	95	MAT
Godrej Consumer Products	94	CS
Indian Hotels Co.	94	CD
Indian Oil Corporation	94	EGY
Godrej Industries	92	MAT
HDFC Bank Ltd	92	FIN
Mahindra & Mahindra Financial Services	92	FIN
Tata Power Co.	92	UTIL
HCL Technologies	90	IT
Shree Cement	90	MAT

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.

Highlights of 2015 CDP Responses

Analysis indicates that corporates are at an interesting turning point with respect to their understanding and commitments towards carbon abatement. There are signs of organizations demonstrating willingness to move from tactical and short-term carbon abatement measures to more long-term and strategic measures.

Key Trends

1. **Increased awareness** about carbon impact and enhanced reporting
2. Anticipated **regulations** continue to be viewed as a key risk
3. Willingness to shift from **process investment** measures to **infrastructure investment** measures
4. Increasing focus on **Renewable Energy**

Trend 1: Increased awareness about carbon impact and enhanced reporting

There is a considerable increase in the aggregate Scope 1 and Scope 2 emissions[1].

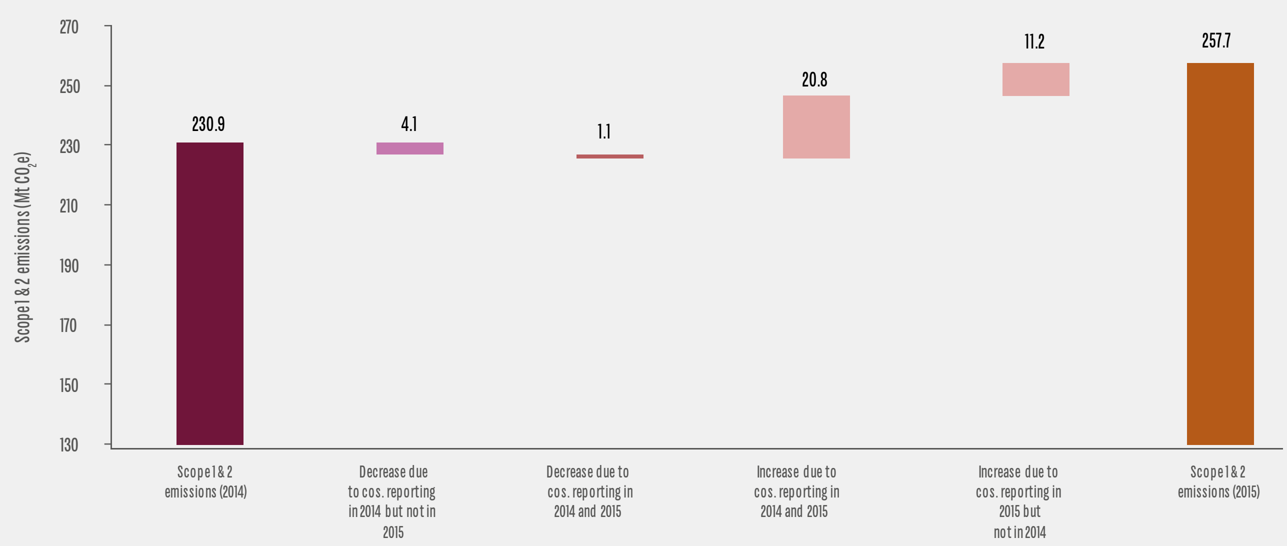
Reported aggregate Scope 1 & 2 emissions have increased from around 231 million metric tons CO_2e in 2014 to around 258 million metric tons CO_2e in 2015, representing an increase of 12%. This change in emissions is due to changes in the organizations reporting across the last two years as well as changes in reported emissions by the organizations that reported across both years. Of the 200 Indian companies invited to respond (Bombay Stock Exchange (BSE) 200 index), 62 Indian companies (31%) responded this year, compared to 59 in 2014.

Changes in Scope1 & 2 emissions for organizations reporting across both years 2014 and 2015[2]: Almost two-thirds of the organizations that reported across both years reported higher Scope 1 & 2 emissions in 2015 vis-à-vis 2014. It is also evident that the amount of increase for organizations that reported higher emissions is far more than the amount of decrease for organizations that reported lower emissions. This is reflected by an increase of 18 million metric tons CO_2e (for organizations that reported higher emissions in 2015) compared to a decrease of just around 1.1 million metric ton CO_2e of Scope 1 & 2 emissions (for organizations that reported lower emissions in 2015). While part of the overall increase in reported Scope 1 & 2 emissions may be attributed to increased business activity; it may also indicate an increased rigor around tracking and reporting emissions.

Changes in organizations reporting data to CDP across 2014 and 2015: There are several organizations that did not report in 2014, but have started disclosing data in 2015. This includes organizations such as Arvind, Axis Bank, JSW Energy, MRF[3] and NMDC. These 5 new entries account for almost 4.35% of absolute Scope 1 & 2 emissions for responses received in 2015. Interestingly, there are three organizations which reported data in 2014 but not in 2015: Asian Paints, Hindustan Petroleum Corporation and Maruti Suzuki India.

[1] Aggregating Scope 1 and 2 emissions can lead to double counting if done across sectors.
[2] Analysis is based on comparisons made between 2014 and 2015
[3] MRF responded after submission deadline in 2014, hence data was not part of the analysis.

1. Changes in reported Scope 1 & 2 emissions during 2014–15



The steep rise in Scope 3 emissions is a positive sign as it highlights that **businesses are becoming aware** of the indirect carbon emissions arising from their spectrum of business operations across the value chain. Additionally, it indicates that organizations are putting in place **mechanisms to monitor and track** these emissions.

There is a significant rise in reported Scope 3 emissions

Reported Scope 3 emissions have increased from 27.4 million metric tons CO_2e in 2014 to around 49.3 million metric tons CO_2e in 2015, an increase of around 80%. This is significantly higher as compared to the increase of 12% for Scope 1 & 2 emissions. This suggests that a significant fraction of increase in Scope 3 emissions is more likely to be on account of better reporting rather than increased business activity.

Tata Steel India (TSI) – Assessing Impact of value chain elements

In 2015, TSI reported the highest Scope 3 emissions amongst all the responses received in 2015. Scope 3 emissions for TSI increased from 6.8 million metric tons CO_2e (in 2014) to 14.1 million metric tons CO_2e (in 2015), representing an increase of around 109%. TSI believes that the increase in Scope 3 emissions reported is primarily attributable to the enlarged scope of tracking and reporting boundaries.

TSI has rolled out a Climate Change program which includes “Awareness session”, “Assessment of baseline emissions”, “Strategy for initial adoption” and “Recommendation on governance”. TSI extended this rollout to include upstream (major material suppliers), downstream (TSI customers in Auto sector, Wire Plants, etc.) and partners (e.g. Tata Metaliks, Jamshedpur Utility Services, etc.).

