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# Why companies need emissions reduction targets

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THE KEY TO A LOW-CARBON ECONOMY

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11/12/2014



## Glossary

### Emissions

**Emissions** - the reference to 'emissions' in this report refers to CO<sub>2</sub> emissions.

**CO<sub>2</sub>e-CO<sub>2</sub> equivalent**, measured in metric tonnes.

**Reporting year** - the reporting year for this report is 2013.

#### Scope of emissions<sup>1</sup> -

**Scope 1 emissions** - All direct CO<sub>2</sub> emissions.

**Scope 2 emissions** - Indirect CO<sub>2</sub> emissions that arise as a consequence of an organisation's activities for example, emissions electricity, heat, cooling or steam purchased for its own consumption.

**Scope 3 emissions** - Other indirect emissions of CO<sub>2</sub> from sources that are not owned or controlled by a company but which occur as a result of its activities. For example the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities not covered in Scope 2, outsourced activities and waste disposal.

### Targets

**Absolute Target** - an absolute target is one that describes a reduction in actual emissions in a future year when compared to a base year. The target can relate to scope 1, 2 or 3 emissions in full or in part.

**Intensity Target** - an intensity target is one that describes a future reduction in emissions that have been normalized to a business metric (financial- revenue profit, or non-financial- unit of output) when compared to normalized emissions in a base year.

### Projects

**Energy efficiency (building fabric)** refers to the building shell or building envelope, e.g. an insulation or maintenance program.

**Energy efficiency (building services)** refers to examples such as building controls, HVAC, lighting, motors and drives, and combined heat and power.

**Energy efficiency (processes)** refers to examples such as heat recovery, refrigeration, process optimization, fuel switch, compressed air, combined heat and power, waste water treatment, process water and machine replacement.

**Fugitive emissions reduction** refers to examples such as agriculture methane capture, agriculture N<sub>2</sub>O reductions, landfill methane capture; oil/natural gas methane leak capture/prevention, refrigerant leakage reduction.

**Low-carbon energy purchase** the source could be biomass, fuel cells, geothermal, hydro, solar, solar hot water or biogas.

**Low-carbon energy installation** - this includes the installation of clean energy generating facilities at the company's site or at others on behalf of your clients.

**Process emissions reductions** - initiatives to reduce process emissions from manufacturing, e.g. new equipment, changes in operations and process materials selection.

**Transportation (Fleet)** for example electric vehicles, fleet management program, fuel switch, hybrid vehicle and vehicle efficiency improvements.

**Transportation (Use)** for example business travel, commuting and shipping.

### PRI

**Principles for Responsible Investment** - The United Nations supports the Principles for Responsible Investment (PRI) Initiative, an international network of investors working together to put the six Principles for Responsible Investment into practice<sup>2</sup> (incorporating ESG issues into investment analysis and decision-making processes, being active owners and incorporating ESG issues into ownership policies and practices, seeking appropriate disclosure on ESG issues by the entities invested in, promoting acceptance and implementation of the Principles within the investment industry, working to enhance the effectiveness in implementing the Principles, reporting on activities and progress towards implementing the Principles).

<sup>1</sup> Taken from the Greenhouse Gas Protocol: <http://www.ghgprotocol.org/calculation-tools/faq>

<sup>2</sup> For more information, visit the UNPRI website: <http://www.unpri.org/about-pri/the-six-principles/>

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## What is Carbon Action?

CDP Carbon Action is an initiative backed by 254 investor signatories, asking companies to take action to reduce emissions. A letter is sent to companies each year with the support of the 254 investor signatories with **US\$ 19 trillion in investment**, and investor engagement is coordinated by the Principles for Responsible Investment (PRI). Companies in heavy-emitting industries are asked to take three specific actions in response to climate change:

- 1 **Set targets;**
- 2 **Reduce emissions; and**
- 3 **Generate return on investment.**

### Industries targeted

#### % of total emissions (scope 1 and scope 2) reported to CDP in 2014

Oil, Gas & Consumable Fuels	19%
Electric Utilities	15%
Gas Utilities	1%
Independent Power Producers & Energy Traders	4%
Multi-Utilities	7%
Chemicals	6%
Construction Materials	8%
Metals & Mining	16%
Paper & Forest Products	1%
Air Freight & Logistics	1%
Airlines	4%
Building Products	1%
Commercial Services & Supplies	1%
Industrial Conglomerates	1%
Marine	2%
Road & Rail	1%
Automobiles	1%
<b>Total</b>	<b>89%</b>

### 2014 Key Findings

CDP's Carbon Action initiative saw the following results in 2014. There has been:

-  A 7% increase in the number of companies targeted to 322; although the number of companies reporting emissions reduction projects did not increase correspondingly;
-  A 34% increase in the number of signatories to 254;
-  An upward trend in the number of companies establishing emissions-reduction targets, with an increase of 3% over three years to reach 79% of responding companies (227<sup>1</sup>);
-  For companies reporting all required data for projects, emissions reductions increased by 8%;<sup>2</sup>
-  Although investments in emissions-reduction projects were reported to have increased by 18%, emissions were reduced by only 8%; and
-  21% of responding companies did not adopt any intensity or absolute targets.

<sup>1</sup> 224 responding companies and 3 companies responding through their parent companies  
<sup>2</sup> Annual emissions reduction, annual monetary savings and initial investment

## Executive Summary

In our fourth annual Carbon Action report, CDP highlights how 224 companies in heavy-emitting industries are investing in emissions-reduction projects and setting emissions targets. Our analysis shows that the number of reported projects and quantity of emissions reductions plateaued in 2014. The setting of ambitious targets is a crucial aspect of energy management and the current target-setting process is not leading to companies establishing ambitious goals to reduce CO<sub>2</sub> emissions. 79% of companies reported emissions-reduction targets in 2014. 25% set both absolute and intensity targets, 36% have intensity targets only and 18% set absolute targets only. Given the urgent need to address climate change, while at the same time achieving attractive returns for emissions-reduction activities, we believe companies in heavy-emitting industries need to be more ambitious to meet the targets they have set.

### A significant scaling up of activity is required.

Despite 43% of companies adopting absolute targets in 2014, emissions were only reduced by 1% for the year. Although 61% of companies adopted intensity targets, emissions intensity was reduced by less than 3% annually. While it is encouraging to see that 79% of responders reported at least one emissions-reduction target, these targets are not yet translating into adequate emissions reductions.

### Taking aim: accurate targets are crucial to the measurement and achievement of emissions reductions.

In terms of the accuracy of targets being set, 80% (141) of absolute targets and 90% (197) of intensity targets were correctly reported with all details provided (start date, end date, base year emissions, scope, % of scope covered by the target, decrease rate). Setting a target should be based on an accurate inventory of greenhouse gas (GHG) emissions in order to communicate a company's active commitment to managing its carbon footprint.

