



# The Low-Carbon Company

Mastering the low-carbon economy

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**CORPORATE CITIZENSHIP**  
Part of The Good Relations Group

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# Foreword

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Climate change is now widely recognised as one of the greatest risks to long-term business success in the world today. However, taking action to reduce greenhouse gas emissions, perhaps contrary to initial perceptions, has turned out to

be a profitable move for many businesses. . With the impetus for greater regulatory and commercial carbon constraints on the rise, in all likelihood it will make even more commercial sense to do so in the future.

It is not surprising then that forward-thinking companies are already exploring how they can continue to grow their businesses in a low-carbon world, or transition to new business models that benefit from a low-carbon economy.

This paper highlights some interesting examples of companies that are already making that shift. Each one offers a unique perspective into what's possible and what the future might hold across a range of sectors. We also cover very practical steps that all companies can take to develop low-carbon strategies of their own.

The business case for taking action is becoming increasingly clear. The question now remains, what will the nature of your company's low-carbon strategy be going forward?

A handwritten signature in dark ink, appearing to read 'Yohan Hill'.

**Yohan Hill**  
Associate Director

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*“Forward-thinking companies are already exploring how they can continue to grow their businesses in a low-carbon world, or transition to new business models that benefit from a low-carbon economy.”*

# Executive summary

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In December 2015 the UN Climate Change Conference will be held in Paris to decide the world's future climate change strategy. At that event, plans to move the world to a low-carbon trajectory and avoid the worst consequences of climate change will be discussed and agreed. Or at least that's the plan.

Leading companies have already seen the writing on the wall. There is no likely scenario in which carbon emissions go unconstrained, whether or not a global agreement is reached at Paris. The world's two largest greenhouse gas emitting economies, the United States (US) and China, have already agreed a deal ahead of Paris to reduce their greenhouse gas output, with China agreeing to cap emissions by 2030 and the US committing to deep reductions by 2025. A similar commitment to deep reductions has been recently made by the EU, with a binding target of at least 40% domestic reduction in greenhouse gases by 2030 compared to 1990. The challenge now is not one of predicting what, if anything, will be done about climate change, but of interpreting how companies should respond to the low-carbon signals coming from regulators and policy makers, as well as the associated risks posed by climate change.

This challenge requires both reducing greenhouse gas emissions, otherwise known as mitigation, as well as adjusting operations to prepare for the inevitable changes as a result of climate change, otherwise known as adaptation. Much of this paper focuses on company strategies for climate change mitigation.

This report is not aimed only at the specialist corporate responsibility or sustainability audience in mind. Climate change, as with other sustainability challenges, presents

real risks and opportunities for how businesses operate and needs to be considered as a mainstream business concern.

Chuck Hagel, the US Secretary of Defense recently described climate change as a "threat multiplier" and the 2014 Climate Change Adaptation Roadmap<sup>1</sup> from the US Department of Defense cites several national security risks posed by climate change, including rising global temperatures, changing precipitation patterns, climbing sea levels, and more extreme weather events. These risks apply equally to companies. The world has entered into an era of amplified risks as a result of climate change and other related factors.

Moreover, the regulatory and competitive landscape is already changing in response. Efforts to mitigate climate change are increasingly part of the commercial landscape, whether through the growing burden of greenhouse gas regulations, various types of carbon tax or the cost of meeting consumer or customer expectations around carbon.

However, the shift towards a low-carbon economy also presents radically new opportunities for businesses. We are already experiencing the rise of the sharing economy, growing demand for sustainable mobility solutions and the continued displacement of traditional power generation in favour of renewables. A low-carbon economy will need new low-carbon business models in order to thrive. As economies look to aggressively contract their carbon budgets, the winners will be those companies who master the capability to progressively squeeze carbon out of their operations and their value chains. The losers will be those that fail to do so, gradually upping their climate-related risk exposure in the process.

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# What does the low-carbon economy mean for business?

