

Carbon Disclosure Project FTSE 100 Carbon Chasm

Based on Carbon Disclosure Project 2009 responses
from the UK's 100 largest companies



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Introduction

The 2008 UK Climate Change Act, sets some of the world's most aggressive national targets by introducing the first ever long-term, legally binding, national framework to tackle dangerous climate change.¹ The Act sets a UK target of 80% reduction in greenhouse gas (GHG) emissions from 1990 levels, by the year 2050.² This is in line with scientific consensus on the required reduction levels for developed economies.³ The government has also set an interim target of 34%-42% reductions in greenhouse gas emissions by the year 2020, against 1990 levels.⁴

This research evaluates how UK FTSE 100 companies' emission reduction targets compare against the national target and utilises the Carbon Disclosure Project (CDP) 2009 dataset⁵ to analyse how companies are currently setting emissions reduction targets and what level of reduction these targets will deliver.

Most FTSE 100 companies report having some form of emissions or energy reduction target in place, but the scope of these targets varies considerably. Therefore, the crucial question is, will these targets deliver sufficient reduction in emissions to deliver on UK national commitments. To answer this question CDP has calculated the expected annual reduction rate of greenhouse gas emissions across FTSE 100 companies based on their reported targets.

“In line with longer term Government Targets of 80% reduction in greenhouse gas emissions by 2050 we will aim to measure our contribution to this target based on 2006/07 levels.”

Pennon Group

Key Findings

- 77% of FTSE 100 companies report having an emissions reduction target.
- 49% of targets are absolute, compared to 31% based on intensity. 19% of target setting companies have both absolute and intensity targets.
- The average annual reduction rate for FTSE 100 company targets is 2.5%. A 2.4% annual reduction rate is required to meet the UK 2020 target.
- Energy, Utilities and Materials sectors cover just 24 companies in the FTSE 100, but they are currently responsible for 87% of all FTSE 100 reported emissions. Their average reduction rate per annum is just 1.2% per annum. These carbon intensive sectors will need to take on more aggressive targets if they are to deliver in line with government commitments.

Clearly UK regulation is sending strong signals to companies of the necessity to manage carbon, but as many of these companies operate globally, we also need a strong global framework to create the right incentives to set sufficiently strong targets.

¹ http://www.decc.gov.uk/en/content/cms/legislation/cc_act_08/cc_act_08.aspx

² Climate Change Act 2008, section 1.

³ Intergovernmental Panel for Climate Change, *Fourth Assessment Report*, 2007.

⁴ The target for current legislation is a 34% and the expected target for a post-Kyoto legislation is 42%. The rationale being that a new global deal to combat climate change will require more ambitious targets. From: Committee on Climate Change, *Building a Low-Carbon Economy- the UK's contribution to tackling climate change*, Chapter 2.

<http://www.theccc.org.uk/pdf/TSO-ClimateChange.pdf>

⁵ CDP 2009 data was collected on behalf of 475 investors with assets of US \$55 trillion. www.cdproject.net

Background and Trends

Most companies report having targets

According to the FTSE 100 responses to CDP in 2009, the majority of these companies are setting targets to reduce their emissions or energy consumption.

As illustrated in figure 1, in 2009, 77% of FTSE 100 companies reported having some form of emission reduction target in place, while 7% reported that they did not have any targets in place. 5% of FTSE 100 companies reported that they were in the process of setting targets.

CO2-equivalent targets lead the way

There is a total of 144 targets reported by these 77 companies, indicating that it is common for a company to set more than one target. As illustrated in figure 2, targets are most frequently defined in terms of carbon dioxide equivalent emissions, (CO2-e), which is the accepted unit of measurement for greenhouse gases. A recent report by CDP, the “Carbon Chasm”, found this trend is also reflected globally amongst Global 100 companies.⁶ Energy consumption (28%) is also a popular target and benchmark as it is directly related to emissions but easier to measure and track over time.