### Going further: companies should shift the focus from intensity targets to targets that reduce absolute emissions.

Although it is encouraging that targets are being set by companies, the majority are using intensity targets to manage carbon-reduction performance (61% of companies reported setting intensity targets compared to 43% setting absolute targets, including those companies that set both). The drawback of intensity targets in this context is that absolute emissions can increase and targets can still be achieved. Based on the responding companies reporting, on average, absolute emissions could increase up to 4.7% and the intensity targets would still be met. Companies need to focus on energy management with the ultimate aim of a continuous reduction in CO<sub>2</sub> emissions.

### A closer look: emissions-reduction projects and target-setting in the electric utilities industry.

To give further insight into the types of projects being undertaken by companies, we have provided an industry-based focus on electric utilities. In 2014, electric utilities accounted for 34% of the total emissions reported by responding companies. Therefore, it is crucial that this industry takes the lead in setting informed and ambitious emissions-reduction targets.

**For further details, please refer to Figure 1.**

## Investor's perspective – Investing in Resource Efficiency – a compelling investment opportunity



Impax Asset Management is a signatory of Carbon Action. Impax manages US\$4.6 billion for institutional and high net worth investors globally, and is committed to providing strong long-term risk-adjusted returns. Listed equity investment is focused on a small number of deeply researched global equity strategies across markets related to alternative energy, energy efficiency, water, waste, and food and agriculture. A rigorous ESG-analysis of the companies is integrated into the investment process, including ensuring adequate corporate governance structures and analysing the companies' environmental and social policies and processes and the performance and disclosures of those. **CDP data is an important part of the analysis.**

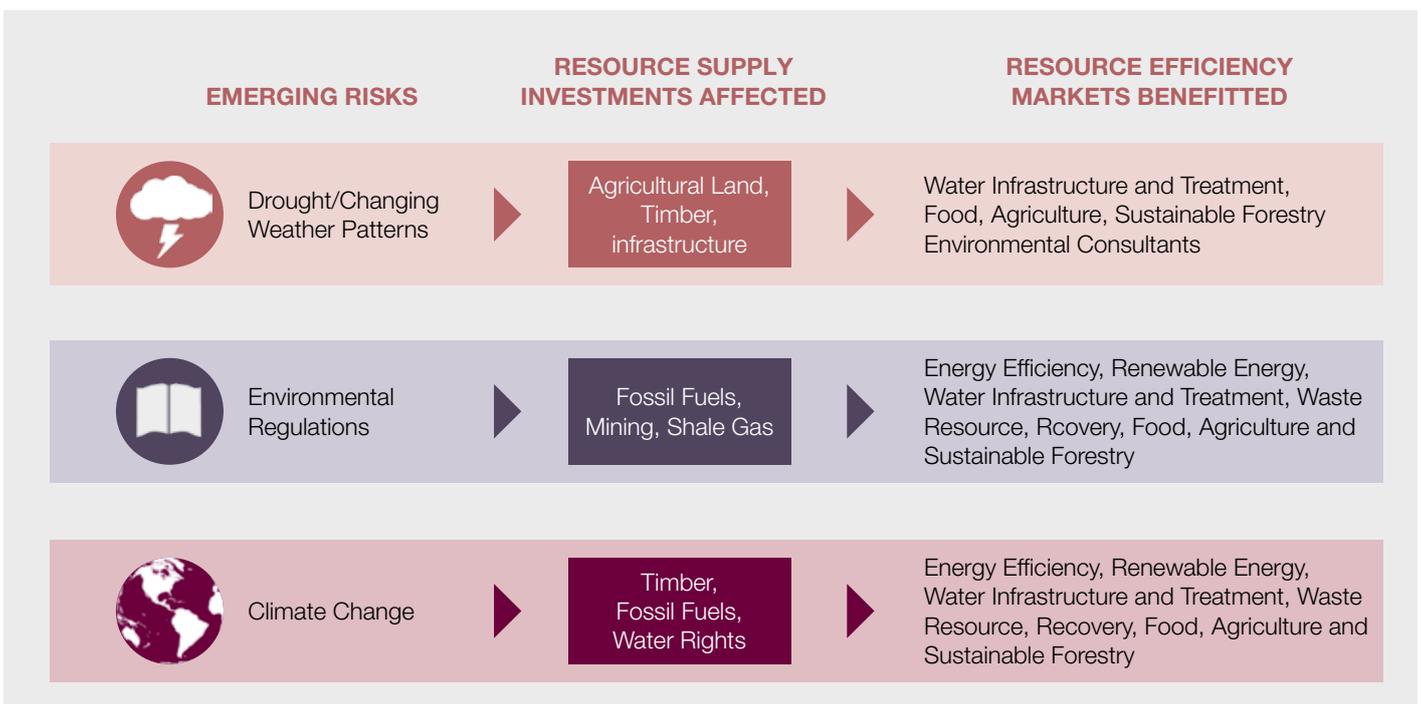
The inexorable trend of rising global resource demand amidst increasing resource constraints provides the backdrop to a compelling investment case for resource efficiency. Impax has identified a diverse set of sub-sectors including energy efficiency, renewable energy, water infrastructure, pollution control, sustainable food and agriculture, as well as waste management and technology as areas set to continue to benefit as our natural resources become scarcer.

The long term trends around resource supply and consumption can be described through four drivers of change:

- 1 **Rapidly growing demand for resources**  
Driven by population growth, rising standards of living and urbanisation, particularly in developing markets
- 2 **Limitations to cost-effective resource supply**  
Higher marginal costs of production for many key resources, e.g., oil and rare earth minerals
- 3 **Inadequate infrastructure**  
Greater demand for new infrastructure in developing economies; repair and replacement in developed economies, energy security
- 4 **Environmental constraints**  
Climate change, drought and flooding, contaminated air, soil and water, stricter environmental policy globally

### Resource efficiency as a hedge against emerging systemic risks

As many investors experienced during the recent financial crisis, systemic risks (such as the collapse of the housing market) build slowly and can be hard to protect against. Unfortunately, many investors may not appreciate and/or may be under-protected against today's emerging systemic risks, some of which are likely to be high magnitude. A portfolio of resource efficiency stocks can provide a hedge against a number of such emerging risks, for example:



**Policy and legislation addressing climate change and pollution**

Climate change, principally from burning fossil fuels, is an increasing concern globally. A typical investor's equity portfolio has 7 to 10% exposure to fossil fuel companies. These may suffer value destruction as regulators impose charges or limitations on fossil fuel combustion and carbon and pollutant emissions, thereby both raising the price of energy to consumers and lowering the price of energy received by producers. A recent example of US regulations limiting emissions from coal-fired power stations have contributed to US coal stocks underperforming a basket of US energy stocks by 70% since 2011. A portfolio of energy efficiency and renewable energy stocks offers a counterweight to this risk.