The Fifth Assessment Report from the Intergovernmental Panel on Climate Change (IPCC)<sup>i</sup> provides the clearest and most pressing guidance yet on the projected evolution of greenhouse gas emissions (GHG)<sup>1</sup> to 2100. We now know that to prevent the most severe impacts of climate change, by avoiding a rise in average global temperatures of above 2°C, the world’s cumulative greenhouse gas emissions should not exceed 825 Giga-tonnes of CO<sub>2</sub> equivalent by 2050. In simple terms, this means we will need to slash the global average of CO<sub>2</sub> energy emissions per capita by up to 70% by 2050,<sup>iii</sup> relative to current levels, and approach zero net emissions within the second half of the century.

Such a shift will require significant changes in fuel consumption patterns, energy efficiency, and agricultural practices, among other changes. Our most energy and carbon intensive industries will of course fall firmly under the spotlight, but the changes required will be all-pervasive. No sector or industry will be immune.

Understandably, it has taken time for governments to come to terms with what this might mean for their economies and societies at large, but pressure is now mounting on governments to act to accelerate the transition to a low-carbon economy. The European Union has already developed a roadmap for moving

to a low-carbon economy by 2050 which includes increased regulations and significant investment in clean energy. It seems inevitable that regulatory restrictions on carbon will tighten severely in order to limit carbon emissions in line with scientific consensus.

Already, the operating environment for businesses has shifted. The complex bonds between environmental, economic, social, political, and technological issues have created new challenges and opportunities. In our recent research paper, *Creating Resilient Strategies*,<sup>v</sup> we found that companies that focus on their wider operating context are better positioned for long-term growth. This context is precisely what businesses need to consider when building the case to decarbonise<sup>3</sup> operations and invest in low-carbon business models.

But if we are at the beginning of a shift in favour of low-carbon economics, what does it practically mean for business? What does it mean to have a low-carbon strategy in the low-carbon economy of the future?

This paper sets out to highlight the hallmarks of a low-carbon strategy and identify those leading companies that are already adapting their products and services to sustain performance and thrive for years to come.

**TABLE 1: TRENDS IMPACTING THE OPERATING CONTEXT**

TOPIC	TRENDS	CONTEXT AREA
Cost of natural disasters	Costs related to natural disasters have increased from \$50 billion a year in the 1980s to \$200 billion in the last decade. <sup>vi</sup>	Economic
Drought	The percentage of Earth’s land area stricken by serious drought more than doubled from the 1970s to the early 2000s. <sup>vii</sup>	Environmental
Carbon pricing	In 2014, about 40 national and over 20 sub-national jurisdictions have already implemented or scheduled emissions trading schemes or carbon taxes. Together, these jurisdictions account for more than 22% of global emissions. <sup>viii</sup>	Political
Urbanisation	Cities will account for 60% of global GDP growth between now and 2030. They will account for close to half of global energy-related GHG emissions. <sup>ix</sup>	Social
Technology	By 2017, enterprise spending on cloud computing will amount to a projected \$235 billion, triple the \$78 billion spent in 2011. <sup>x</sup>	Technological



## SPOTLIGHT ON REGULATORY TRENDS

The environmental regulatory landscape is constantly evolving. On a global scale, the United Nations Climate Change Conference, COP 21, to be held next year in Paris will attempt to establish a legally binding commitment from all countries to move towards a low-carbon economy. If an agreement can be reached, enforcement will need to be led by national governments since the United Nations does not have the capabilities to take on this role.

Companies cannot afford to wait to act. Several countries are ahead of international regulations and have already enacted regulations intended to decarbonise their economies. The European Union has long led the way in this regard with the EU Emissions Trading Scheme (launched in 2005) and various other directives, including those aimed at renewable energy, low-carbon fuels, energy-using products and clean-vehicles. Most recently the EU Energy Efficiency Directive has been introduced that requires all large companies to conduct energy audits at least once every four years. In the UK, all listed companies are now required to report on their global GHG emissions and year-on-year performance as part of their Annual Report, whilst the Carbon Reduction Commitment requires all large users of energy, public and private sector, to pay tax based on their annual emissions.