As a result, the company has been able to assess emission and identify risks & opportunities at each of the value chain elements. This has enabled the organization to seize opportunities to improve business performance e.g. downstream construction and auto sector customers will also leverage this into their programs addressing climate change.

Trend 2: Anticipated regulations continue to be viewed as a key risk

Even as organizations continue to evolve in their outlook towards carbon impact, a majority of organizations continue to be ‘driven’ by perceived regulatory risk.

2015 responses indicate that organizations are concerned about perceived regulatory risk. Almost half of the reporting organizations anticipate stringent regulatory framework to be enforced within the next three years.

It is also interesting to note the expected nature of impact from changes in regulatory framework. A majority of organizations believe that the changes in regulations can have significant financial impacts.

- Around **56% companies** believe regulatory changes will **impact their operational costs**
- Around **19% companies** believe the impact would be in the form of **increased capital costs**
- Around **13% companies** believe that changing regulatory framework could have impacts such as an **inability to do business, reduced demand and wider social disadvantages**

It is evident from the responses that organizations in primary and secondary industries[4] seem to be more concerned about regulations compared to organizations in the services industry[5]. For instance:

2. Anticipated impact of regulatory framework (numbers in the grid indicate fraction of responses)

50% respondents expect medium to high impact within next 3 years

Impact ↑ / Timeframe for the impact of regulations →	Up to 1 year	1 to 3 years	3 to 6 years	>6 years	Unknown
High	6%	6%	4%	3%	0%
Medium high	1%	18%	4%	0%	1%
Medium	5%	14%	8%	5%	1%
Low medium	1%	5%	6%	1%	0%
Low	1%	3%	4%	1%	1%
Unknown	0%	1%	0%	0%	0%

- Only around one-fourth (24%) of the responses from Service Industry organizations indicate the potential impact of regulations as either medium-high or high. Comparatively, more than half of the responses (54%) from the primary and secondary sector organizations expect the impact of regulations to be medium-high or high.
- 49% of responses from services industry organizations indicate the likelihood of regulatory impact to be felt within the next three years. As compared to this, more than two-thirds of responses (68%) from the primary and secondary sector organizations expect the impact to be felt in the same period.

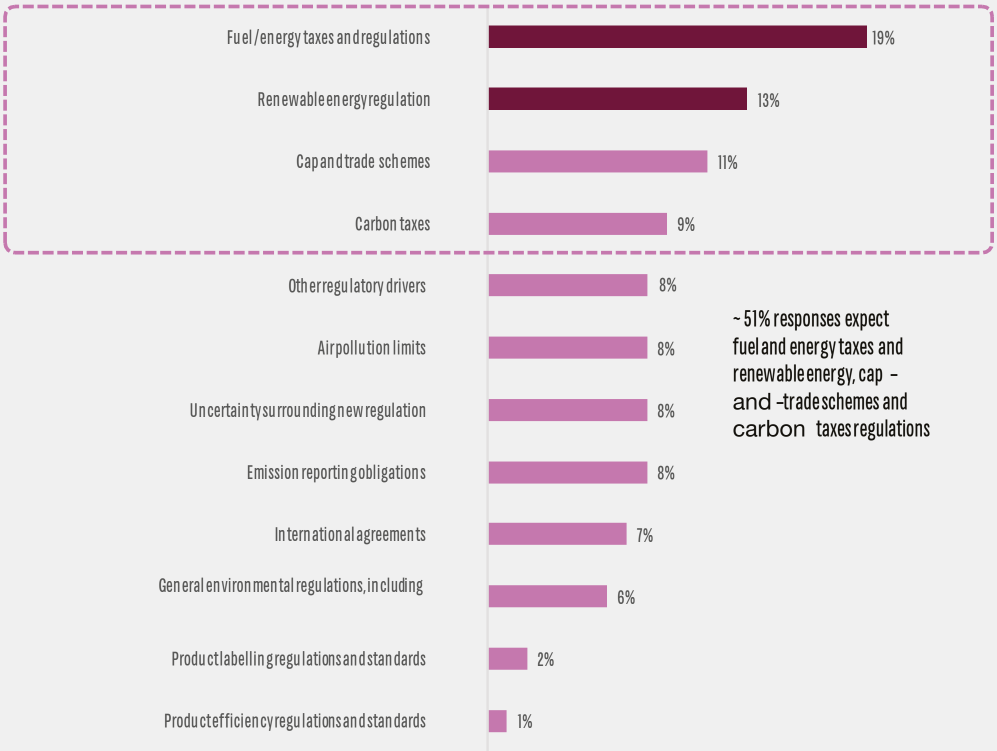
[4] These include following industry sectors: Consumer Discretionary, Consumer Staples, Energy, Industrials, Materials and Utilities.

[5] These include following industry sectors: Financials, Healthcare, Information Technology and Telecommunication Services.

Another interesting aspect to look at is the nature of the anticipated upcoming regulations. There is significant dispersion observed in the anticipated areas of changes in regulatory framework. However, more than half of the responses expect the changes in regulatory framework to relate to areas such as fuel and energy taxes, renewable energy, cap-and-trade schemes and carbon taxes.

The diverse expectations with respect to changes in regulatory reforms seem to be emanating from the differences in the nature of operations of responding organizations. For example, Tata Motors anticipates new regulations and standards on product efficiency in the next 1 to 3 years. On the other hand, Hindustan Zinc anticipates renewable energy regulations in the next year.

3. Anticipated area of changes in regulatory framework



Note: Percentages in the chart indicate proportion of responses that expect the changes in regulations to occur in that area.

ACC – Addressing the risk of rising operational costs from regulatory risks

With the growing concern on climate change globally, businesses envisage regulatory restrictions on quantity of energy and its sourcing. These regulations are currently in preliminary shape but are expected to be strictly enforced with much higher expectations in the near future. Anticipated non-compliance penalty is estimated around USD 18.27 million (INR 120 crore) which will significantly impact operational costs.

ACC has proactively been taking measures in reducing these risks by not only identifying areas to reduce energy consumption but also by actively integrating renewables into their energy sourcing strategy.

ACC has spent approximately USD 8.25 million (INR 54.2 Crore) on various energy reduction activities; owing to which its specific power consumption reduced from 71.2 kWh / Tonnes of Clinker in 2013, to 70.7 kWh / Tonnes of Clinker in 2014.

ACC has installed three wind farms totaling 19 MW, generated 32.5 million units in 2014 and purchased Renewable Energy Certificates (RECs) equivalent to approximately USD 1.48 million (INR 9.75 Crore).