**Extreme weather**

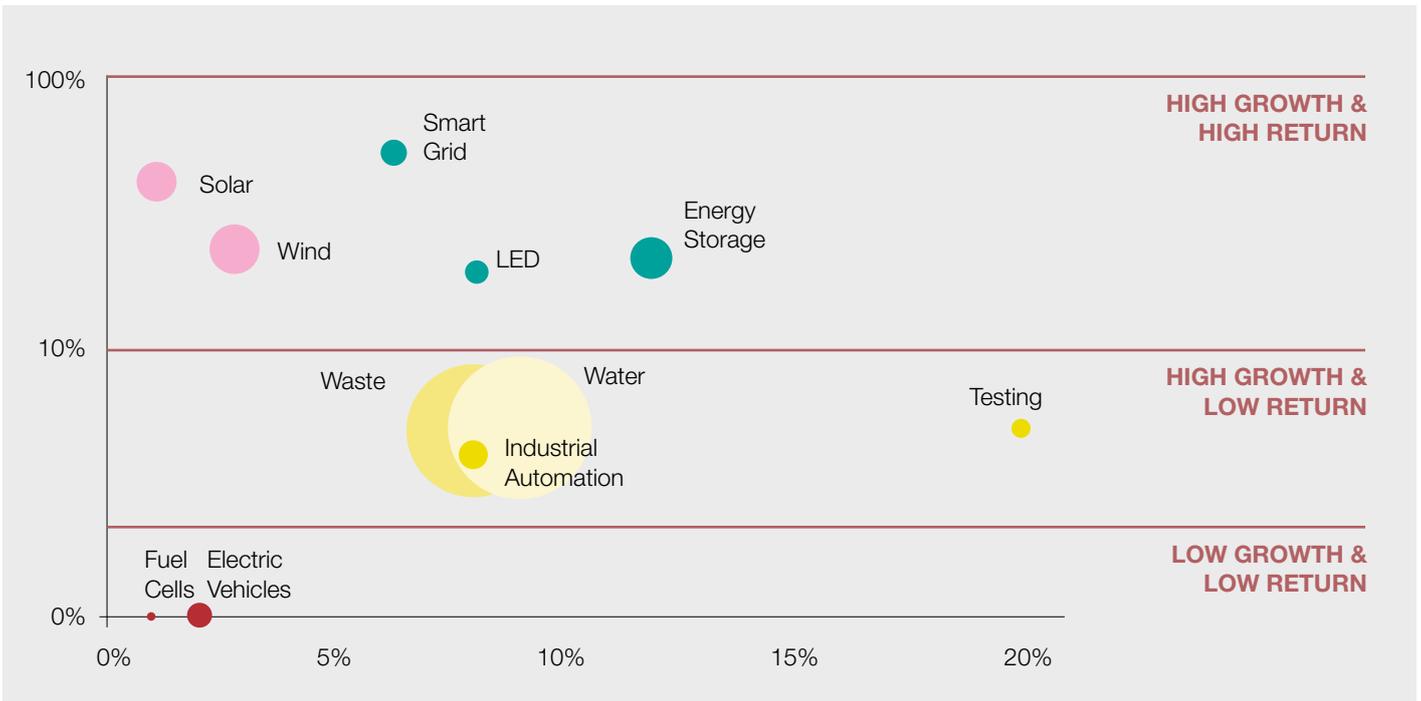
Incidence of severe weather events is rising, e.g. flooding in Europe and Canada in 2013 caused ~\$20bn of damage, while the insured losses from Hurricane Sandy in 2012 are expected to reach \$35bn. Companies that provide flood prevention infrastructure and environmental monitoring systems are set to benefit from investments to mitigate the impact of extreme weather.

**Technology substitution, shifting towards efficiency**

Companies rolling out new, proven energy efficiency technology can accelerate obsolescence in other areas. For example, the market for LED-based light-bulbs which are 10x more efficient and have a lifetime of up to 50x longer than traditional incandescent bulbs, is expected to grow from 15% (in 2013) to 45% of the global lighting market by 2016, eventually replacing conventional lighting. Commercial LED-lighting currently has a payback period of less than one year. Economies of scale are driving down costs for other energy efficiency technologies and the International Energy Agency (IEA) estimates that each dollar spent on energy efficiency brings \$2-4 in lifetime cost savings. In addition, energy efficiency is important in ensuring energy security.

**Understanding technology in the resource efficiency sector**

Understanding rates of innovation and growth for a broad range of technologies is central to resource efficiency investing. However, investing in this area does not always translate into returns, and a thorough understanding of the technologies and the underlying markets is important to avoid bubbles and destruction of shareholder value.



## Investor's perspective - continued

The sweet spots in resource efficiency technology investing, as depicted in the chart on page 7, have been the green areas demonstrating high growth and high returns, in areas such as LED-lighting companies and smart grids. The yellow areas represent companies and sectors with moderate growth, but solid returns and with defensive and stable characteristics, the bedrock of any well-diversified resource efficiency portfolio, including water, waste and industrial automation technologies. The red area represents sub-sectors that have both low growth and low returns. The key to investing in resource efficiency technology is to avoid sub-sectors and technologies that are expanding too fast and where barriers to entry are low, leading to commoditisation and over-capacity, and ultimately to destruction of shareholder value. Some technologies on the other hand are dependent on markets that have yet to develop. It is therefore critical to have a deep understanding of both the technologies and the end markets in order to invest in the right parts of the value chain.

### A significant universe of resource efficiency stocks with superior growth

Over the last decade we have witnessed the rapid emergence of a large universe of listed companies that are focused on resource efficiency. This universe (as defined by FTSE) currently comprises some 1,500 stocks and has an aggregate market capitalisation of approximately US\$4 trillion. Companies in this universe demonstrate superior growth potential with revenues forecast to grow on average by over 6% per annum over the next three to five years, and earnings growth predicted to increase by 14.6% over the same timeframe. This compares to annual revenue and earnings growth forecasts of 5.6% and 11.8% respectively for the MSCI ACWI. The equivalent earnings growth forecast for the oil and gas sector in the next 3 to 5 years is around 8.3%.

Due to their higher growth characteristics, resource efficiency stocks tend to trade at a valuation premium to the broader markets, but have consistently outperformed the MSCI ACWI over the longer term, albeit with a relatively high tracking-error. Resource efficiency stocks also tend to have lower leverage, with the Debt/Equity ratio of the resource efficiency universe today at 47% vs 74% for the MSCI ACWI.

Resource efficiency stocks are generally not well covered by sell-side analysts and the resource efficiency markets are typically not well understood and therefore frequently mispriced. This provides many opportunities for specialist managers to add value, in an investment area where many investors are currently under-allocated.