Asia, predicted by the IPCC to be the hardest hit by climate change impacts, must balance its booming economic developments with reducing carbon emissions.<sup>xi</sup> China's recent commitment to cap

greenhouse gas emissions by 2030 is a major part of the equation, but other smaller players should not be overlooked. Based on current usage and policies, it is estimated that energy demand in Vietnam will quadruple and coal consumption will double by 2030, from 2010 levels. In order to address this increase, the Vietnamese government has launched a National Target Plan to Respond to Climate Change, in addition to passing regulation on energy efficiency and conservation. Similarly Indonesia has recognised the urgency of low-carbon green growth and launched the National Action Plan Addressing Climate Change and pledging to reduce emissions by 26% by 2020, and by 41% if there is international support.

In the US, the landmark federal ruling in favour of the Environmental Protection Agency's (EPA) right to regulate carbon dioxide emissions under the Clean Air Act marks a significant turning point in climate change regulation. At least 29 of the largest US companies, including General Electric, Microsoft and Exxon Mobil have announced that they are planning their future growth and financial forecasting on the expectation that the US government will force them to pay a price for carbon pollution as a way to control negative environmental effects.<sup>xii</sup>

These are just some of the low-carbon schemes that have been introduced around the world as regulators grapple with the imperative to act on carbon. What is clear, however, is that companies face an increasingly complex regulatory landscape globally, all geared towards driving carbon reduction.

*"Companies face an increasingly complex regulatory landscape globally, all geared towards driving carbon reduction."*

<sup>1</sup>A greenhouse gas is any gas in the atmosphere which absorbs heat, and thereby keeps the planet's atmosphere warmer than it otherwise would be. The main GHGs in the Earth's atmosphere are water vapour, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and ozone. GHGs occur naturally in the Earth's atmosphere, but human activities, such as the burning of fossil fuels, are increasing the levels of GHGs in the atmosphere, causing global warming and climate change. (Ecometrica, August 2012).

<sup>2</sup>A low-carbon economy can be defined as one that maximises gross domestic product (GDP) and job growth while minimising carbon emissions and the subsequent impacts to the atmosphere.




<sup>3</sup>Decarbonisation can be defined as the removal of carbon emissions from a company's business footprint.

# What are the business drivers for the low-carbon company?

The motivation for transitioning to a low-carbon business strategy is often driven by risk. While there are inherent risks to business from climate change, there are also significant opportunities for companies to capitalise on this transition and move towards a

low-carbon strategy in the future. The opportunity to achieve profitable growth lies in gaining a competitive advantage through new products and service innovations, lowering operating costs and attracting investment.

**TABLE 2: LOW-CARBON RISK AND OPPORTUNITY DRIVERS**

TYPE	RISK	OPPORTUNITY
 <b>Regulatory</b>	<p>Companies that do not address the inevitable regulatory changes are at risk of higher costs. Governments have already started to impose carbon taxes, cap and trade systems, and energy efficiency standards, among other regulations, which will increase operating costs for carbon-intensive businesses.</p>	<p>Companies can in some cases pre-empt regulation by taking steps to proactively and voluntarily reduce their GHG emissions. Additionally, internal carbon pricing can help to anticipate the effects of externally imposed pricing schemes, driving proactive carbon-efficiency measures.</p>
 <b>Investment</b>	<p>Those that do not develop a carbon strategy or move towards low-carbon alternatives are at risk of losing investors. We are already beginning to see investors divest from fossil fuel industries, with more than 800 global investors pledging to withdraw from fossil fuel investments over the next five years.<sup>xiii</sup> This type of carbon-sensitive investment behaviour may well increase going forward.</p>	<p>Companies that successfully address climate change impacts as part of their business strategy will become increasingly attractive for investment. A recent CDP report that reviewed companies listed on the S&amp;P 500 found that corporations managing and preparing for climate change secure a 18% higher return-on-investment than their competitors.<sup>xiv</sup> The investor community is beginning to acknowledge that this information should be assessed when evaluating the future shareholder value of a company, and there is now broad recognition among companies of the importance of reporting climate change information in a consistent manner in their annual reports.<sup>xv</sup></p>
 <b>Competitive</b>	<p>The lack of a carbon strategy can be viewed as a competitive risk. A long-term carbon strategy is now seen as a must have for companies, particularly in carbon-intensive sectors such as oil and gas or airlines. In these industries, companies often have forward looking plans that extend up to 2050. Additionally, investor-led surveys like the Dow Jones Sustainability Index and CDP look specifically at a company's carbon strategy to identify those companies that are a strong long-term investment. The expectation is that a company understands the issue and has created a plan to manage it accordingly.</p>	<p>Significant opportunities exist to develop new products or services that can drastically reduce greenhouse gas emissions, while enabling growth. The car-sharing model is a good example of how disruptive innovation can change the marketplace, while delivering clear environmental benefits. The automotive industry has of course taken notice. Earlier this year, Ford's newly appointed CEO argued the company should think of itself as a "personal mobility company" and has been championing the company's own projects related to car-sharing and incorporating new carbon-saving technology into its vehicles. Similar opportunities may exist across a range of sectors as companies seek out new low-carbon business models.</p>