Fig 1: Target Setting by FTSE 100 Companies

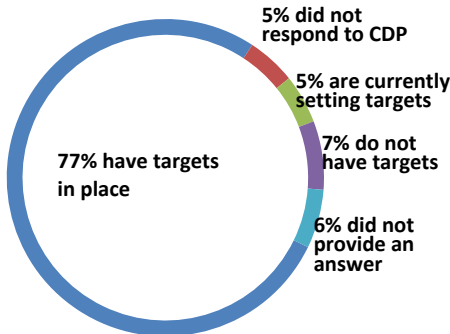
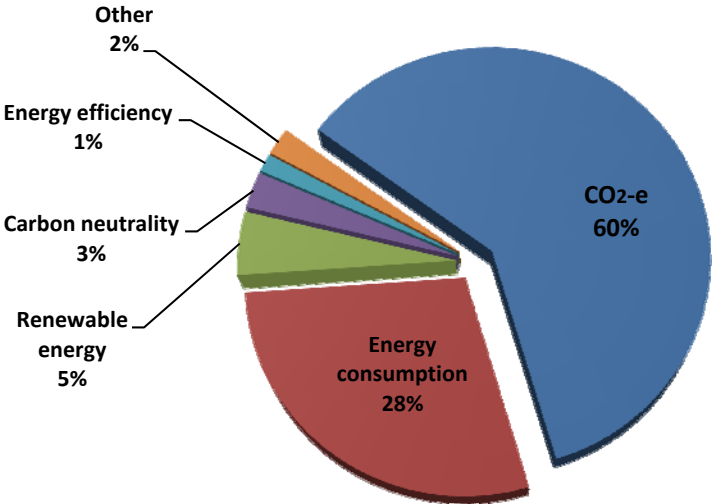


Fig 2: Types of Targets



“Our climate changes strategy is to minimise our energy consumptions and GHG emissions.”

Xstrata

“[Our targets are to] achieve a 26 % reduction on the 2005/06 baseline for 'owned' carbon emissions by 2012 (8% reduction from United Utilities activities and 18% from renewable energy contracts); halve our emissions by 2035; [and] continue our reduction of emissions beyond 2012 in line with the government targets for 2050.”

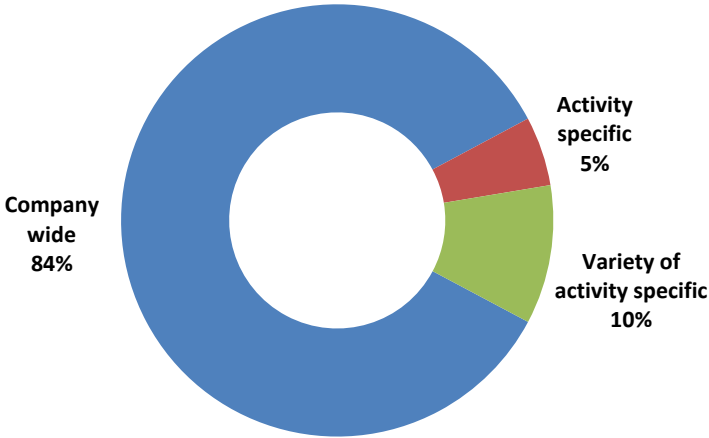
United Utilities

⁶ Carbon Disclosure Project, *the Carbon Chasm*. https://webadmin.cdproject.net/CDPResults/65_329_219_CDP-The-Carbon-Chasm-Final.pdf

Company-wide targets dominate

As illustrated in figure 3, 84% of target-setting companies set company-wide targets. 5% set targets tackling emissions from a particular activity within the company, and 10% of the companies set reduction targets tackling emissions from a variety of activities within the company.

Fig 3: Company-wide Targets



An activity specific target may be selected to pinpoint a precise part of the business where there is scope or requirement to cut emissions, in order to save costs or increase efficiency. They can also be simpler to establish than a company wide target. Whatever the scope of the target, companies must be explicit about how these targets relate to their company-wide emissions and set wider targets to complement more specific ones.

“Targets are group wide and cover all of GSK’s emissions from operations and transportation including the sales force, business air travel and product logistics.”

GlaxoSmithKline

“We have not as yet set a Group-wide energy reduction target as we are still in the process of understanding what our Group-wide impact is. However, PRUPIM has set a target to reduce carbon emission intensity by 20% on 2007 levels, by the end of 2010. This target is in line with the Government’s own commitments under the Climate Change Act, setting an 80% reduction target for CO2 emissions by 2050.”