Trend 3: Willingness to shift from process investment measures to infrastructure investment measures

The industry is at an turning point where organizations are beginning to move beyond the obvious quick wins and are showing signs of shifting from 'short-term process tweaks' to 'long-term infrastructure investments'.

During the 2013-2015 CDP reporting years, there have been some interesting changes in the number and nature of investments made by organizations. It is observed that the total investments made by the reporting companies have decreased from USD 238.3 million (INR 1,565 crore) to USD 203.1 million (INR 1,334 crore), representing a drop of about 15%. Some probable reasons for this downtrend include sluggish growth and high interest rates. This is an interesting trend in light of the two trends described above (increasing awareness of carbon impact across value chain and enhanced perceived risk of regulations).

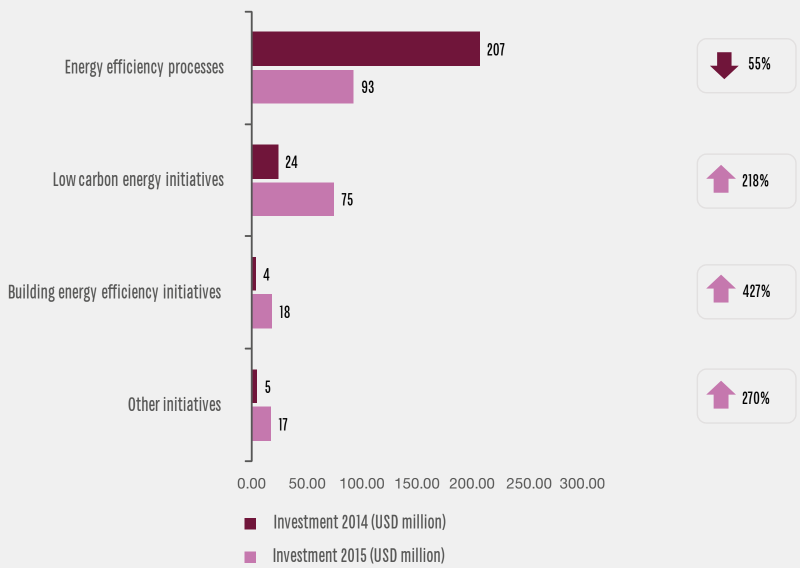
A closer look at the data reveals that while the total investments have gone down over the past year, the nature of these investments has also changed significantly:

- Investments in conventional energy efficiency initiatives have decreased considerably and have reduced from **USD 206.6 million (INR 1,357 crore) to USD 92.6 million(INR 608 crore)**. This represents a significant year on year drop of **approximately 55%**.
- On the other hand, **investments in low carbon installation have increased by over 280%** and investment in low carbon energy purchase has increased by about 52%. Similarly, Investments in initiatives related to renewable installation, renewable purchase and green building infrastructure has increased by about 36%.

It is interesting to note the reasons for the changes in investment trends observed above. One of the possible explanations could be that most organizations have already invested in short-term quick wins and are in a phase where they expect to realize the benefits from these previous investments. As such, the investments in typical energy efficiency initiatives have reduced compared to previous years. This includes initiatives such as: Initiatives for reducing electrical energy/thermal energy consumption, utilization of waste materials in the process, improving efficiency of "compressor, furnace, pump, blower, vacuum", real-time energy monitoring & control system and capacity optimization.

At the same time, as discussed earlier, there is a growing awareness of carbon impact across the value chain and the potential risk of upcoming regulations. This awareness is beginning to bring about a shift in mind-set amongst Indian corporates. Some organizations are already showing signs of migrating from short-term tactical investments to long-term strategic investments. This is reflected by the significant increase in, for example, investments related to renewable installations, renewable energy purchase and low carbon installations.

4. Changes in investment pattern during 2014 – 15



Note:

Building Energy efficiency initiatives includes both Building fabric and services

Low carbon energy initiatives includes both low carbon energy installation and low carbon energy purchase

Others initiatives include Product design, Behavioral change, Transportation fleet and use; and Process emissions reductions

Note: 1 USD = 65.657 INR; 1 million = 10 Lakh; USD 1 million = INR 6.56 Crore

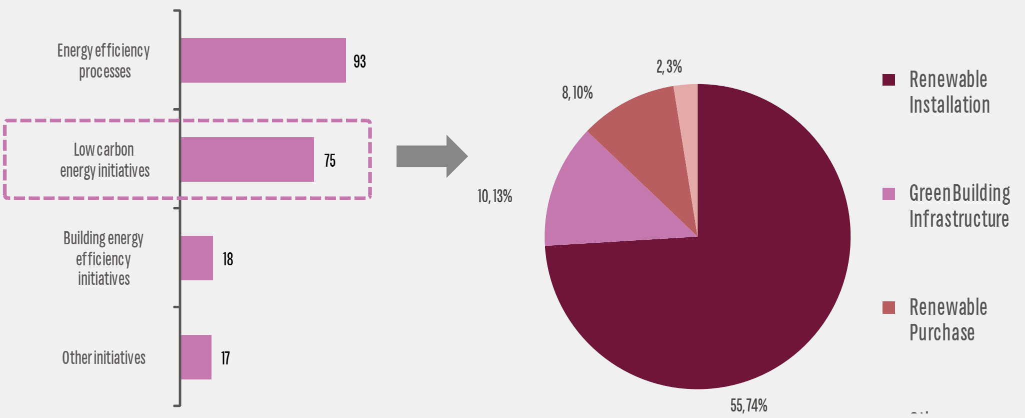
Trend 4: Focus on renewable energy

Organizations are getting more aware of opportunities and are investing significantly in upstream renewable energy options.

It is encouraging that significant portion of investment is directed towards renewable energy namely, renewable installation and renewable energy purchase.

This trend is in line with the increasing national focus on enhancing the renewable energy contribution to the grid and distributed energy supply. The Indian Government has set a goal of achieving 175 GW of Renewable energy supply by 2022 which also includes 2 GW of off-grid/decentralized renewable supply.To achieve such a goal, the existing renewable purchase obligations regulation is set to be strengthened and enforced and hence organizations are getting prepared to integrate renewables into their energy strategy.

5. Investment in Low Carbon Energy Initiatives (USD million) during 2014 – 15



Notes: Renewable Installation includes Wind power, Solar plant, Biomass based CPP plant, Distributed small captive systems like solar panels, solar heating systems, captive biomass CHP, Solar PV Pump, etc.

Renewable Purchase includes buying renewable energy by getting into tripartite agreement with Distribution companies and RE supplier, buying RECs

Green Building Infrastructure includes addition of LEED guidelines based green building space to existing infrastructure

Others include low carbon LED and efficient lighting arrangements, setup to switch to cleaner fuel and Energy Recovery.