## SPOTLIGHT ON THE INSURANCE INDUSTRY

While insurance companies produce relatively few direct emissions, the industry faces significant risks as a result of climate change. The changing global climate has made risk modelling, the very core of the industry, more difficult. While past experience used to be an accurate predictor of future likelihood, this is no longer the case. A recent study by Ceres found that a majority of US insurance companies are not effectively addressing climate-related risks and opportunities.<sup>xvii</sup>

Insurance companies are increasingly exposed to greater risks than in the past. The number of billion-dollar economic loss events has nearly doubled over the past ten years.<sup>xviii</sup> This has increased the number of insurance pay-outs. The 2011 floods in Thailand,

which had a knock-on effect on global supply chains in the automotive and technology sectors, resulted in insurance market loss of approximately US\$18 billion.<sup>xix</sup> The high costs associated with these events resulted in withdraw of insurance coverage in certain areas.

However, despite the increasing risks, there are opportunities for the industry to develop new products that encourage the transition to a low-carbon economy, such as discounted premiums for energy efficient buildings or for behaviours that generate lower greenhouse gas emissions. There are also opportunities to incentivise the building of more resilient infrastructure going forward, lowering future costs.

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# Examples of low-carbon strategies

While many companies have already adopted climate change commitments or set emissions reduction targets, a number of low-carbon leaders are beginning to implement very strategic initiatives to drive low-carbon performance within their operations. These companies recognise business as usual will no longer suffice and have started to make fundamental changes to the way they function.

Table 3 shows a number of examples of such companies that are taking steps towards decarbonisation. This list is by no means exhaustive, nor does it profess to highlight the very best examples from each sector. Rather it is intended to demonstrate a range of different leading edge approaches from around the world and from across a variety of sectors, with the recognition that many more examples of low-carbon leaders do in fact exist.