Prudential

“BT has a worldwide carbon stabilisation intensity target of which the above is an integral part . By December 2020, BT Group will reduce its CO2e emission per unit of contribution to GDP by 80% against 1996/7 levels”

BT

Absolute targets most frequent

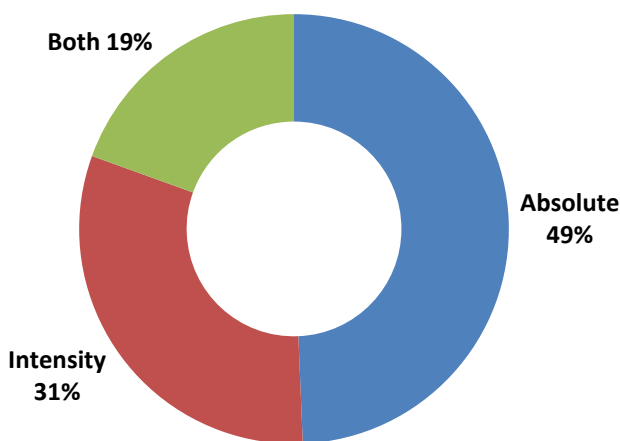
A major differentiator between targets is whether they are absolute or intensity based. Absolute emissions reduction targets are defined by the GHG Protocol as goals to “reduce absolute emissions over time”⁷ and are the most popular target type.

Intensity emissions reduction targets are defined as goals to “reduce the ratio of emissions relative to a business metric over time”.⁸ Intensity targets are popular across sectors as they allow companies to account for growth. As illustrated by figure 4, 31% of target setting companies set intensity targets only, 49% set absolute targets only, while 19% adopt both absolute and intensity targets.

Although setting intensity targets can be valuable for a company, the ultimate result of a company’s emissions reduction targets should be an absolute reduction in emissions. Such absolute reductions are required if we are to deliver in line with UK government targets and are not guaranteed by a reduction in emissions intensity. In fact, if a company’s activity grows at a faster rate than the emissions intensity reduction rate, absolute emissions will actually increase. By setting absolute targets, 68% of target setting FTSE 100 companies have committed to avoiding emissions growth.

It is important to note that many FTSE 100 companies are undertaking some form of emissions reduction commitments and are setting absolute and company-wide targets.

**Fig 4:
Absolute versus Intensity Targets**



“We have committed to reducing our absolute carbon emissions by 50% by 2020.”

Cadbury

“HSBC normalises its targets by employee in order to account for contraction and growth in the territories and businesses within which it operates.”

HSBC

“BHP Billiton’s main targets to achieve greenhouse gas emission reductions are based on emissions intensity and carbon-based energy intensity. As our business and greenhouse gas emissions are strongly dependant on global resource demand, intensity targets – rather than overall total emissions targets – are the most appropriate means of measuring performance against goals.”

BHP Billiton

⁷ The Greenhouse Gas Protocol, *A Corporate Accounting and Reporting Standard*, p.76.

<http://www.ghgprotocol.org/files/ghg-protocol-revised.pdf>

⁸ Ibid.

Methodology

The FTSE 100 average reduction rate of emissions will be evaluated against the reduction rate required to achieve the UK interim target. Recent recommendations set by the Committee on Climate Change, an independent body established under the Climate Change Act to advise the UK Government on its emissions reduction, state that to achieve the interim 2020 target we need an annual reduction rate of around 2-3%.

More specifically, according to the Committee on Climate Change:⁹

- An annual emissions reduction rate of 1.7% is required to comply with current legislation and achieve a 34% reduction in greenhouse gas emissions by 2020, compared to 1990 levels.
- An annual emissions reduction rate of 2.6% is needed to comply with intended legislation following a global deal to tackle climate change to achieve a 42% reduction in greenhouse gas emissions by 2020, compared to 1990 levels.

The full scope of the UK interim target depends on an agreement of a post 2012 global deal. Therefore, this report assumes that the UK will aim to achieve a 1.7% reduction until 2012 and a 2.6% reduction thereafter, achieving an overall reduction of 34%-42% by 2020. Considering this, CDP has calculated that:

- **A 2.4% annual reduction rate is required to meet the UK intended 2020 target.**

In order to evaluate how targets set by FTSE 100 companies compare with the UK target, this analysis uses the targets reported to CDP in 2009 by these companies to calculate their expected annual reduction rate. For this purpose, a total of 69 absolute and intensity CO₂-e emissions targets have been analysed. More than half of FTSE 100 companies (54 in total) supplied sufficient data for this calculation.

In order to estimate the absolute reductions that will be delivered by the intensity targets, these have been adjusted for a real GDP growth rate of 2.5% per annum. The assumption of a 2.5% annual growth rate is based on OECD figures from the past 20 years for real growth rates in industrialised countries.

