



Goal 13 Impact Platform: emerging findings

How companies are
managing the transition
to a low-carbon, resilient
and valuable future

September 2020

Goal 13
Impact Platform

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O Chapter
Zero
The Directors' Climate Forum

A4S
ACCOUNTING FOR
SUSTAINABILITY

DELL Technologies

Met Office

“The next ten years will throw up so many climate change opportunities and challenges, and you have to start somewhere. We will never have all the answers, so much of the learning will happen along the way.”

VP Global Corporate Responsibility (Hospitality)



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DELL Technologies

Met Office

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Foreword from CBI

Recent years have seen the public imagination captured by the need to respond to the climate emergency in a way that few could have predicted. Mirroring this, the imperative to curb emissions and operate more sustainably is now also a regular topic for discussion across boardroom tables throughout the country, even during this extraordinary coronavirus crisis.

The reasons for this shift in the corporate agenda are clear. Businesses are not immune from the impact of extreme weather events that are sweeping across the globe with increased regularity. Their investors are increasingly measuring environmental performance alongside financial performance.

Their customers are demanding sustainability strategies with real substance rather than superficial branding exercises. And with strong evidence that more sustainable companies are often more successful ones, many are looking to exploit the opportunities for growth associated with going green.

As co-hosts of COP26 next year, the UK has a unique opportunity to show global leadership in taking meaningful action against climate change. Businesses must be at the forefront of this effort. While the 2050 net zero target is undoubtedly the right ambition, it will only be realised with corporate buy-in and with the innovation and dynamism brought by the private sector. Within individual firms pledges to cut emissions in line with the target must be backed up with credible strategies and investment to deliver them.

That is why the CBI is proud to be part of the Goal 13 Impact initiative, which will shine a light on how the business community is stepping up to the challenge, and in doing so create a new resource for more firms to learn from others' experience. The early insights based on in-depth interviews with over 100 business leaders are captured in this report. They start to identify the drivers that are motivating change within business, the measures that have made the most substantial impact and the common barriers preventing faster progress.

Meeting net zero will require new levels of collaboration among businesses. As the Goal 13 Impact Platform grows it will facilitate knowledge sharing across sectors, enabling companies to make more effective plans and tackle shared challenges together.



Carolyn Fairbairn, Director-General
Confederation of British Industry (CBI)



"With strong evidence that more sustainable companies are often more successful ones, many are looking to exploit the opportunities for growth associated with going green."

Foreword from Deloitte

Climate change will have a profoundly destabilising impact on our environment, global economy and society if we fail to halve global greenhouse gas emissions within a decade.



This urgency to act also represents a significant opportunity for business to lead and take immediate action to improve operational efficiencies, develop new business strategies to adapt to a lower carbon future, engage and empower talent, enhance capital market attractiveness, and build resilience for future climate disruption. As climate action increasingly becomes a business imperative, now is the time for organisations to reimagine their business models and how they engage with their customers, stakeholders, investors and suppliers.

The core objective of the Goal 13 Impact Platform is to support organisations in managing this transition to a low-carbon and resilient future, encouraging both ambitious commitments and pragmatic action. I am extremely proud that Deloitte is involved in this partnership, as it aligns well with our ambition to drive responsible climate choices within our organisation and beyond, and our purpose – to make an impact that matters for our clients, people and society.



Sharon Thorne, Global Board Chair
Deloitte LLP

The report provides valuable cross-sector insights into the actions organisations are pursuing to manage their climate transition, and what barriers are inhibiting progress. The response we've had from contributing organisations so far signals a clear intention to drive collaboration and action, and is a positive indication of how powerful the Goal 13 Impact Platform will be going forward.

"As climate action increasingly becomes a business imperative, now is the time for organisations to reimagine their business models and how they engage with their customers, stakeholders, investors and suppliers."





Aligned public and private investment across value chains is required to effect systemic change.

Key messages

The vision for the Goal 13 Impact Platform is to support organisations in managing the transition to a low carbon, resilient and valuable future, encouraging both ambitious commitments and pragmatic action. Insights are based on ongoing research with businesses of all sectors and sizes, initially in the UK but now expanding globally.

61% of the companies interviewed have at least one significant headline carbon reduction target. 43% of the companies interviewed have set net-zero or carbon neutral targets. These are typically more recent, longer-term and represent bolder ambitions than companies' absolute carbon reduction targets. However, more than half of these have constrained boundaries to their own operations, rather than the broader value chain.