Cairn India and TCS are among companies investing significantly in long term strategic initiatives

Cairn India: With forward looking approach, Cairn India is also investing in low carbon infrastructure, to accrue benefits over a longer run. Cairn has invested in building infrastructure to switch to cleaner fuel, renewable installations, LED and Solar lights (which generated 42,860 kWh of electricity).

Tata Consultancy Services (TCS): TCS spent USD 5.47 million (INR 35.97 Crore) in incorporating green building concepts (such as zero discharge, energy efficient systems, rain water harvesting systems and integrated building management systems) in all of its new buildings (e.g. Indore campus).This has helped TCS to reduce electricity consumption and hence their Scope 2 carbon footprint.

Organizations like Ambuja Cement, Tata Power and Wipro are increasingly deploying renewable energy

Ambuja Cements: Ambuja has established 7.5 MW capacity wind power, 300 KV solar plant and a captive power plant (35% fuel comes from Biomass). This helped to reduce carbon emissions by 46,859 metric tons CO_2e/annum which is equivalent to 0.32% of its total emissions.

Tata Power: With an investment of USD 36.6 million (INR 240 crore) Tata power has installed a solar power plant of 28.8 MW. Tata Power now has more than 56MW of Solar and 461 MW of Wind making it the largest Renewable Utility player in India. This renewable power installation saved 33,859 metric tons CO_2e which is 0.10% of total. It looks meager in relative terms as most of Tata Power's installed capacity of 8,747 MW is coal based and hence Tata Power is increasingly focusing on enhancing its renewable portfolio.

Wipro: With an investment of USD 0.4 million (INR 2.6 crore) Wipro has voluntarily purchased renewable energy through the PPA (Private Purchase Agreement) to the order of 65.6 million units (KwH) for 5 key locations in India in 2014-15. This has resulted in emissions reduction of 53,858 million metric tons CO_2e from Scope 2 (Purchased electricity), which is equivalent to 8% of its total emissions.

India Snapshot

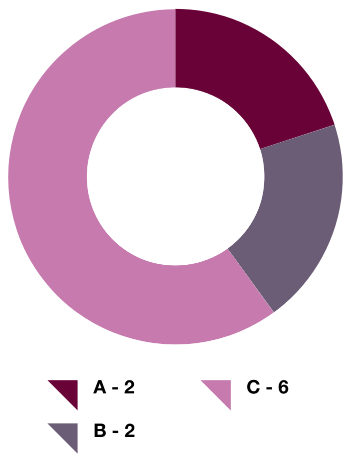
India	2010	2015
Analyzed responses†	34 (16)	49 (13)
Market cap of analyzed companies US$m	551,597	551,671
Scope 1	87.9 $MtCO_2e$	245.3 $MtCO_2e$
Scope 2	35.6 $MtCO_2e$	12.1 $MtCO_2e$
Scope 1 like for like: 23 companies	68.3 $MtCO_2e$	161 $MtCO_2e$
Scope 2 like for like: 23 companies	18.5 $MtCO_2e$	8.7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

† 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.

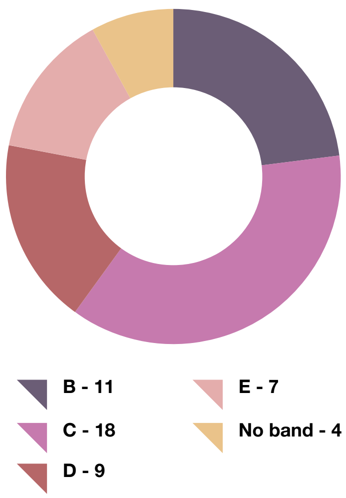
The region sees one of the most dramatic jumps in average disclosure scores, reflecting a sophistication of approach to data collection and climate accountability. The average disclosure score stands at 86 – just above the global average – up from 50 in 2010.