In order to ensure the robustness of the analysis, it is based on conservative assumptions. We have not included those companies which do not report a target. Assuming they do not have any form of target, had they been included, the required per annum reductions would increase.

⁹ Committee on Climate Change, *Meeting Carbon Budgets- the need for a step change*, Executive Summary, p. 12. <http://www.theccc.org.uk/pdf/TSO-ClimateChange.pdf>

FTSE 100 Targets on the Right Track

CDP analysis is based on targets where sufficient data was provided to assess average annual reductions:

- Based on 37 targets, the average absolute reduction targets from the FTSE 100 will achieve a 3.6% annual absolute CO₂-e reduction within the target years.
- Based on 32 targets, the average intensity reduction targets from the FTSE 100 will achieve 3.7% annual CO₂-e intensity reduction, but when normalised for GDP growth, will achieve just 1.24% absolute reduction per annum.
- **The two types of targets combined will achieve a 2.5% average annual reduction in emissions.**

To comply with the UK 2020 interim target, an annual reduction rate of 2%-3% is needed. With a reduction rate of 2.5%, FTSE 100 companies, on average, are setting good targets. This average reduction rate is also higher than the Global 100 average reduction rate of 1.9%, suggesting that the UK's largest companies are more advanced in target setting than their global counterparts.¹⁰ However, the targets set by the most carbon intensive sectors, responsible for the majority of FTSE 100 emissions are not sufficiently ambitious and will not deliver reductions required by the UK Climate Change Act.

“A major shift in the pace of UK carbon emissions reduction must be achieved. In the five years before the first budget period (i.e. in 2003 to 2007) greenhouse gas (GHG) emissions were falling at less than 1% annually. They need now to fall at 2% annually on average in the first budget and thereafter, and 3% following a global deal at Copenhagen.”¹¹

Committee on Climate Change

¹⁰ Carbon Disclosure Project, *the Carbon Chasm*.
https://webadmin.cdproject.net/CDPResults/65_329_219_CDP-The-Carbon-Chasm-Final.pdf

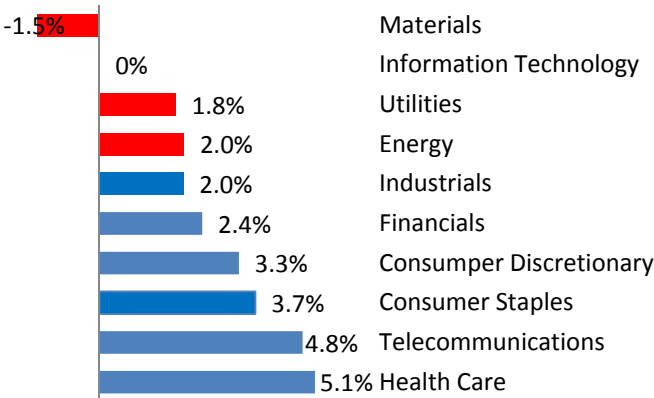
¹¹ Committee on Climate Change, *ibid.*, p. 12.
<http://www.theccc.org.uk/pdf/TSO-ClimateChange.pdf>

The Carbon Chasm: FTSE 100 Carbon Intensive Targets Lag Behind

The UK Climate Change Act sets a legally binding national target of an 80% reduction in greenhouse gas emissions by 2050. Although on average FTSE 100 companies are setting good targets, CDP analysis shows that some carbon intensive companies are not committed to sufficient cuts and there is a Carbon Chasm between required national cuts and those commitments from the most carbon intensive sectors. If we continue on the trajectory of emissions reductions set across carbon intensive sectors, we will not achieve the reduction required to hit the UK interim target which will also impact the UK's ability to reach its long-term target.

As illustrated in figure 5, the average reduction rate reported by FTSE 100 companies varies significantly by sector. Telecommunications and Health Care lead the way in setting strong targets, followed by Consumer Staples and Consumer Discretionary. Average reduction rates for these sectors are currently ahead of the recent recommendations presented by the Committee on Climate Change.