Companies are taking steps to integrate their climate programmes with their corporate strategy, performance and culture; however, 65% are still in the early stages of that journey. Whilst executive sponsorship is common, sustainability functions remain the primary stewards of setting and delivering climate strategies, targets and initiatives.

The mix of company initiatives reflects this focus, with 45% of initiatives impacting company operations, such as energy and fleet efficiency. Many companies, however, are increasingly engaging with customers on climate change and offering low-carbon products and services, with 40% of initiatives involving downstream engagement. This reflects growing recognition of opportunities to market and monetise low-carbon products & services.

Only 27% of initiatives have an impact on sourcing and the supply chain. These initiatives present a significant challenge considering inconsistency in emissions measurement, fragmented and often global supply chains, misaligned ownership and incentive models in some parts of the value chain, and limited coordination on investment both within and across sectors.

72% of initiatives implemented to date have an attributable payback period, and many of these are short-term. Operational efficiencies with short-term payback are proving valuable for gaining traction, but to realise their targets companies need to look to longer-term, more transformative initiatives both within their organisations and across the value chain.

45% of respondents cite policy and regulation as significant barriers to progress. The lack of clear policy roadmaps contributes to uncertainty, and companies are seeking a more coordinated, cross-sector approach to enable the effective deployment of technology and infrastructure.

Momentum is building to deliver large-scale climate action and there is a real sense of optimism. However, delivering on the Paris Agreement will require more ambitious company commitments and action that is fully integrated with the core business strategy and operating model. As we build towards COP26, aligned public and private investment, consistent standards, and collaboration across value chains are critical to effecting systemic change.

For general enquiries or to contribute on behalf of your company, please contact: goal13ImpactPlatform@deloitte.co.uk



c.80% of all respondents say that their climate ambition affects their investment decisions, underscoring the expected scale of impact on the business.



Executive summary

The Goal 13 Impact Platform is the result of a partnership between the Confederation of British Industry, Deloitte, Chapter Zero, The Prince's Accounting for Sustainability Project, Dell Technologies and the Met Office. The aim is to **accelerate progress in the climate transition**, in order to reduce emissions and enhance resilience. We aim to do this by publishing company insights, inspiring further climate commitments and action, and facilitating collaboration.

The partners have undertaken research with c.100 companies to date, with respondents including strategy, sustainability, finance, and procurement leaders, executives, and board directors. Interviews have captured company-specific insights into climate commitments, the organisation of climate programmes, the most impactful initiatives, their climate and commercial impact, barriers to progress and lessons learned. The purpose of this report is to share the emerging insights from interviews to date.

Commitments are becoming more ambitious, but more is needed to increase their scale and scope

Headline targets addressing emissions are becoming more widespread and ambitious, with **c.45% of respondents now having a net-zero or carbon neutral target**.

The net-zero commitments are typically more recent, longer-term, and represent bolder ambition than the absolute carbon reduction targets. However, only approximately half of the headline carbon reduction targets appear to be science-based targets, and more than half of the companies define their targets within a limited boundary.

Some companies with the majority of their emissions in the supply chain are constraining their targets to scopes 1 and 2.

The underlying motivations, and approaches used, to make climate commitments and set targets also differ. For some, a bold and ambitious target is critical to signalling a direction of travel and galvanising change, while others take a more conservative approach and spend time and effort ensuring plans and infrastructure are in place before making their commitments. Some of those without targets are in the process of developing them, but others do not yet feel ready to set ambitious targets; reasons vary but include technology limitations, for example companies in chemicals and shipping.

The majority (c.80%) of all respondents say that their climate ambition affects their investment decisions, underscoring the expected scale of impact on the business.

Companies are feeling pressure from all stakeholders

More than half of respondents talk about broader societal shifts or implications for brand and reputation as drivers for change, reflecting the growing expectation for companies to be credible players in the climate transition. There is a sense that this has been accelerating, in particular over the last 18 months.

Customers are seen as the strongest influence across both B2B and B2C companies, with consumers expecting brands to offer climate-friendly products and services as their own consumption behaviours change, and business customers looking to decarbonise their own supply chains due to regulation or pressure from stakeholders.