1. 2010 performance bands in India*

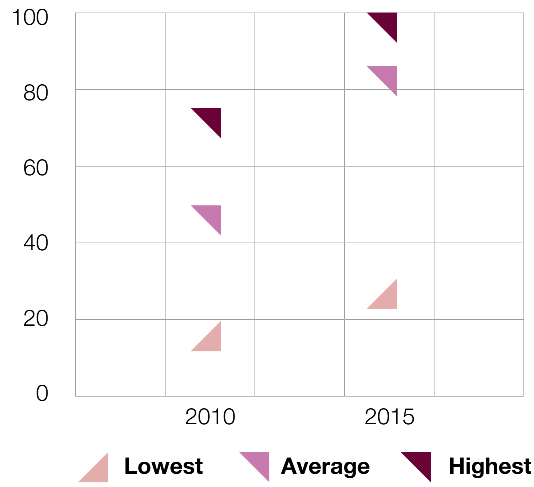


* in 2010 only 8 Indian companies in Global 500 were scored for performance

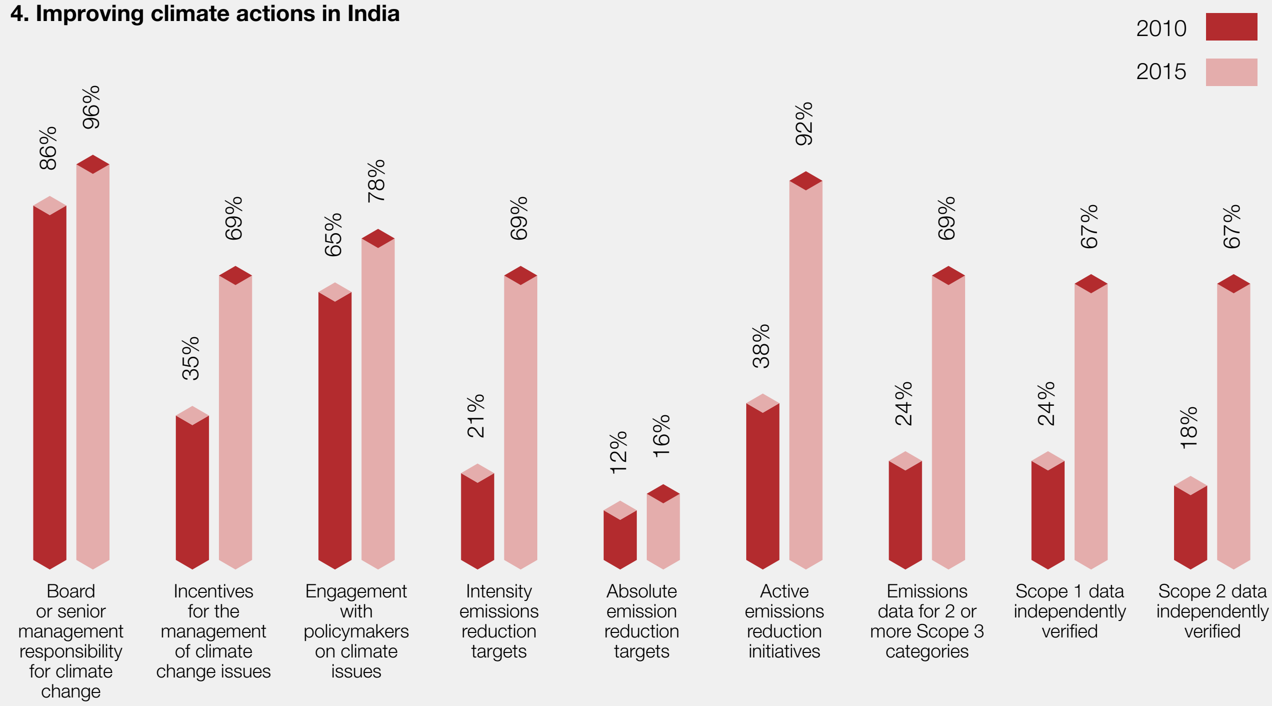
2. 2015 performance bands in India



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.

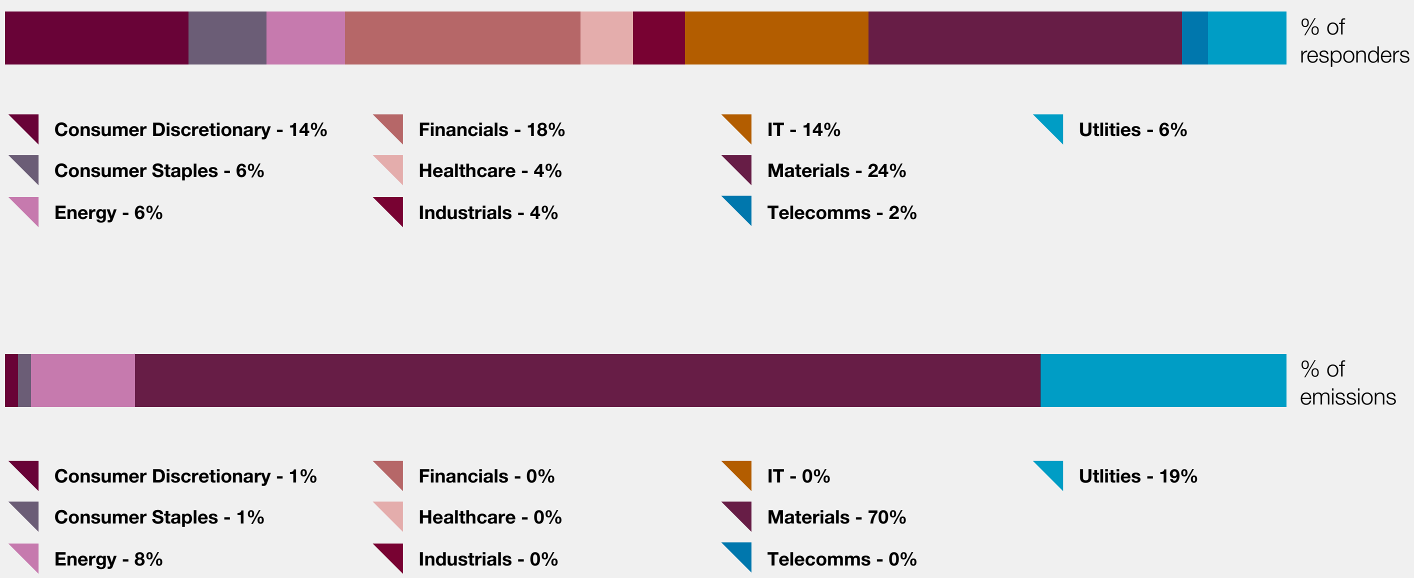
Some Indian companies recognize the threat posed by climate change. **Tata Global Beverages**, for example, notes that, “the physical impacts of climate change on the sourcing of tea/coffee is impacting the buying department’s sourcing strategy”. The company is moving towards buying from Rainforest Alliance 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 Decarbonisation 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 emissions by sector in India



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: 1306 companies	4,135 $MtCO_2e$	4,425 $MtCO_2e$
Scope 2 like for like: 1306 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.

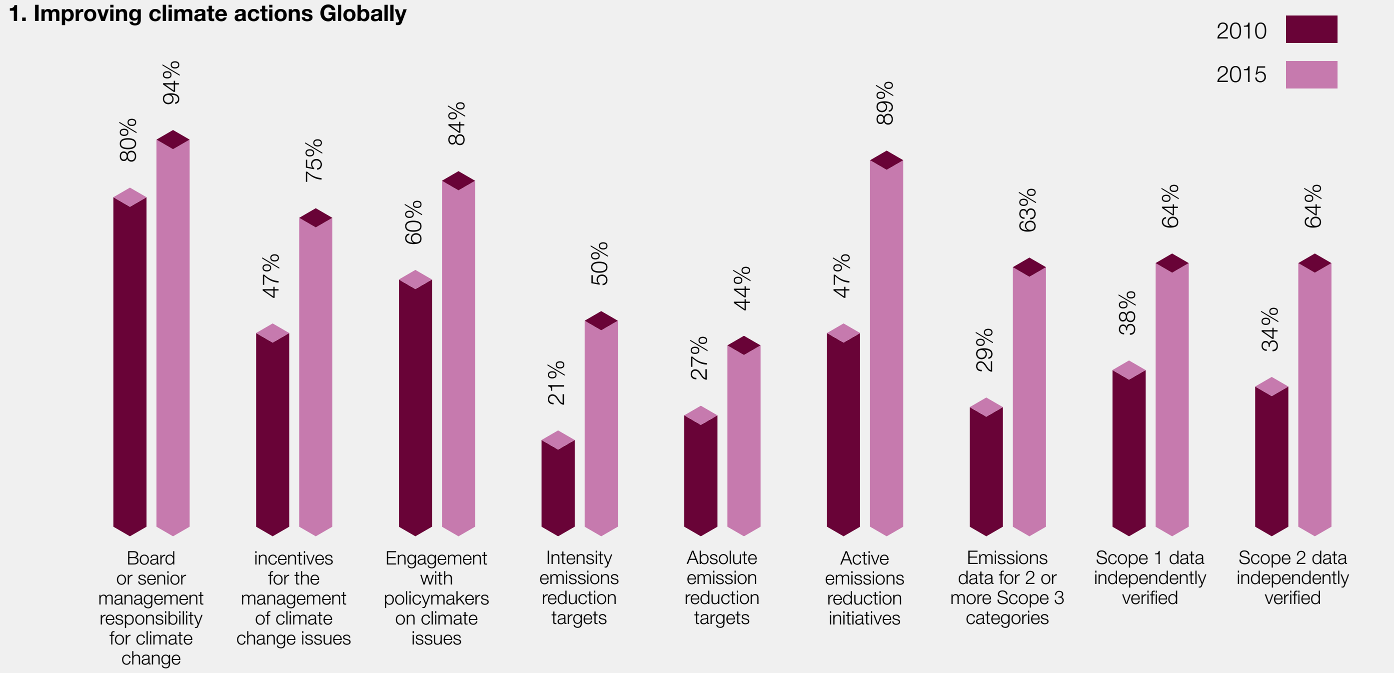
Business is already stepping up. The United Nations Environment Programme estimates that existing collaborative emissions reduction initiatives involving companies, cities and regions are on course to deliver the equivalent of 3 gigatons of carbon dioxide reductions by 2020. That's more than a third 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