### The complete data sources can be found in the following Impax White Papers, blogs and videos:

[http://www.impaxam.com/sites/default/files/Impax%20White%20Paper\\_Investing%20in%20Resource%20Efficiency%20-%20UK.pdf](http://www.impaxam.com/sites/default/files/Impax%20White%20Paper_Investing%20in%20Resource%20Efficiency%20-%20UK.pdf)

<http://www.impaxam.com/media-centre/impax-blog/2013/02/27/energy-efficiency-%E2%80%93-topical-opportunities>

<http://www.impaxam.com/media-centre/impax-blog/2013/08/15/impax-approach-investing-technology-companies>

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## Company's perspective

FCA is a responsible global automotive player with 15 brands and a comprehensive product range distributed worldwide. With more than 4.4 million vehicles sold in 2013 and revenues of €87 billion, the Group is the 7th largest automaker worldwide. The Group's technological edge is a major component in its sustainability strategy. In 2013 alone, the Group invested around €3.4 billion in research and development aimed at introducing some of the most innovative and advanced processes and products in the world.

Of the drivers that guide our sustainability strategy, addressing climate change through reductions in CO<sub>2</sub> emissions has always been a key component. The Group's targets and long-term initiatives up to 2020 are a tangible sign of our intention to maintain this commitment wherever we have a presence. In 2014, FCA continued implementation of activities in the Energy Action Plan to reduce energy consumption and CO<sub>2</sub> emissions. One area where our commitment to addressing climate change has been demonstrated is the downward trend in CO<sub>2</sub> emissions from our production processes compared with the 2010 baseline.

An example of concrete energy savings is at the new paint shop at the Sterling Heights Assembly Plant in the U.S. In the auto industry, painting is more energy demanding than any other stage of production. The paint booth in particular consumes the most energy, as it requires a significant volume of air per minute at a specific temperature and humidity. Booths require large quantities of natural gas, electricity and water to meet stringent process control requirements. This new paint shop covers approximately 100,000 square meters and was designed for maximum energy efficiency, using a "cascading air / recirculating air" process (which recirculates 90% of air) to significantly reduce energy and water usage. This innovation provides annual energy savings of approximately €1.3 million, avoiding approximately 24,000 tons of potential CO<sub>2</sub> emissions, while also significantly reducing water usage.

Achieving challenging energy targets has been made possible by the adoption of one of the most efficient production methodologies in the world, World Class Manufacturing (WCM). Consuming energy responsibly is, in fact, a core premise of the WCM program, which focuses on introducing technologies that consume less while at the same time employing energy solutions with reduced environmental impacts. WCM is a structured, rigorous and integrated methodology that covers every aspect of the production process, from safety to the environment, maintenance, logistics and quality. The WCM program aims first and foremost at improving processes to ensure product quality that meets or exceeds customer expectations.

The projects developed within WCM are designed to achieve the broadest engagement of employees and systematically reduce loss and waste, ultimately reaching zero accidents, zero waste, zero breakdowns and zero inventories. Last year around 2,400 WCM specific energy projects were implemented, resulting in approximately 180,000 fewer tons of CO<sub>2</sub> emissions and savings of €62 million, showing once again that in this field, as in all other aspects of the business, FCA is committed to fulfilling its imperative of responsible leadership.



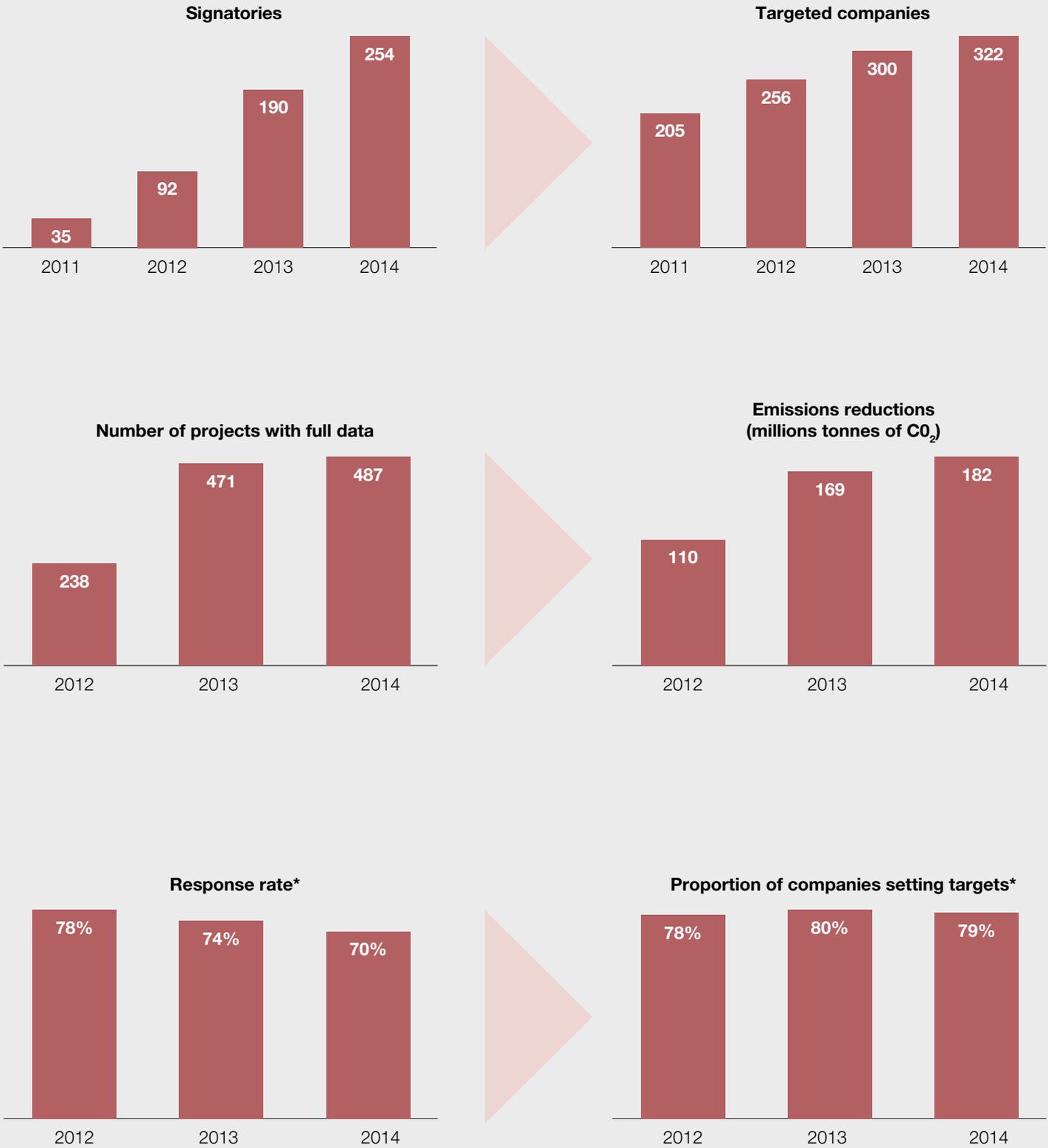
FCA, as member of CDP's Reporter Service for several years, continues to use data and benchmarks provided by CDP – which continues to improve in both quantitative and qualitative terms – to further refine targets, identify opportunities, benchmark its performance, monitor and measure cost savings and communicate its progress. We believe that the continuous increase in awareness and transparency, together with our focused commitment is the right way to address climate change responsibly.