Other important stakeholder influences on climate action include **employee retention and acquisition**, meeting the expectations of **investors**, changes introduced by **regulators and policy makers**, and **clear direction from executive and board members** who view this as a strategic opportunity. Expectations of direct **commercial returns** also help to catalyse change, not only from cost reduction but increasingly through new market opportunities. **External reporting requirements** such as CDP and TCFD are driving both the need for transparency and more cohesive and strategic responses to emerging risks and opportunities.

In many cases the climate programmes remain siloed, although many are working to embed programmes better across the business

We have identified four stages of programme maturity, on the basis of four factors: the positioning of the agenda in the organisation, the scope of action across mitigation and adaptation, who is involved and the level of coordination, and management between different climate related activities. The largest concentration of companies is at the earlier stages of maturity:

- **Stage 1: Overlay** (c.25% of respondents): Climate initiatives are pursued separately with limited alignment to the broader business;
- **Stage 2: Priority initiative** (c.40%): There is good leadership buy-in, a number of teams from across the organisation are involved in delivery, however the pursuit of climate initiatives has no fundamental impact on the organisation's business model;
- **Stage 3: Driver of transformation** (c.30%): Climate initiatives are viewed as a top priority and are aligned to the overall organisational strategy, the delivery of initiatives involves a significant number of dedicated resources, and there are transformational changes to the company's business model underway; and
- **Stage 4: Fully Integrated** (c.5%): The climate programme is fully aligned to and influences the overall organisational purpose and strategy, initiatives are fully integrated within wider business activities and the operating model, climate related issues continuously shape the organisation's business model, employees are equipped with the knowledge, skills and tools to deliver, and strategic processes and decisions are designed to deliver the required outcomes.

While there is clearly some way to go in fully integrating climate activities into businesses, most respondents are making climate action more central, broadening the scope of the way they are considering climate change, involving more of their business, and improving the level of cross-functional coordination.

Companies are primarily focusing on their operations, but supplier and customer engagement is increasingly important

A significant proportion (c.45%) of initiatives mentioned by respondents impact their **own operations**, such as energy efficiency in buildings and production, fleet efficiency and waste reduction. However, there is growing recognition of opportunities to market and monetise low-carbon products and services, with c.40% of initiatives impacting **customer or consumer-facing activity**. There is also recognition of the need to focus on closer engagement with suppliers, particularly with more pressure for targets to consider scope 3, with c.25% of initiatives impacting **supply chain and sourcing**. However, significant barriers remain to implementing these initiatives, including supply chain fragmentation and issues with data transparency and consistency.

Greater focus on climate initiatives also happens at a time when most organisations are becoming more sophisticated at **embedding digital technology**, partly catalysed by COVID-19. Respondents often mention data and technology as important enablers of their initiatives, and the effective use of data insights to drive efficiency gains and reduce emissions.

The majority (c.80%) of initiatives raised by respondents are focused on **emissions reduction**, while only c.15% were designed to improve **asset resilience**. Companies citing adaptation include food and beverage companies with supply chains and operations in regions suffering the greatest impacts of climate change, and real estate and construction firms taking advantage of market opportunities around resilient infrastructure.



Many companies have looked at efficiency initiatives as a more commercially acceptable way to start their climate journey, with c.40% of the initiatives associated with **OpEx reduction impact** and c.10% with **CapEx reduction**. However, companies are increasingly considering initiatives that open up opportunities for revenue growth: c.25% of the initiatives carry revenue upside that **strengthens the existing business**, and c.40% of the initiatives where the company is able to access **new market opportunities**. c.70% of initiatives have a directly attributable payback period, however some initiatives do not have a specific commercial return or business case and are instead executed to build foundational capabilities (such as in data), or are seen as critical for protecting existing revenue streams.

Unclear policy roadmaps, industry structures and other barriers are inhibiting progress

The most frequently cited external barrier is an **uncertain policy and regulatory environment**. This leads to concerns around, for example, who will pay for the significant costs of upgrading assets to meet new regulations, and the future cost scenarios for different types of energy. Coherent policy across jurisdictions is also an issue for those with significant international footprints. **Industry structure** often creates challenges, and there are concerns about the differences between geographic markets, a lack of shared responsibility up and down the value chain, a lack of consistency in defining scopes and measuring across companies, and reliance on markets or sectors that are still nascent.

Other external barriers include differing **levels of understanding amongst customers**, current **market disruption and investment constraints** relating to Brexit and COVID-19, and the limited availability of adequate **technological solutions** to accelerate industrial emissions reduction.