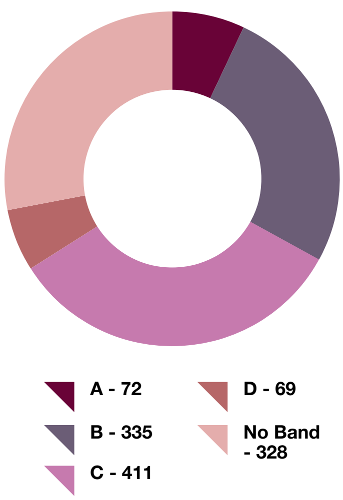
Since 2010, there has been a 54% rise in the number of institutional investors, from 534 to 822, requesting disclosure of climate change, energy and emissions data through CDP.

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

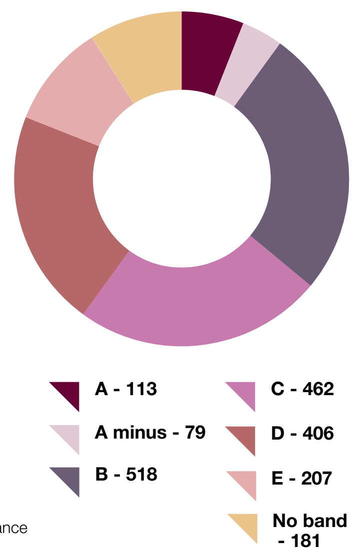
For example, a number of institutional investors have come together in the 'Aiming for A' coalition to call on specific major emitters to demonstrate good strategic carbon management by attaining (and maintaining) inclusion in CDP's Climate A List. The A List recognizes companies that are leading in 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

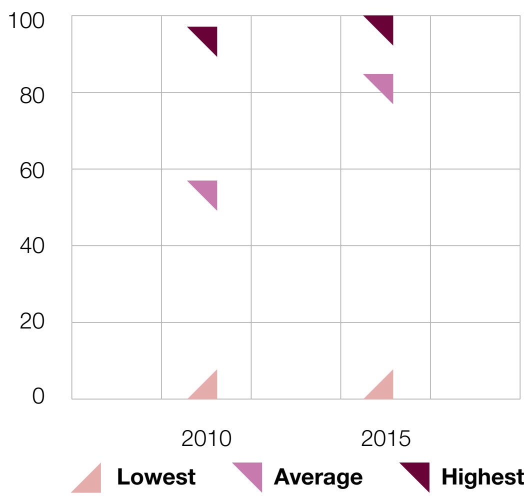
2. 2010 performance bands globally*



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
Financials	

Company	Country
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
CNH Industrial NV	United Kingdom

CDP A LIST 2015 CLIMATE

Company	Country
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

Company	Country
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
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

Company	Country
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

Company	Country
Belgacom	Belgium
KT Corporation	South Korea
LG Uplus	South Korea
Sprint Corporation	USA
Swisscom	Switzerland
Telefonica	Spain
Telenor Group	Norway

Utilities

Company	Country
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

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.

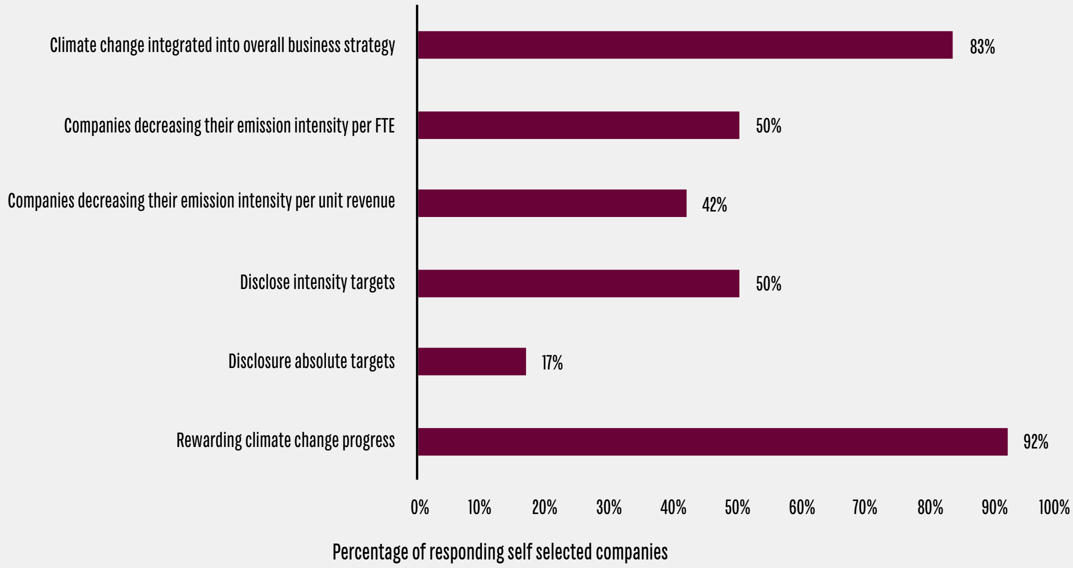
As mainstream investors take a longer view, they are asking companies to future-proof their business to take better account of environmental risks and opportunities to stabilize, maximize and grow shareholder return. The North American edition of CDP's 2015 global climate change report will further examine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

*sourced from Bloomberg

Self-Selected Companies (SSCs)

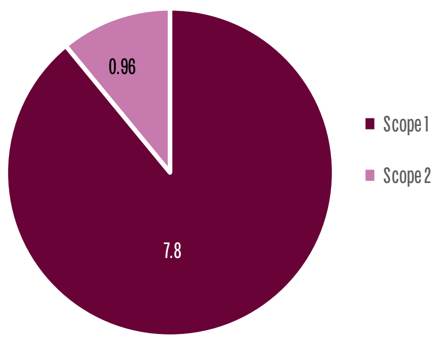
Every year, a number of companies which are not a part of the India 200 sample by market capitalization, choose to participate in the CDP Climate Change program voluntarily and disclose their climate change data. CDP recognizes and salutes their leadership in furthering accountability and transparency on climate change issues in the Indian industry and presents key highlights from their responses.