5 In question 12 of the CDP Climate Change information request, companies detail both absolute (12.1a) and intensity (12.2) emissions reductions.

6 Exhibit 8, page 19. The 3% Solution, 2013. This is an analysis from WWF and CDP that finds if US businesses act now to emissions reduction by an average of 3% annually, they can save up to USD190 billion in 2020 alone, or USD780 billion over 10 years. <https://www.cdproject.net/CDPResults/3-percent-solution-report.pdf>

# 2014 results

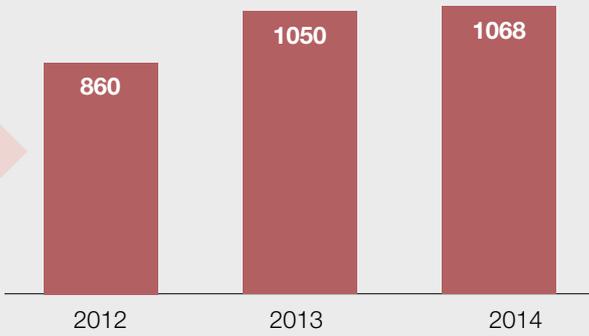
**Table 1: CDP Carbon Action results**



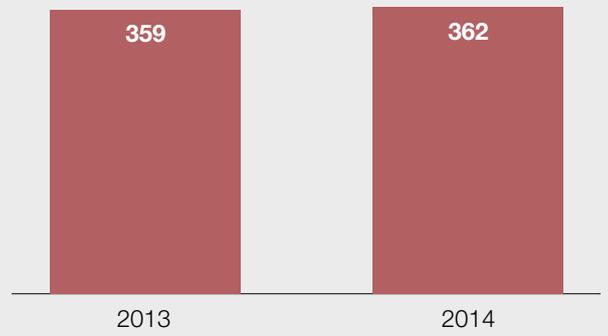
\*this is based on the targeted companies: 256 in 2012, 300 in 2013 and 322 in 2014

\*this is the percentage of companies setting targets amongst responding companies

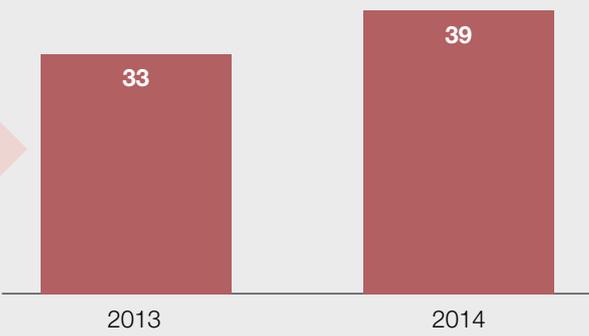
**Number of projects**



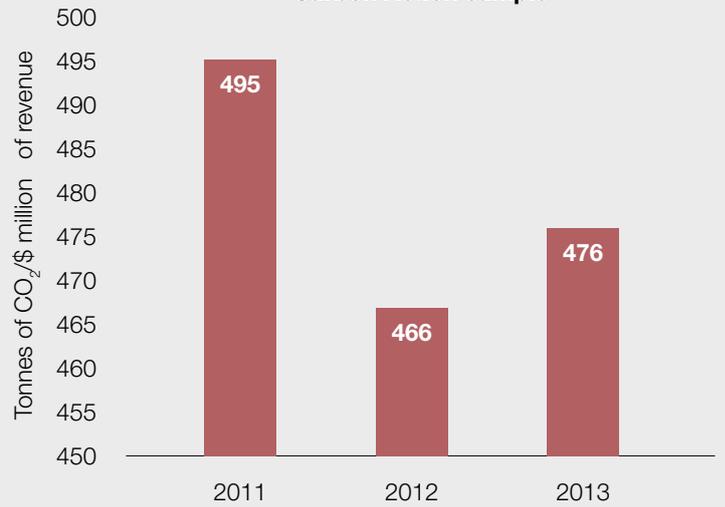
**Emissions reductions (millions tonnes of CO<sub>2</sub>)**



**Investments (bUSD)**

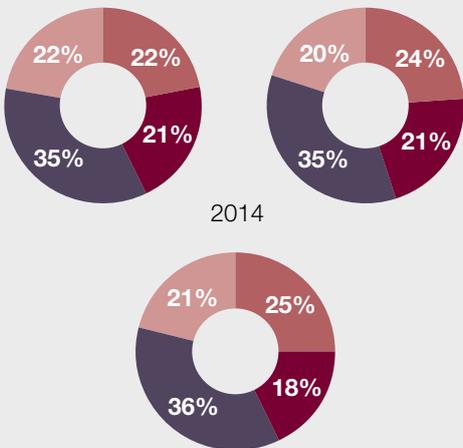


**Carbon intensity for 2014  
Carbon Action sample**

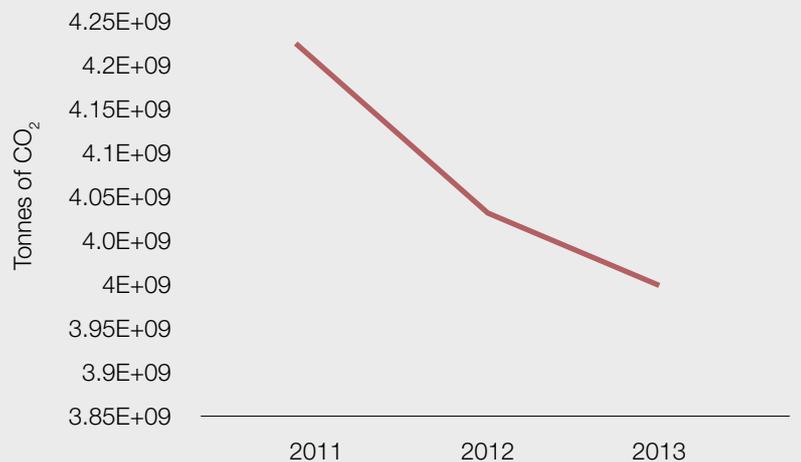


2012

2013



**Absolute emissions for 2014  
Carbon Action sample**



**Absolute & Intensity**  
**Absolute only**

**Intensity only**  
**None**

## Missing the mark: not all companies are on course to meet their targets

79% of companies set targets (either intensity or absolute). 173 absolute targets were reported. Although it is positive that companies are setting targets, only 141 (80%) were correctly reported with all details provided (start date, end date, base year emissions, scope, % of scope covered by the target, decrease rate). Without all the correct details, it is difficult to accurately assess the achievability and ambition of these targets.