Internal barriers include climate competing with other **company priorities**; lack of **employee behavioural changes** due to existing performance management, incentives (e.g. remuneration) and culture; lack of **quality data** to support decision-making; and gaps in **skills and capabilities** such as climate scenario modelling, green product & service innovation and general climate knowledge.

Progress is reliant on extensive collaboration, both internally and across the value chain

The importance of **collaboration across the supply chain, and with policy makers, customers and peers**, cannot be overstated. This has proven to be invaluable for sharing learning, developing joint projects and propositions, innovating existing and nascent technologies (e.g. in hydrogen, EVs), and adapting existing technologies for climate actions. Many respondents also raise the importance of **market-wide understanding and communication** in stimulating change, by educating customers and consumers, and debating the realities of sectoral challenges and trade-offs. **Leadership buy-in** is unsurprisingly critical in unlocking the required company focus and resource, and employees play an important role in mobilising the whole business to deliver on commitments. The more advanced companies we have interviewed use **data** and learnings captured through **pilots** to communicate progress with key stakeholders, secure buy-in and build credibility.

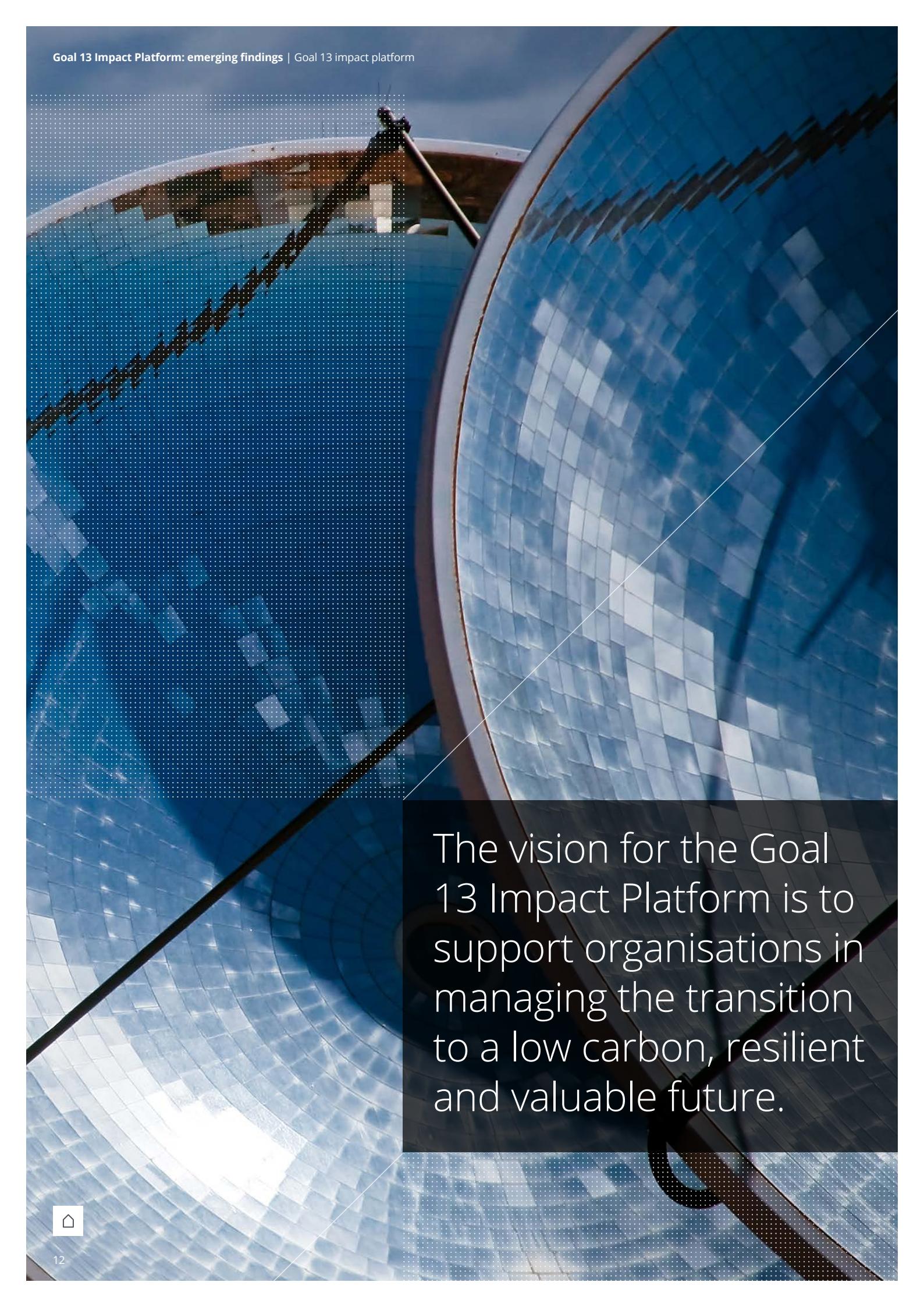
Progress is clearly underway, but more is required to trigger systemic change