**TABLE 3: LOW-CARBON LEADERS**

COMPANY	ACTIONS
<b>Apple</b>	Apple is a consumer electronics company. The company has a goal to power all of its corporate offices, retail stores, and data centres entirely with energy from renewable sources. It is 94% of the way towards achieving this goal and already powers 100% of data centres with renewable energy. The company's North Carolina data centre was the first of its size to earn LEED Platinum certification from the U.S. Green Building Council. <sup>xx</sup>
<b>BT Group</b>	BT Group is a communication services company serving customers in the UK and businesses globally. Its environmental programme, Net Good, has the goal to help customers reduce carbon emissions by at least three times the end-to-end carbon impact of its business by 2020. The company aims to achieve this goal through the development of products and services that reduce customers' emissions, including those that reduce travel and increase energy efficiency through cloud computing. <sup>xxi</sup>
<b>Caterpillar</b>	Caterpillar is a machinery and engine manufacturer. The company has developed a new business model for remanufactured machines. Caterpillar takes back used machines and breaks them down to reuse the parts. These machines cost significantly less than new products and the majority of the cost is covered by a deposit that is refunded when the machine is returned. The process lowers greenhouse gas production and minimises the need for raw materials. <sup>xxii</sup>
<b>City Developments Limited</b>	City Developments Limited is a Singaporean property developer, with projects around the world. CDL has committed to 22% reduction in total carbon emissions by 2020, relative to 2007, and has a "net zero" carbon commitment, which involves financing carbon offset projects around Asia. CDL is also collaborating with the Singapore's National Parks Board on a zero-energy gallery, which showcases practices for buildings that produce more energy than is required for their operations. <sup>xxiii</sup>
<b>Diageo</b>	Diageo is a global alcoholic beverage company. The company has committed to halving its direct emissions by 2015 by improving efficiency and investing in renewable energy. The company is working to turn the by-products of its breweries and distilleries into on-site renewable energy sources. <sup>xxiv</sup>
<b>GlaxoSmithKline</b>	GlaxoSmithKline is a global healthcare company focused on pharmaceuticals, vaccines, and consumer healthcare. A majority of its carbon footprint is outside of its direct operations which accounted for 14% of its footprint in 2013. Approximately 40% of its footprint is attributable to raw materials and 44% is attributable to the use of its products. For this reason, the company has set the stretching goal of being carbon neutral across its value chain by 2050. <sup>xxv</sup>
<b>Jaguar Land Rover</b>	Jaguar Land Rover is a multinational automotive company. In addition to reducing its operating impacts, the company focuses on reducing the environmental impact of its products. Jaguar Land Rover is looking to future trends and regulations in mobility, including the use of electric vehicles and increasing fuel efficiency standards for vehicles. The company has set a target to reduce fleet tailpipe emissions by 25% by 2015. To do so, Jaguar Land Rover has invested in R&D efforts to increase efficiency, develop hybrid vehicles, and lightweight its fleet. <sup>xxvi</sup>

**Holcim** Holcim is a cement company in an industry that produces approximately 5% of all manmade CO<sub>2</sub> emissions. Recognising the transition to a low-carbon economy, Holcim has committed to maintaining net absolute CO<sub>2</sub> emissions at 2013 levels, across the whole lifecycle of its products until 2030. This will require minimising impacts across the value chain to offset any increases in direct emissions due to business growth. The company has set interim reduction targets for 2015 and 2020.<sup>xxxvii</sup>

**Infosys** Infosys is an Indian information technology company with operations in more than 30 countries. As energy demand in India continues to rise, the company continues to look for opportunities to reduce consumption. As part of its new campus, Infosys built two identical new structures. However, one building incorporated energy efficiency technology into its design and the other was built using conventional methods. The energy efficient building cost 1% less to build and reduced energy bills by 38%. The company plans to publish the data in order to help other companies in India build the business case for sustainable construction.<sup>xxxviii</sup>

**Mars** Mars is a privately held global food manufacturer. The company identified climate change as one of its most material issues and has committed to eliminating GHG emissions for its factories and offices by 2040, making its operations 'sustainable in a generation.' To reach this goal, Mars will improve operational efficiency, invest in capital efficiency, develop new technology, and generate renewable energy. The company also recognises over 85% of its emissions are found in its supply chain and is committed to sourcing 100% of its key ingredients from certified sources.<sup>xxxix</sup>

**Microsoft** Microsoft is a software company committed to being carbon neutral, by improving efficiency, purchasing renewable energy and building accountability internally. The company has set an internal price for carbon that reflects true cost accounting for activities like business travel and utility costs. Microsoft charges its divisions, ranging from data centres to sales and marketing, a fee for carbon and puts the money in a central investment fund. Funds are used to purchase renewable energy and carbon offsets.<sup>xxxix</sup>

**Novelis** Novelis produces rolled aluminium and is the world's largest purchaser of aluminium. The company recognised it can significantly reduce its environmental impacts by moving from primary aluminium to recycled aluminium, which requires 95% less energy and produces 95% fewer greenhouse gas emissions (GHG) than manufacturing primary aluminium. The company has set an aggressive target of 80% recycled aluminium in its products by 2020. Novelis is also working with its customers to develop new, more recyclable products and closed-loop recycling systems to help ensure security of supply. The company states this business strategy allows it to be well positioned for future carbon tax measures.<sup>xxxi</sup>