### Absolute targets

57% of companies did not set any absolute targets. 23% of absolute targets ended in the reporting year, and therefore new targets need to be set immediately. In order to take a comprehensive approach to target setting, businesses need to look at the short, medium and long-term. Of the absolute targets set correctly by companies, 70% of the targets being set will not be achieved in a business-as-usual scenario and further action will be required.

### Intensity targets

218 intensity targets were reported. Of these, 90% were correctly reported with all details provided. 28 companies disclosed intensity and absolute targets that were aligned (in terms of Scope 1 and Scope 2 emissions). However, the intensity targets disclosed by the other companies were not in line with their absolute targets, and were on average one third weaker than the equivalent intensity targets calculated from the company's absolute targets.

A scientific approach to climate action in line with the latest IPCC Report can inform target-setting by companies. According to the Fifth Assessment Report, global emissions in 2050 need to be 41 to 72 percent lower than emissions in 2010, in order to have a likely chance to prevent temperatures rising above 2°C<sup>3</sup>. The main drawback to the setting of intensity targets is that companies can increase absolute emissions and still meet these targets. On average, absolute emissions could increase by 4.7% annually and the targets established would still be achieved. A closer look at target-setting methodologies needs to be undertaken in order to evaluate what further action and ambition is needed by companies. CDP, in collaboration with WWF and WRI, is developing a methodology to help companies set targets in line with the IPCC's recommendations.

### Methodology:

#### Absolute target assessment:

- ▶ Calculate the annual reduction rate required to meet the targeted emissions using the CAGR (Compound Annual Growth Rate)
- ▶ Calculate the actual rate of change of emissions between the base year and 2013 using CAGR
- ▶ If the actual rate of emissions reduction is at or more than the required rate, the company is in line with its target. If not, the company is not on track to meet its target without further action.

#### Annual absolute emission rate to reach intensity targets

- ▶ Calculate the targeted intensity for the percentage of scope covered by the target: initial intensity \* (1-decrease rate)
- ▶ Calculate the annual rate using the inflation rates from the Stern School of Business and the targeted intensity

#### Intensity target based on the absolute target<sup>4</sup>

- ▶ Intensity target = initial intensity \* (1 - absolute decrease rate reported by companies \* % of scope concerned by the absolute target)<sup>(target year - initial year)</sup> / (1 + sector GDP rate)<sup>(target year - initial year)</sup>

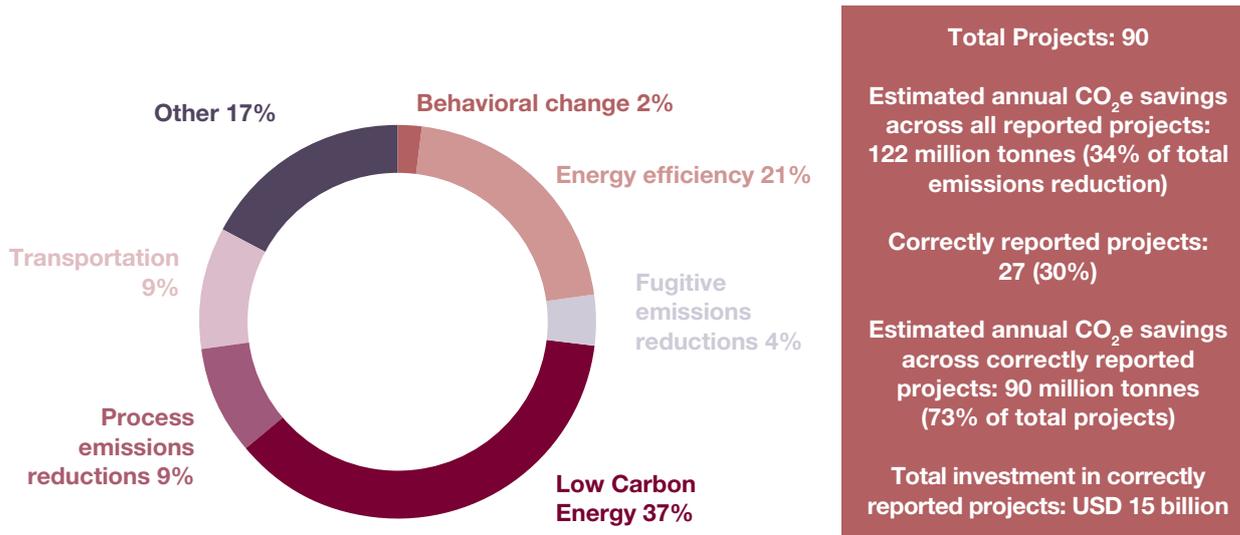
<sup>3</sup> IPCC Fifth Assessment Report: Summary for Policymakers, available at [https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc\\_wg3\\_ar5\\_summary-for-policymakers.pdf](https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_summary-for-policymakers.pdf) at page 12.

<sup>4</sup> For companies that have both intensity and absolute targets.

## Industry Focus: Electric Utilities

In 2014, emissions by electric utilities accounted for over a third of total emissions reported by all companies. Reducing emissions in this industry is therefore crucial, and with an industry response rate of 52% (25% lower than the average response rate), there is much room for improvement in this industry's response. However, of the electric utilities that responded, 100% set targets to reduce emissions.

**Figure 3:** Emission reduction project types for electric utilities



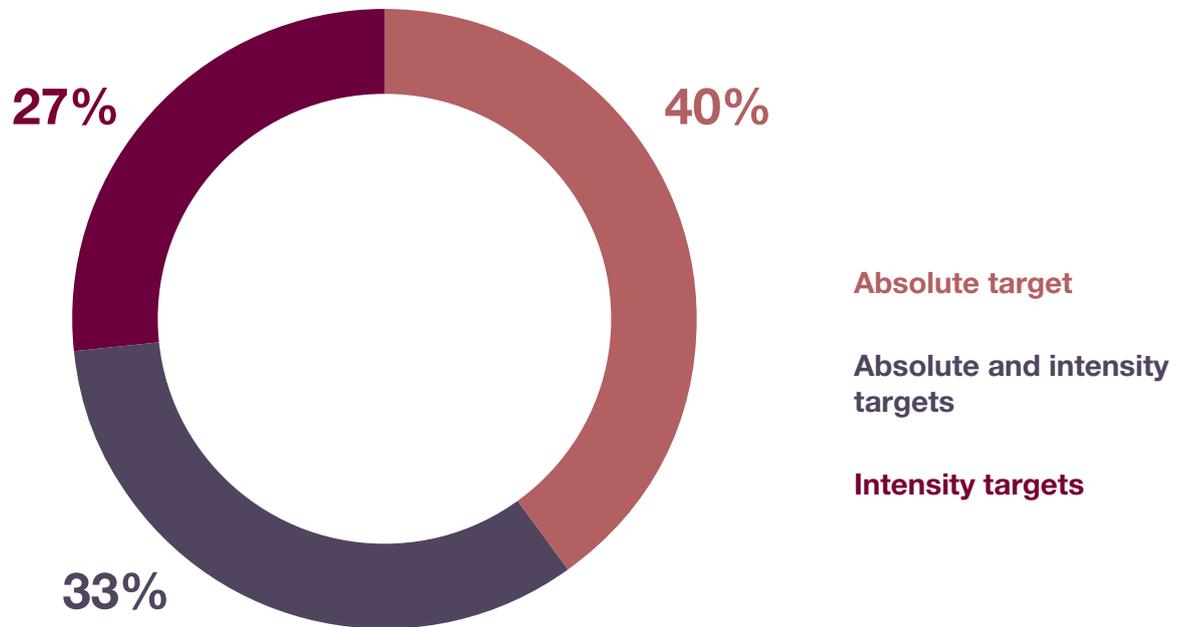
Electric utilities can play an important role in energy transition by investing in renewable energy production and retiring unabated coal power production. In this regard, the project reported to have the greatest CO<sub>2</sub>e saving was a low-carbon energy installation by ENEL SpA, with a total investment cost of US\$1.7 billion. The company operates under Enel Green Power, with a portfolio of technologies spanning wind farms, photovoltaic and hydro plants. The project aims to reduce scope 1 emissions through utilizing renewable energy sources, which ENEL reports as having both quantitative and technological potential in emissions reduction. However, an investment in renewable energy only reduces overall emissions if non-renewable emissions are abated elsewhere. Unless this occurs, there is not an absolute reduction in overall emissions, but rather just an addition of renewable energy.