Momentum is building to deliver large-scale climate action and there is a real sense of optimism. However, delivering on the Paris Agreement will require more ambitious company commitments and action. For more mature companies, climate actions are not considered as discrete initiatives, but rather embedded within the core strategy and operating model. Moving up the maturity curve requires companies to build capabilities in areas including data and technology to baseline their carbon footprint and prioritise areas of focus, scenario modelling to determine the unique risks and opportunities for their business, new product development & innovation, as well as employee training, KPIs and remuneration structures to cascade skills and responsibility throughout the organisation.

Externally, extensive collaboration across value chains, clear policy decisions and roadmaps, and consistent standards across industries are critical to supporting the transition. As we build towards COP26, it is clear from the responses that there is an opportunity to increase collaboration across sectors and regions, and agree the clear policy asks that will accelerate progress. We will continue our efforts through the **Goal 13 Impact Platform** to capture and share insights, and identify matchmaking opportunities to accelerate progress.

If you would like to get involved, please contact the G13 team at goal13impactplatform@deloitte.co.uk for further details and to sign up to an interview.





The vision for the Goal 13 Impact Platform is to support organisations in managing the transition to a low carbon, resilient and valuable future.

Goal 13 impact platform

The key objective of the Platform is to accelerate progress in the climate transition, in order to reduce emissions and enhance resilience. We aim to do this by publishing company insights, inspiring further climate commitments and action, and facilitating collaboration.

Our collective challenge

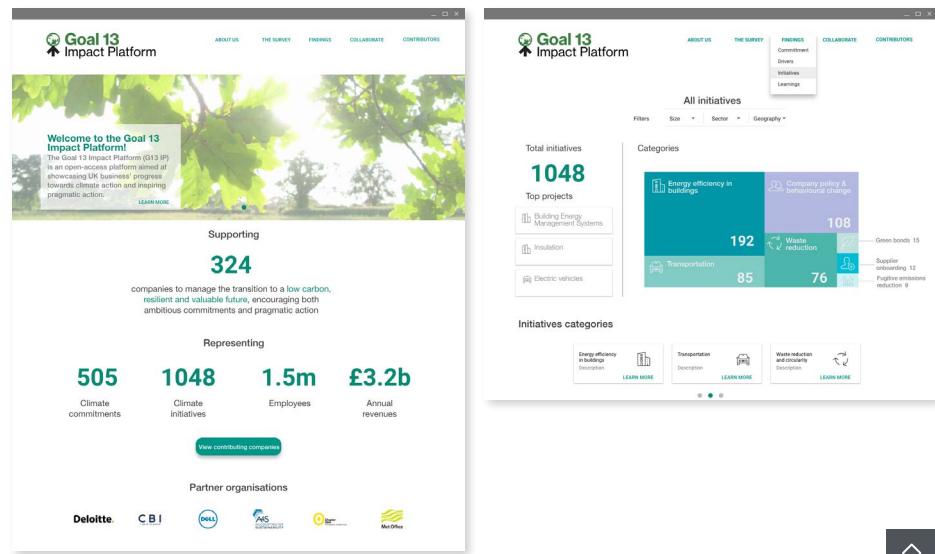
Climate change will have a profoundly destabilising impact on our environment, our economy and our societies if we fail to halve global greenhouse gas emissions within a decade. The shift to a low carbon future, and need to build resilience to future extremes, require organisations in every sector to make radical commitments to reduce their carbon footprint, build resilience across their organisation, and adapt their business models. A significant number of businesses have made decarbonisation or related commitments, however, there is a sense that detailed action plans and delivery lag these commitments. Businesses are often unclear how best to address the opportunities and risks presented by the climate transition, what ambitious targets mean for their business, and how to break this down into meaningful programmes with aligned plans and targets.