**Tesla Motors** Tesla Motors designs, manufactures, and sells electric vehicles. The company has identified a gap in the marketplace for cars that compete with internal combustion engines but produce significantly fewer emissions and has developed electric vehicles to fill this gap. In June 2014, the company announced it would allow others to use its technology under patent in good faith, including both vehicle and charging station technologies. Tesla believes opening patents will accelerate the growth of the electric vehicle industry.<sup>xxxii</sup>

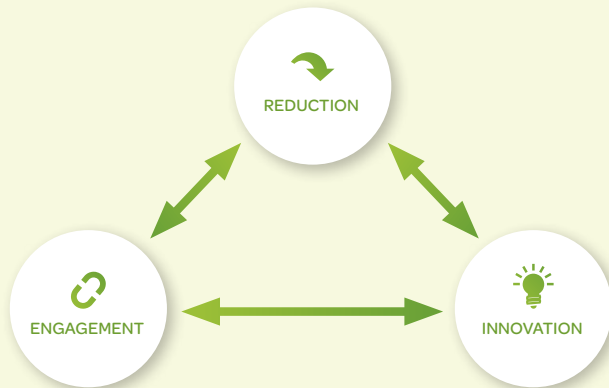
**Unilever** Unilever is a fast moving consumer goods company with more than 400 brands globally. It has set the goal to halve the greenhouse gas impact of its products across the lifecycle between 2010 and 2020, covering the entire value chain from sourcing to consumer disposal. The company has set 11 separate targets for specific emissions areas including consumer use targets for washing clothes, skin-cleaning and hair-washing. Many of these initiatives require the development and adoption of new product lines such as dry wash shampoo and cold-rinse laundry detergents.

**The Walt Disney Company** The Walt Disney Company is a diversified family entertainment and media company. Driven by stakeholder concerns and a changing regulatory environment, it has set a long-term goal of zero net greenhouse gas emissions from assets that it owns and operates with an interim goal to reduce net emissions by 50% from 2012 levels by 2020. Walt Disney relied on the IPCC scientific guidelines when setting its 2020 target. To make carbon a part of financial conversations, the company has also set an internal price on carbon.<sup>xxxiii</sup>

**Whitbread** Whitbread is a multinational hotel and restaurant business. The company is committed to embedding new sustainable design concepts into its new hotel construction projects, so that upfront investments in higher building costs are off-set by long-term cost savings achieved through reduced energy and water use over time. Whitbread's newest hotel concept will be powered 100% by renewable energy and use 30% less energy than current building regulations.<sup>xxxiv</sup>

# Hallmarks of a low-carbon strategy

Corporate Citizenship has identified three key components of effective low-carbon strategies illustrated below.



## REDUCTION

**Setting stretching targets** – While many companies have set emissions reduction targets, often these targets are not stretching enough. Those companies that are progressing towards a low-carbon economy set targets in line with the IPCC low-carbon scenario, limiting global temperature rise to 2°C. These goals should not only include the emissions from a company's direct operations, but also ideally include aspects of the wider value chain where the business can have significant influence.

**Evaluating financial impacts** – Decarbonisation requires taking steps to define the financial implications of physical, regulatory, and other climate related impacts. Understanding these impacts enables companies to adopt a long-term strategy to address them. Strategies often include increasing the use of renewable energy, improving efficiency of products, and offsetting unavoidable emissions. By evaluating the financial implications, companies are better able to justify the capital expenditure sometimes needed to deliver carbon-saving results. In this regard, it may also be useful to understand the impact of different carbon-pricing scenarios on the viability of longer-term investments.

**Exploring options for carbon offsetting and insetting** – As companies approach the boundaries of what they can do economically to reduce the carbon footprint of their direct operations, there may be scope to explore the purchase of voluntary carbon credits, generated by the emission reduction activity of a third-party (i.e. carbon offsetting) or investing in emission reducing activity within the company's sphere of influence or value chain (i.e. so-called 'carbon insetting').

## INNOVATION

**Developing new products and business models** – New products and business models present a significant opportunity for companies to differentiate themselves from their competitors or enter new markets.