Electric utilities can also reduce emissions through projects aimed at switching to lower carbon fuels, particularly in high-efficiency gas generation. Endesa developed a voluntary process emissions-reduction project in 2013 to switch fuel use from gas oil to natural gas at a thermal plant in Spain, with fuel oil becoming the reserve combustible to be used during periods of unavailability. The estimated CO<sub>2</sub>e savings for the year were 58,073 tonnes at an investment cost of US\$17,529,880. The project is aimed at reducing scope 1 emissions by 31%. Scope 3 emissions are also reduced through avoiding transport of fuel emissions to the power plants.

Utilities can improve the efficiency of installed capacity and the energy efficiency of their client base. Exelon reported an energy efficiency project with estimated annual CO<sub>2</sub>e savings of 973,113 metric tonnes at an investment cost of US\$265,000,000, developed in accordance with energy efficiency state public statutes for utilities. The project includes implementation of a portfolio of programs aimed at helping customers to reduce energy consumption, with a reduction of 16 million MWh achieved since 2009. This reduced energy use translates to a reduction in scope 2 emissions for Exelon's customers and scope 3 emissions for Exelon.

## Industry Focus: Electric Utilities - Continued

**Figure 4:** Types of targets set by electric utility companies



### Absolute targets

9 Electric Utilities established 23 absolute targets, with 44% of those targets either achieved or on track to be achieved. The absolute targets set by the companies should lead to an annual decrease of 1% of emissions. 9 utilities set targets to reduce Scope 1 emissions. As this industry is responsible for generating significant scope 1 emissions, it is important that all companies take appropriate steps to set targets to reduce these emissions in the future.

### Intensity targets

9 electric utilities established 20 intensity targets. Encouragingly, all companies set at least one target for scope 1 emissions. However, a comprehensive comparison was not possible as not all targets were calculated in tonnes CO<sub>2</sub>/MWh. It is important that in the future, companies use the MWh metric to disclose intensity targets to allow for comparability. The intensity targets set by companies, if achieved, should lead to an annual decrease in emissions intensity of 2% on average. 3 companies set both intensity and absolute targets that are aligned. When the absolute decrease rate is used to recalculate intensity targets, targets are 43% lower than the targets set by the company. Even when the most ambitious intensity target is used for companies that have multiple targets, companies can actually increase emissions by up to 1.45% annually and still meet these targets.

## What Action Can Investors Take?

We invite investors to sign up to CDP Carbon Action to accelerate cost effective company action on energy efficiency and carbon reduction. Signatories benefit from corporate climate and energy management data; analysis of emissions, targets, and investment in emissions-reduction activities for all the companies that receive the Carbon Action letter and engagement facilitation. Carbon Action is designed to advance understanding of portfolio company carbon management and energy-efficiency initiatives and to improve risk management in areas including regulation, operations, fiduciary duty and reputation.

### Engage with high-emitting companies

Carbon Action helps companies generate positive returns through carbon reduction and energy-efficiency projects to build long term sustainable businesses. We invite current signatories of Carbon Action to engage with high-emitting companies in order to reduce climate risks from portfolios and maximize the business benefits of target setting, investment in emission reductions and energy-efficiency projects. We invite current signatories to Carbon Action to engage with companies, through collaborative engagement with CDP. CDP is keen to support investors on this journey by providing analysis and benchmarking tools, background information on each company, coordinating individual or joint letters, and where appropriate, helping investors file shareholder resolutions.

1) Engage with non responding companies

<https://www.cdp.net/Docs/investor/2014/carbon-action-CC-non-responders.pdf>

2) Engage with companies that did not set targets - for the full list please log onto onto CDP website

<https://www.cdp.net/mycdp>

### 2014 CDP Carbon Action engagement results

As part of a collaborative engagement coordinated by the PRI via the Clearinghouse platform, a group of 14 investors with US\$ 1.5 trillion in assets under management have engaged with selected emissions-intensive companies that do not have an emissions reduction target in place. The effort, which in 2014 entered its fourth year, saw three additional companies responding to investor concerns by disclosing an emissions-reduction target in their response to CDP or to investors directly. In addition:

-  A further five companies have demonstrated progress towards setting a target (e.g. a target has been sent to board for approval or is under development by an internal committee);
-  Two of three targets set were assessed by investors to be 'high quality' (i.e. time-bound, covering major sources of emissions and publicly disclosed);
-  13 companies acknowledged the need to set a target or at least demonstrated some recognition of investors' concerns.

In previous years, the Carbon Action programme has seen a total of 15 other companies setting emissions-reduction targets and many more acknowledging the concerns of investors.

### Join Carbon Action

Please visit CDP website at

<https://www.cdp.net/en-US/Programmes/Pages/Initiatives-CDP-Carbon-Action.aspx>.

### Should you wish to sign up to Carbon Action

Please contact Henry Repard at [henry.repard@cdp.net](mailto:henry.repard@cdp.net).