Working alongside other initiatives such as the Carbon Disclosure Project (CDP) and the Task Force on Climate-related Financial Disclosures (TCFD), we can help address this knowledge gap and stimulate collaboration by providing pragmatic and transparent information to organisations, highlighting any significant gaps in progress, and encouraging more ambitious commitments and action.

The concept

The **Goal 13 Impact Platform** is a partnership intended to strengthen existing support for companies in managing the transition to a low carbon, resilient and valuable future. It captures company-specific insights into target setting, drivers of change, programme organisation, the most impactful initiatives, their climate and commercial impact, barriers to progress and lessons learned. It will also serve as an opportunity to ‘matchmake’ organisations who are working on similar initiatives and challenges, so that we can accelerate progress. The broader ambition is to create a valuable public asset that contributes to COP26.

What the platform may look like (Indicative – currently designing features & functionality with Boomi, a Dell Technologies business):



The partnership

Deloitte.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax and related services. Our network of member firms in more than 150 countries and territories serves four out of five Fortune Global 500® companies. Our environmental sustainability services continue to grow. They currently include services related to strategy, resource productivity, risk mitigation, attest services and supply chain. Renewable energy services are also expanding as clients explore innovative supply arrangements, and Deloitte has engaged with clients on a broad range of environmental sustainability topics including energy, water, greenhouse gas emissions, plastics, circular economy and supply chain.



Established in 2019, Chapter Zero's goal is to help chairs and non-executive directors address the challenge of the transition to a net zero carbon economy for their businesses, across the full spectrum of commercial activity. It is part of the World Economic Forum's Climate Governance Initiative. Chapter Zero supports the non-executive community in enhancing its knowledge, understanding and experience of this complex and critical business challenge through providing: learning events with experienced speakers where members can build their knowledge and their network; toolkits; and other resources like access to the Goal 13 impact platform, which provide access to relevant content and facilitate boardroom discussion.

DELL Technologies

The vision of Dell Technologies is to provide greater access to technology for people around the world. Dell Technologies is instrumental in changing the digital landscape the world over, fuelled by the desire to drive human progress through technology. We have a responsibility to protect and enrich our planet together with our customers, suppliers and communities. It is a core part of our business and we embed sustainability and ethical practices into all that we do, being accountable for our actions while driving improvements wherever and whenever possible.

.CBI

Across the UK, the CBI speaks on behalf of 190,000 businesses of all sizes and sectors. The CBI's corporate members together employ nearly 7 million people, about one third of private sector employees, and communicates the British business voice around the world. Driving fundamental and societal change around climate requires immediate action and long-term policy support from government. By working together, business and government can unleash the potential of low-carbon power, support the switch to low-emission vehicles, and develop low-carbon solutions for heating. The CBI is calling on the government to put policies in place that enable business to reduce emissions further.



HRH The Prince of Wales established A4S in 2004 to work with the finance and accounting community to: inspire finance leaders to adopt sustainable and resilient business models; transform financial decision making to reflect the opportunities and risks posed by the climate crisis and other environmental and social issues; and scale up action to transition to a sustainable economy. A4S has three global networks: (i) Chief Financial Officers (CFO) Leadership Network – CFOs from leading organisations seeking to transform finance and accounting; (ii) Accounting Bodies Network (ABN) – members comprise approximately two-thirds of the world's accountants; (iii) Asset Owners Network – Pension Fund Chairs who integrate sustainability into investment decision making.

Met Office

The Met Office is at the forefront of global weather and climate science and services. As the national meteorological service for the UK the Met Office provides critical weather services that help the public, businesses and policymakers make better decisions to stay safe and thrive. The Met Office is also the UK Government's centre for climate change prediction. As such, our scientists provide long-term projections and advice to government and industry on how to adapt to and mitigate against climate change. Our collaborations and partnerships reach beyond the shores of the UK, contributing to science and research all over the world.



Progress to date

As of 31st Aug 2020, we have a total of 150 companies signed up, and 100 interviewed. Whilst all interviews have been considered in the writing of this report, the quantitative analysis is based on the first 75 interviews. Each interview is standardised to cover the following key topics:

- What are the most important climate related targets and commitments that companies are making?
- What is driving companies to make climate change a strategic priority?
- How are companies organising their programmes of climate action?
- What are the key initiatives that help companies transition to a low carbon future?
- What are the biggest barriers to putting more ambitious commitments in place and/or delivering on initiatives?
- What are the key learnings that catalysed or unlocked their focus on climate action?