Fig 5: Average Sector Targets



However, the vast majority of emissions reported within the FTSE 100 come from the most energy intensive sectors, so, the reductions these sectors commit to will be key in delivering on UK targets. CDP data shows that although the Energy, Utilities and Materials sectors cover just 24 companies in the FTSE

100, they are currently responsible for 87% of all FTSE 100 reported emissions (Figure 6).¹²

Fig 6: Sectoral Contribution to Total FTSE 100 Reported Emissions

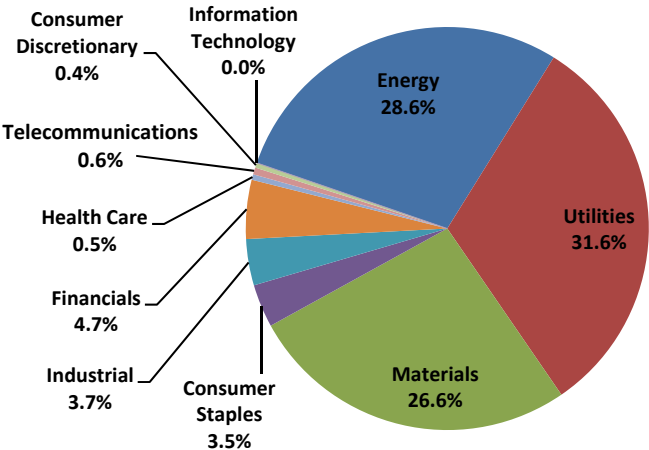
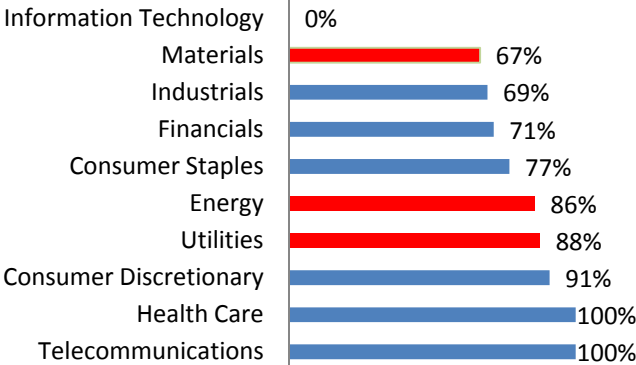


Fig 7: Percentage of Target-Reporting Companies per Sector



As illustrated in figure 7, the majority of these carbon intensive companies report having some form of target. However, do they go far enough to deliver on the UK national targets?

¹² This includes both scope 1 and scope 2 emissions. Total scope 1 and scope 2 to emissions reported equals 644,145,163 metric tonnes of CO2. The Energy, Utilities and Materials sectors within FTSE 100 are responsible for 558,550,926 metric tonnes of CO2. The IT sector is responsible for 0.0007% of total emissions.

CDP finds that on average, these energy intensive sectors do not have adequate targets:

- The high intensity **Materials** sector accounts for 27% of total FTSE 100 reported emissions. CDP found that the absolute and intensity targets set by this sector, when normalised for GDP growth, will achieve an actual annual 1.5% increase in emissions.
- The average annual reduction rate calculated for the **Energy** sector is 2%. These targets are insufficient to achieve the required 2.4% annual reduction rate.
- The **Utilities** sector has a major role to play in the UK’s plan to mitigate climate change. Reducing emissions from this sector and the supply of low-carbon electricity to other sectors is crucial if the UK is to reach its 2050 target. Some Utilities companies are clearly thinking ahead and setting strong targets, but the average annual reduction across the sector is only 1.8% per annum, falling short of the required 2.4%. We will need to see a significant increase in reduction rates in this sector in order to achieve the required cuts.
- Considering both absolute and adjusted intensity targets, the average reduction rate of the FTSE 100 carbon intensive Energy, Utilities and Materials sectors is 1.2% per annum.

Some companies are setting strong targets:

“We have set carbon budgets and emissions intensity targets for each of our lines of business: 45% reduction by 2020, 80% reduction by 2050, Reduce our UK building energy consumption by 20% by 2012.”

National Grid

“SSE is targeting a reduction in carbon intensity of 50%, to around 0.300kg/kWh or less from 2005/06 to 2020 in electricity produced at power stations in which it has an ownership or contractual interest...In 2009/10 we aim to facilitate the annual saving of at least 10,000,000 tonnes of CO2 by our electricity and gas customers.”