## Carbon Action signatories

3Sisters Sustainable Management Llc	First Bank	Optrust
Active Earth Investment Management	First State Investments	Panahpur
Addenda Capital Inc.	First State Super	Park Foundation
Aegon N.v.	Firststrand Group Limited	Pax World Funds
Sura Peru (Afp Integra, Seguros Sura, Fondos Sura, Hipotecaria Sura)	State Board Of Administration (Sba) Of Florida	Pensioenfondos Vervoer
Alcyone Finance	Folksam	Perpetual
Alliance Trust Plc	Fondazione Cariplo	Pictet Asset Management Sa
Antera Gestão De Recursos S.a.	Fondo Pensione Gruppo Intesa Sanpaolo - Fapa	Pka
Appg	Friends Fiduciary Corporation	Polden-Puckham Charitable Foundation
Appleseed Fund	Forluz - Fundação Forluminas De Seguridade Social - Forluz	Portfolio 21
Ati Asset Management	Fundação Sanepar De Previdência E Assistência Social - Fusan	Postalis - Instituto De Seguridade Social Dos Correios E Telégrafos
Atlantic Asset Management Pty Ltd	Gamechange Capital Llc	Prevhab Previdência Complementar
Australian Ethical Investment	Generation Investment Management	Prius Partners
Avaron Asset Management As	Global Forestry Capital Sarl	Progressive Asset Management, Inc.
Aviva Plc	Globalance Bank Ltd	Provincial Rheinland Holding
Aviva Investors	Good Growth Institut Für Globale Vermögensentwicklung Mbh	Rpmi Railpen Investments
Axa Investment Managers	Good Super	Rathbones / Rathbone Greenbank Investments
Bae Systems Pension Funds Investment Management Ltd	Government Employees Pension Fund ("Gepf"), Republic Of South Africa	Representative Body Of The Church In Wales
Banco Do Brasil Previdência	Gpt Group	Reynders Mcveigh Capital Management
Banco Do Brasil S/A	Greater Manchester Pension Fund	River Twice Capital Advisors, Llc
Banco Santander	Green Cay Asset Management	Robeco
Banesprev - Fundo Banespa De Seguridade Social	Green Century Capital Management	Robecosam Ag
Sarasin & Cie Ag	Groupe Ofi Am	Rockefeller Asset Management, Sustainability & Impact Investing Group
Bank Vontobel Ag	Harbour Asset Management	Rothschild & Cie Gestion Group
Bankinter	Heart Of England Baptist Association	Samsung Fire & Marine Insurance Co.,Ltd.,
Banque Degroof	Henderson Global Investors	Sarasin & Partners
Banque Libano-Française	Hermes Fund Managers - But Hermes Eos For Carbon Action	Schroders
Basf Sociedade De Previdência Complementar	Holden & Partners	Scottish Widows Investment Partnership
Basler Kantonalbank	Humanis	Servite Friars
Bbva	Ilmarinen Mutual Pension Insurance Company	Shareholder Association For Research & Education
Blom Bank Sal	Imofundos, S.a	Shinhan Bank
Blumenthal Foundation	Impax Asset Management	Shinkin Asset Management Co., Ltd
Boardwalk Capital Management	Making Dreams A Reality Financial Planning	Signet Capital Management Ltd
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British Airways Pension Investment Management Limited	Inflection Point Capital Management	Sisters Of St. Dominic
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Bt Financial Group	Instituto Infraero De Seguridade Social - Infraprev	Società Reale Mutua Di Assicurazioni
Calvert Investment Management, Inc.	Interfaith Center On Corporate Responsibility	Solaris Investment Management Limited
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Cathay Financial Holding	Jupiter Asset Management	Spf Beheer Bv
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Cbre	Kaiser Ritter Partner Privatbank Ag	Sprucegrove Investment Management Ltd
Cbus Superannuation Fund	Kendall Sustainable Infrastructure, Llc	Stateridesuper
Ccla Investment Management Ltd	Kepler Cheuvreux	Strathclyde Pension Fund
Cedrus Asset Management	Keva	Superfund Asset Management Gmbh
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Ceres	Klp	Svenska Kyrkan
Ctbc Financial Holding Co., Ltd.	Kpa Pension	Svenska Kyrkans Pensionskassa
Christian Super	Legal And General Investment Management	Swift Foundation
Christopher Reynolds Foundation	Lgt Group Foundation	Swisscanto Asset Management Ag
Church Commissioners For England	Lloyds Banking Group	Sycomore Asset Management
Church Of England Pensions Board	Local Authority Pension Fund Forum	Tasplan
City Developments Limited	London Pensions Fund Authority	Td Asset Management (Td Asset Management Inc. And Tdam Usa Inc.)
Clearbridge Investments	Lucrf Super	Telstra Super
Colonial First State Global Asset Management Limited	Lutheran Council Of Great Britain	Terra Global Capital, Llc
Bâtirente	Mama Sustainable Incubation Ag	The Bullitt Foundation
Commerzbank Ag	Mapfre	The Children's Investment Fund Management (Uk) Llp
Commonwealth Superannuation Corporation	Marc J. Lane Investment Management, Inc.	Clean Yield Asset Management
Compton Foundation	Maryknoll Sisters	The Council Of Lutheran Churches
Connecticut Retirement Plans And Trust Funds	Mercy Investment Services, Inc.	The Joseph Rowntree Charitable Trust
Conser Invest	Mergence Investment Managers	The New School
The Co-Operative Asset Management	Merseyside Pension Fund	The Pension Plan For Employees Of The Public Service Alliance Of Canada
Co-Operative Financial Services (Cfs)	Miller/Howard Investments, Inc.	The Presbyterian Church In Canada
Crayna Capital, Llc.	Mirova	The Russell Family Foundation
Credit Agricole	Mistra, Foundation For Strategic Environmental Research	The Sisters Of St. Ann
Dgb Financial Group	Mn	The Sustainability Group At The Loring, Wolcott & Coolidge Office
Dalton Nicol Reid	Momentum Manager Of Managers (Pty) Ltd	The Wellcome Trust
Dana Investment Advisors	Monega Kapitalanlagegesellschaft Mbh	Toronto Atmospheric Fund
Demeter Partners	Mongeral Aegon Seguros E Previdência S/A	Trillium Asset Management, Llc
Development Bank Of Japan Inc.	Mtaa Superannuation Fund	Triodos Investment Management
Dip	Mutual Insurance Company Pension-Fennia	Tri-State Coalition For Responsible Investment
Dlm Invista Asset Management S/A	Arjuna Capital	Trusteam Finance
Dongbu Insurance	Nathan Cummings Foundation, The	Union Investment Privatfonds Gmbh
Doubledividend	National Australia Bank Limited	Unisons Staff Pension Scheme
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Evangelisch-Luth. Kirche In Bayern	Oceanrock Investments	Wisconsin, Iowa, & Minnesota Coalition For Responsible Investment
F&C Investments	Oppenheim & Co. Limited	Zevin Asset Management, Llc
Fédérés Gestion D'actifs	Opplysningsvesenets Fond (The Norwegian Church Endowment)	Zürcher Kantonalbank
Financiere De L'equiquier		
Fipeqc - Fundação De Previdência Complementar Dos Empregados E Servidores Da Finep, Do Ipea, Do Cnpq		
First Affirmative Financial Network		

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**Freddie Woolfe**  
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