Contributing companies see value in showcasing their own progress, and gaining insight into what actions other companies are taking to accelerate progress: “*we have been frustrated with the pace of change, so we are interested in seeing the journey that other organisations have taken*” Director for Social Responsibility and Sustainability (Academic Institution). In addition, partnership and collaboration opportunities along the transition journey have been highlighted as a key benefit, ranging from addressing similar initiatives/challenges, co-developing new technology, and identifying commercial opportunities.

Profile of contributing companies¹

- The initial sample is largely UK-based, with a diverse mix of industry and business size;
- The vast majority are companies in the private sector, with a few non-profits and academic institutions;
- c.65% are responding at the UK level, c.25% at the global level, and the remainder from other geographies;
- Energy, Resources and Industrials make up the largest sector at c.35%, followed by Consumer Business at c.20%, and Professional Services (e.g. legal, consulting, marketing) at c.20%;
- The majority of the organisations interviewed (c.75%) are larger corporations with more than 250 employees. SMEs with less than 50 employees make up c.20% of the sample.

The near-term goals for the Goal 13 Impact Platform are to continue to scale the interviews in the next few months increase our focus on other markets globally, launch the platform, and share the insights through partner events.

Whilst sampling is a powerful tool for understanding trends and drawing insights, it is important to recognise the limitations of the small sample size and a degree of self-selection bias when drawing conclusions from insights and findings captured in this report. These limitations will reduce as the number of companies involved increases.

Get involved

Regardless of where you are in your climate journey, we are interested in speaking to you to understand progress you have made so far, and some of the main challenges that remain.

If you would like to get involved, please contact the G13 team at goal13impactplatform@deloitte.co.uk for further details and to sign up to an interview.

1. Given the current sample, we use ‘companies’ to refer to all contributing organisations in this report. This may change in the future as sample changes.



Contributing companies

Our 100 contributors include:

Addleshaw Goddard LLP

Airspace Unlimited

Allianz Global Investors

ArcelorMittal S.A.

Argo Group

Avanti West Coast

Barratt Developments plc

BASF plc

Bird Sunglasses

British American Tobacco plc

BT Group plc

Burger King

Burges Salmon LLP

Cadent Gas

CGI Inc.

CoGo

David Macbrayne

Deloitte NSE

Doosan Babcock Limited

Dŵr Cymru Welsh Water

Ecometrica Limited

Electrocomponents plc

Engie S.A.

Envopap Limited

Freestar Drinks Limited

Glasgow Clyde College

Good Energy Limited

Green Energy Options Limited

Human after all

Imerys S.A.

Innocent drinks

InterContinental Hotels Group plc



Johnstons of Elgin

Kuwait Petroleum Corporation

Lendlease Europe Limited

LUXTRA

Maanch

Mastercard Inc.

Orbit Group

Pladis Global

Robert Bosch GmbH

ROCKWOOL Limited

Royal Dutch Shell plc

Royal Wessan nv

Sales Untangled

Sanctuary Group

Scottish Leather Group Limited

SNC-Lavalin Group Inc.

Stora Enso Oyj

Stride Treglown Group plc

Tesco plc

The Gupta Partnership

The University of Edinburgh

Thomson & Scott Limited

TLT LLP

Uniper SE

United Utilities Water Limited

Walgreens Boots Alliance Limited

WSP Global Inc.

Yoyo design

Zigzag SR Limited





61% of the companies interviewed have at least one significant headline carbon reduction target.



Commitments

Respondents were asked, "What are the most important climate related targets and commitments that your company has made?" They were asked to provide the base and target year, indicate which targets are aligned to specific initiatives such as SBT/EV100/RE100, as well as additional contextual commentary.

Headline targets are starting to address the fundamental challenges of climate change and decarbonisation

61% of the companies interviewed have at least one significant headline carbon reduction target. 43% of companies have a net-zero or carbon neutral target, and 33% of companies have an absolute carbon reduction target. 17% have carbon intensity or energy efficiency targets that might result in a reduction in emissions. The net-zero targets are typically more recent, longer-term, and represent bolder ambition than the absolute carbon reduction targets: *"we are being more ambitious in what the business is looking to achieve and creating challenging stretch targets. Having these in place will drive innovation within the business and the supply chain, as opposed to making small piecemeal changes to achieve easy targets."* Climate Change and Carbon Manager (Utilities).