1. Key best practice statistics for SSCs



- Dalmia Cement (Bharat) Limited
- Divyajyoti Eye Hospital
- Godrej Interio Division-Godrej & Boyce
- iGatePatni
- Jubilant Life Sciences Ltd
- Lawkim Motors Group division - Godrej and Boyce
- Mahindra Lifespace Developers Limited
- Mahindra Sanyo Special Steel Pvt. Ltd
- Tata Capital Limited
- Tata Housing Development Company Limited
- Tata Motors Finance Ltd
- Welspun India Ltd

2. Emissions reported (Million metric tons CO_2e)



Commendable actions and achievements

1. Sustainability members at locations are given internal targets to reduce the energy consumption. Every quarter the most energy efficient branch is recognized internally and awarded- Tata Motors Finance Limited
2. Decrease in emission intensity per unit revenue of 26% achieved from efficiency of operations and emission reduction activities.- Mahindra Life Space Developers Ltd
3. Estimated annual CO_2e emission saving of 23,444 tons and monetary saving of INR 1.9 Crores through multiple energy efficiency projects implemented in 2014-15- Jubilant Life Sciences Ltd
4. Target to reduce Scope 1+2 emission intensity by 17% over 2014-15- Godrej Interio Division-Godrej & Boyce

Appendix 1
Table of emissions, scores and sector information by company

Sector	Company name	2015 disclosure score	2015 permission status	Total scope 1 + scope 2 emissions (tons CO_2e)	Scope 1 (tons CO_2e)	Scope 2 (tons CO_2e)	Number of Scope 3 categories reported
Consumer Discretionary	Arvind Ltd	-	Not public	-	-	-	-
	Bharat Forge	-	Not public	-	-	-	-
	Indian Hotels Co.	94	Public	441,664	133,709	307,955	
	Mahindra & Mahindra	98	Public	195,233	33,075	162,158	5
	Motherson Sumi Systems	-	Not public	-	-	-	-
	MRF Ltd	-	Not public	-	-	-	-
	Tata Motors	98	Public	377,107	61,660	315,447	1
Consumer Staples	Godrej Consumer Products	94	Public	76,024	43,256	32768	2
	ITC Limited	100	Public	1,325,691	1,142,815	182,876	5
	Tata Global Beverages	99	Public	60,160	20,670	39,490	7
Energy	Cairn India	65	Public	1,449,247	1,404,222	45,025	
	Essar Oil	95	Public	6,014,433	6,008,968	5,465	4
	Indian Oil Corporation	94	Public	14,006,381	13,936,435	69,946	6
Financials	Axis Bank	87	Public	134,642	9,760	124,883	3
	HDFC Bank Ltd	92	Public	414,961	6,533	408,428	3
	IDBI Bank Ltd	43	Public	72,279		72,279	
	IDFC Ltd	79	Public	3,276	146	3,130	4
	IndusInd Bank	99	Public	51,511	6,811	44,700	3
	Kotak Mahindra Bank	83	Public	15,172	34	15,139	1
	Mahindra & Mahindra Financial Services	92	Public	2,504	479	2,025	1
	State Bank of India	34	Public	-	-	-	
	YES BANK Limited	98	Public	29,190	994	28,196	4
Health Care	Dr. Reddy's Laboratories	97	Public	432,404	177,841	254,563	5
	Piramal Enterprises	56	Public	74,756	30,228	44,528	
Industrials	Crompton Greaves	-	Not public	-	-	-	-
	Larsen & Toubro	98	Public	844,333	528,823	315,510	5
Information Technology	HCL Technologies	90	Public	168,613	30,465	138,148	1
	Infosys Limited	99	Public	171,245	22,126	149,119	4
	Mindtree Ltd	-	Not public	-	-	-	-
	MphasiS	-	Not public	-	-	-	-
	Tata Consultancy Services	99	Public	458,040	34,263	423,777	7
	Tech Mahindra	100	Public	114,942	10,839	104,103	4
	Wipro	100	Public	269,117	41,339	227,778	5

Sector	Company name	2015 disclosure score	2015 permission status	Total scope 1 + scope 2 emissions (tons CO_2e)	Scope 1 (tons CO_2e)	Scope 2 (tons CO_2e)	Number of Scope 3 categories reported
Materials	ACC	98	Public	15,352,984	14,727,219	625,765	4
	Ambuja Cements	97	Public	14,704,636	13,997,274	707,362	6
	Godrej Industries	92	Public	103,218	59,140	44078	2
	Hindustan Zinc	95	Public	4,540,285	4,379,361	160,924	4
	JSW Steel	-	Not public	-	-	-	-
	Kansai Nerolac Paints Limited	-	Not public	-	-	-	-
	NMDC	80	Public	59,680	22,530	37,150	3
	Shree Cement	90	Public	10,290,342	10,149,587	140,755	5
	Tata Chemicals	99	Public	5,251,370	4,970,038	281,332	4
	Tata Steel	100	Public	24,061,909	23,337,931	723,978	10
	Ultratech Cement	95	Public	37,221,278	36,460,611	760,667	4
	Vedanta Ltd	82	Public	39,743,400	38,167,157	1,576,243	3
Telec-ommunication Services	Tata Communications	98	Public	250,321	21,998	228,323	3
Utilities	GAIL	98	Public	2,522,927	2,237,437	285,490	2
	JSW Energy	-	Not public	-	-	-	-
	Tata Power Co	92	Public	35,270,300	35,267,826	2,474	1

a. The 2015 score is comprised of the disclosure score. Score and other information is not shared for companies which have kept their response Not-Public.

b. When determining the number of categories reported by each company, only Scope 3 categories identified by the company as "calculated" are included, and only when the emissions figure pertaining to that category is greater than zero. In no instance should a category with zero emissions be classified as "relevant" by the company