Companies that emphasise innovation as a pathway to decarbonisation recognise that their current products may not necessarily meet the needs of the low-carbon economy of the future and that there is a need to develop viable low-carbon alternatives.

**Cross-sector collaboration** – Decarbonisation requires large scale mobilisation and in some areas collaboration may be the only route to achieve significant progress. Companies that adopt this approach are often able to leverage cross-sectorial knowledge and expertise in tackling difficult issues, or create shared cross-sectorial objectives to broaden the impact of their stand-alone efforts and accelerate change.

## ENGAGEMENT

**Influencing the value chain** – Decarbonisation requires a company to engage with its value chain to drive systematic improvements in carbon performance. Companies that map their carbon footprint across the value chain often recognise that large gains can be made by addressing the impacts of parts of the value chain outside of their direct control. Working with suppliers to reduce their emissions or enabling customers to minimise their environmental footprint can often be a key lever for transformative change.

**Establishing accountability** – A meaningful low-carbon strategy should not be devoid of accountability. Performance on carbon has to be part of what incentivises individuals within an organisation to be accountable for achieving carbon abatement. Leading companies often achieve this by linking senior-level remuneration to carbon performance, setting internal carbon budgets, or embedding external benchmarks as part of a balance scorecard.

# Conclusion

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The future outlook for carbon is clear. It is no longer a question of if companies will be required to significantly reduce emissions going forward; it is just a matter of when and by how much. Those that don't adapt will be met with serious operational, financial, and reputational consequences. Public and regulatory pressure has accelerated the transition towards radical decarbonisation and companies have already begun to respond.

At Corporate Citizenship, we advise leading companies on developing low-carbon strategies. For companies looking to develop or advance their strategies, here are four important next steps to consider:

1. Move from simply disclosing your carbon footprint to identifying reduction opportunities. Most large businesses are already measuring and reporting their greenhouse gas emissions as part of mandatory and voluntary reporting requirements, but relatively few are taking the next steps to proactively identify opportunities to change behaviour, improve operational practices and processes to make them less carbon intensive, or invest in new technology or new business models in order to decouple growth from emissions.
2. Move from a short-term focus on carbon to long-term goals. Too often companies look to short term targets and year-on-year performance, without considering the long-term trajectory of the business, and the associated risks and opportunities linked to carbon. Take a step back from your annual targets and consider what the future carbon trajectory should be for your company over the next five, ten, even twenty years. This can lead to useful perspectives that inform the nature of current actions and priorities.

3. Share your progress whether or not you've met publically-stated goals. There is a systemic lack of transparency around companies who have set long-term targets and not achieved them. Those lessons should not be hidden, but shared alongside explanations that shed light on why these might not have been achieved and what was learned. We should both applaud and learn from those who, many years ago with much less knowledge than we have today, aimed high.
4. Secure the appropriate resources necessary to meet the challenge. Amid competing and urgent business demands, a company's carbon strategy does not always receive the attention it requires. Make the case for adequate time and resources, as part of your business plan, to evaluate the risks and consider your approach going forward.

As this report illustrates, many companies are already taking up the challenge of developing and implementing low-carbon strategies for their businesses, with little fuss or fanfare. Such strategies will become commonplace in the low-carbon economy of the future. However, in many respects the future is already here. Companies that best respond to the changing climate ahead of the wider marketplace are those that are most likely to thrive.

A low-carbon business strategy does not have to be onerous, but it does require effort and long-term thinking if we are to truly transition to a viable low-carbon economy. Take our insights on-board and take the next steps required in your low-carbon journey.

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Corporate Citizenship is a global business consultancy that uses clear insight and a simplified approach to sustainability to deliver growth and long-term value for business and society. Our work spans Europe, North America, Asia, Africa and Latin America. We help our clients make the smart choices that will enable them to survive and thrive in an increasingly challenging business environment. Corporate Citizenship promotes the idea that companies can be a

force for good. We advise our global client list on a number of areas: strategy, environment, reporting, supply chain, socio-economic impacts, inclusive business models and assurance. We are a CDP consultancy partner in the United Kingdom. Our long standing clients include Unilever, Abbott and GoldenAgri.

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