Scottish & Southern Energy

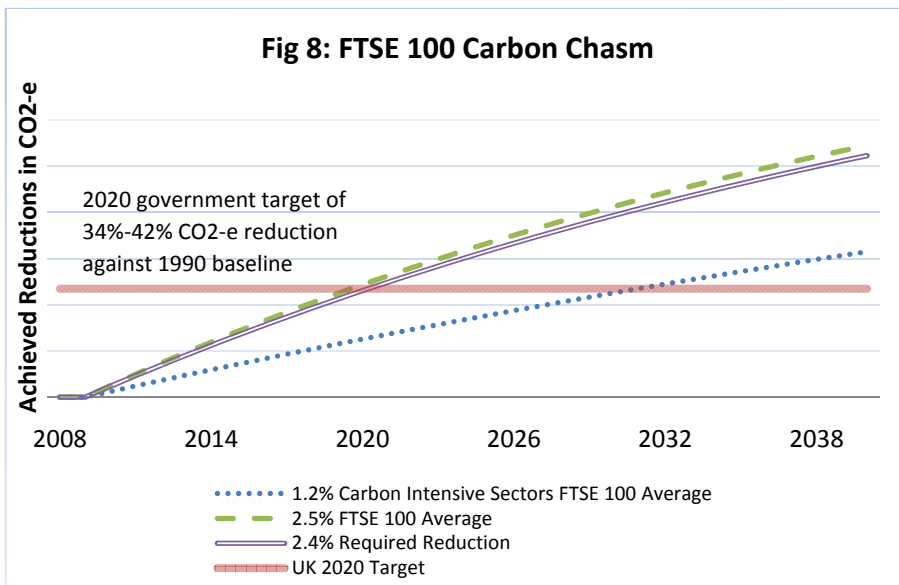


Figure 8 shows that across the FTSE 100, the average reduction rate is on track to meet UK 2020 targets. However the carbon intensive sectors, responsible for 87% of reported emissions are lagging behind in their targets. If we continue on the trajectory set by the carbon intensive FTSE 100 companies, of just 1.2% annual reduction in emissions, we will not achieve the required reduction until 2030, 10 years too late.

Recommendations

Companies should set company-wide targets and make absolute reductions explicit

Companies should set company-wide targets for the reduction of their absolute level of emissions. Intensity targets can be valuable for a company as it allows it to manage emissions and account for company growth. However, companies should make explicit the implication of these intensity targets on their absolute levels of emissions. Climate change can only be mitigated by a reduction in absolute emissions. The UK Climate Change Act calls for absolute emissions and new regulation such as the Carbon Reduction Commitment will require many thousands more organisations to better manage their carbon impact. Therefore companies setting intensity targets should complement these with absolute targets. Additionally, companies should report clearly whether their targets refer to an intensity or absolute reduction in emissions, and whether they are company-wide or activity specific.

Carbon intensive sectors need to set more aggressive targets

Targets are of particular importance in the carbon intensive sectors, because it is here that we will have to see very considerable cuts if we are to deliver on national targets. The Energy, Utilities and Materials parent sectors are responsible for nearly 90% of total reported FTSE 100 emissions. Although 79% of companies within these sectors reported having some sort of target in place, on average, the targets set by these sectors will not deliver in line with the targets set by the UK Climate Change Act, or indeed scientific recommendations of the IPCC. Although the UK is relying on the decarbonisation of the power sector in order to reach its long-term target, CDP data shows that only some companies have targets in place that recognise the radical change that is required in their sector within the next 40 years.

Conclusion

By setting strong transparent targets, a significant number of FTSE 100 companies, such as BT, Cadbury and National Grid are taking an important step towards reducing their emissions and setting a trend which others should follow. However CDP analysis finds that although some carbon intensive companies have strong targets, if we were all to follow the trajectory set by FTSE 100 carbon intensive sectors we will not deliver on UK government targets. These carbon intensive sectors are responsible for nearly 90% of total FTSE 100 reported emissions. If we continue on the trajectory set by the Energy, Utilities and Materials sectors we will not achieve the UK interim target until 2030, 10 years too late.

A failure to reduce emissions sufficiently by 2020, would require the UK to accelerate its rate of mitigation thereafter if it is to reach its 2050 target of an 80% reduction in greenhouse gases, against 1990 levels. Such acceleration would be costly and the delay will compromise the UK's ability to reach this long-term target. For many FTSE 100 companies operating internationally, this highlights the importance of building an international framework alongside strong national regulation, which sends the right signals to industry and enable businesses to set the required reduction targets.

The successful mitigation of climate change requires the collaboration of government and business, as well as individuals. The UK government has demonstrated global leadership by setting ambitious national targets for reducing carbon emissions and we need to see strong targets across the whole of business if we are to enable the UK to achieve its national goal.

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