Appendix 2
CDP India 200 sample response status

Company	Response status
Consumer Discretionary	
ARVIND Ltd	AQ*
Bharat Forge	AQ*
Indian Hotels Co.	AQ*
Mahindra & Mahindra	AQ*
Motherson Sumi Systems	AQ*
MRF LTD	AQ*
Tata Motors	AQ*
Bajaj Auto	NR
Bata India Ltd	NR
Bosch Ltd	NR
D.B. Corp Ltd.	NR
Dish TV India	NR
EIH	NR
Exide Industries	NR
Hero Motocorp Ltd	NR
Page Industries Ltd	NR
Sun TV Network	NR
TVS Motor Company Ltd	NR
WABCO India	NR
Whirlpool of India Ltd	NR
Zee Entertainment Enterprises	NR
APOLLO TYRES LTD	DP
Jubilant Foodworks Ltd	DP
Maruti Suzuki India	DP
Titan Industries	DP
Consumer Staples	
Godrej Consumer Products	AQ*
ITC Limited	AQ*
Tata Global Beverages	AQ*
Colgate Palmolive India	SA
Gillette India	SA
GlaxoSmithKline Consumer Health	SA
Hindustan Unilever	SA
Nestle India	SA
Procter & Gamble Hygiene & Health Care Ltd	SA
Britannia Industries	NR
Dabur India	NR
Emami Ltd.	NR
Marico	NR

Company	Response status
United Breweries	NR
United Spirits	NR
Energy	
Cairn India	AQ*
Essar Oil	AQ*
Indian Oil Corporation	AQ*
Coal India	NR
Mangalore Refinery and Petrochemicals	NR
Oil India Ltd.	NR
Petronet LNG	NR
Bharat Petroleum Corporation	DP
Hindustan Petroleum Corporation	DP
Oil & Natural Gas	DP
Reliance Industries	DP
Financials	
Axis Bank	AQ*
HDFC Bank Ltd	AQ*
IDBI Bank Ltd	AQ*
IDFC Ltd	AQ*
IndusInd Bank	AQ*
Kotak Mahindra Bank	AQ*
Mahindra & Mahindra Financial Services	AQ*
State Bank of India	AQ*
YES BANK Limited	AQ*
Bajaj Finance Limited	NR
Bajaj Finserv	NR
Bajaj Holdings & Invst. (BHIL)	NR
Bank of Baroda	NR
Bank of India	NR
Canara Bank	NR
Central Bank of India	NR
Cholamandalam Investment and Finance Company Ltd	NR
CRISIL LTD	NR
DLF	NR
Federal Bank	NR
Gruh Finance Ltd	NR
Housing Development Finance Corporation	NR
ICICI Bank Limited	NR

Company	Response status
Indiabulls Housing Finance Ltd	NR
Indian Bank	NR
Indian Overseas Bank	NR
Ing Vysya Bank Ltd	NR
J&K Bank	NR
L&T Finance Holdings Limited	NR
LIC Housing Finance	NR
Max India	NR
Muthoot Finance Limited	NR
Network 18 Media & Investments Ltd	NR
Oberoi Realty	NR
Oriental Bank of Commerce	NR
Power Finance Corporation	NR
Prestige Estate	NR
Punjab National Bank	NR
Rural Electrification Corpn.	NR
Shriram City Union Finance Ltd	NR
Shriram Transport Finance Co.	NR
Syndicate Bank	NR
Union Bank of India	NR
Reliance Capital Ltd	DP
Health Care	
Dr. Reddy's Laboratories	AQ*
Piramal Enterprises	AQ*
GlaxoSmithKline Pharmaceuticals	SA
Sanofi India Ltd	SA
ABBOTT INDIA LTD	NR
Ajanta Pharma Ltd.	NR
ALEMBIC PHARMACEUTICALS LIMITED	NR
Apollo Hospitals Enterprises	NR
Aurobindo Pharma	NR
Biocon	NR
Cadila Healthcare	NR
Cipla	NR
Divi's Laboratories	NR
Glenmark Pharmaceuticals	NR
Ipca Laboratories Ltd	NR
Lupin	NR
Ranbaxy Laboratories	NR

Company	Response status
Sun Pharmaceutical Industries	NR
Torrent Pharmaceuticals	NR
Wockhardt	NR
Industrials	
Crompton Greaves	AQ*
Larsen & Toubro	AQ*
ABB - Asea Brown Bovari	SA
Cummins India	SA
Siemens India	SA
3M India Ltd	NR
Adani Enterprises	NR
Adani Ports & Special Economic Zone	NR
Aditya Birla Nuvo	NR
AIA Engineering Ltd.	NR
Alstom T&D India Ltd	NR
Amara Raja Batteries Ltd	NR
Ashok Leyland	NR
Bharat Electronics	NR
Bharat Heavy Electricals	NR
Blue Dart	NR
Container Corporation of India	NR
Eicher Motors Ltd	NR
Engineers India Ltd	NR
Gujarat Pipavav Port Limited	NR
Havells India	NR
IRB Infrastructure Developers	NR
National Buildings Construction Corporation Ltd	NR
SKF INDIA	NR
Thermax	NR
Voltas	NR
GMR Infrastructure Limited	DP

Company	Response status
Information Technology	
HCL Technologies	AQ*
Infosys Limited	AQ*
Mindtree Ltd	AQ*
MphasiS	AQ*
Tata Consultancy Services	AQ*
Tech Mahindra	AQ*
Wipro	AQ*
Info Edge (India) Ltd.	NR
Just Dial Ltd	NR
Oracle Financial Services	NR
Persistent Systems Ltd	DP
Materials	
ACC	AQ*
Ambuja Cements	AQ*
Godrej Industries	AQ*
Hindustan Zinc	AQ*
JSW Steel	AQ*
Kansai Nerolac Paints Limited	AQ*
NMDC	AQ*
Shree Cement	AQ*
Tata Chemicals	AQ*
Tata Steel	AQ*
Ultratech Cement	AQ*
Vedanta Ltd	AQ*
Bayer CropScience Ltd	SA
Castrol India	SA
Berger Paints India Ltd	NR
Coromandel International	NR
Grasim Industries	NR
Gujarat Fluorochemicals	NR
Hindalco Industries	NR

Company	Response status
Jindal Steel & Power	NR
National Aluminium Co.	NR
PI Industries Ltd	NR
Pidilite Industries Ltd	NR
Steel Authority of India	NR
Supreme Industries Ltd	NR
The Ramco Cements Ltd	NR
UPL Limited	NR
Asian Paints	DP
Telecommunication Services	
Tata Communications	AQ*
Bharti Airtel	NR
Bharti Infratel Limited	NR
Idea Cellular	DP
Reliance Communications	DP
Utilities	
GAIL	AQ*
JSW Energy	AQ*
Tata Power Co	AQ*
Adani Power Ltd	NR
Gujarat Gas Company Limited	NR
National Hydroelectric Power Corporation Ltd (NHPC)	NR
Neyveli Lignite Corporation	NR
Power Grid Corpn. of India	NR
SJVN Ltd	NR
Torrent Power	NR
CESC Ltd	DP
NTPC Ltd	DP
Reliance Infrastructure	DP
Reliance Power	DP

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