In all cases these targets imply significant change for the organisation in question, are public, and as such have CXO's implicit or explicit support:

"Our new CEO has led us to be more aggressive than the original SBT 2030 commitment, resulting in re-baselining and targeting 2025, and setting a new ambition of carbon neutrality by 2025."

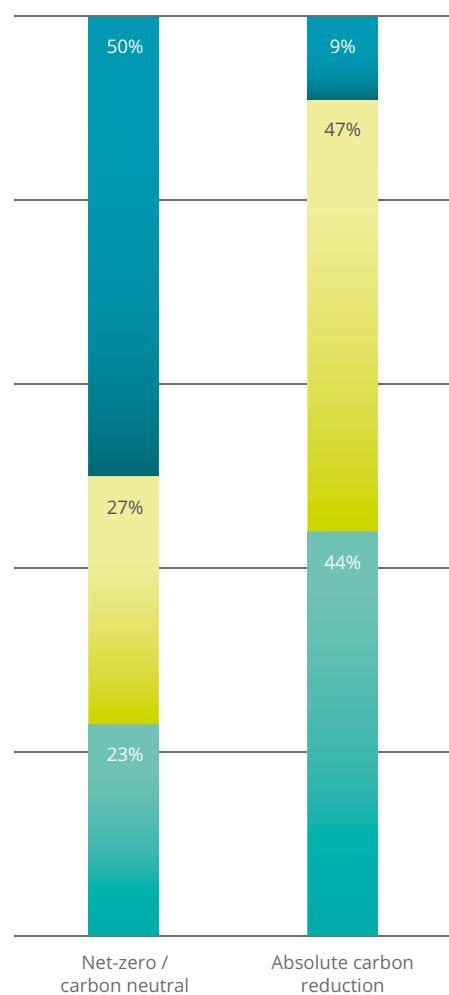
Group Head of Environment, Health and Safety (Consumer goods)

81% of all respondents say that their climate commitments affect their investment decisions, underscoring the expected scale of impact on the business.



Time frame for targets

% of targets within each period

**Key**

- 2020-25
- 2026-30
- Beyond 2030

More than half of companies have at least two climate-related public targets. Other targets that contribute to emissions reduction include renewable energy sourcing, waste reduction and recycling.

Alignment to the Paris Agreement requires more, whilst consistency and universal adoption are still lacking

Whilst headline ambitions are increasing, only approximately half of the carbon reduction targets appear to be science-based targets (SBTs). Alignment to third party initiatives such as the Science Based Targets initiative (SBTi) is supporting consistency, however, SBT guidance is yet to be developed for some industries and can be seen as too complex and administration-heavy.

"We have elected not to get SBT verification... and focus on delivering the goal as opposed to increasing administration costs to the business."

Climate Change and Carbon Manager (Utilities)

The Paris Agreement entered into force in 2016, and requires the 189 ratifying parties to take ambitious efforts to keep a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. The agreement also aims to strengthen the ability of countries to deal with the impacts of climate change.

In addition, the all-important question of what is included in a mitigation target is inconsistent. Over half of the companies constrain their headline carbon reduction targets to scopes 1 and 2 (with c.70% constraining them for net-zero and carbon neutral targets), and there is a broad range of definitions for scope 3 across the other respondents. Reasons given for this vary across industries and based on the position in the value chain. In some instances, this is driven by the fact that scope 1 & 2 account for the majority of emissions (e.g. manufacturing), in others by the difficulty of defining and measuring scope 3 (e.g. retail).

An emissions reduction target is defined as 'science-based' if it is developed in line with the scale of reductions required to keep global warming below 2°C from pre-industrial levels.

"Over 90% of our emissions are in our supply chain... but how do we effectively communicate with such a range of stakeholders, from our tea growers in Rwanda, to our dairy farmers in Scotland?"

Head of Brand (Retail)



Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain.

Despite the profile of the companies involved, 11% do not have a headline climate-related target, although in every case these are being worked on:

"We've started to evaluate and consider a comprehensive environment and sustainability strategy in February 2020. We are reviewing available data from various test initiatives across the company and constituting a more formal sustainability effort."

Director, Sales and Marketing (Social Housing)



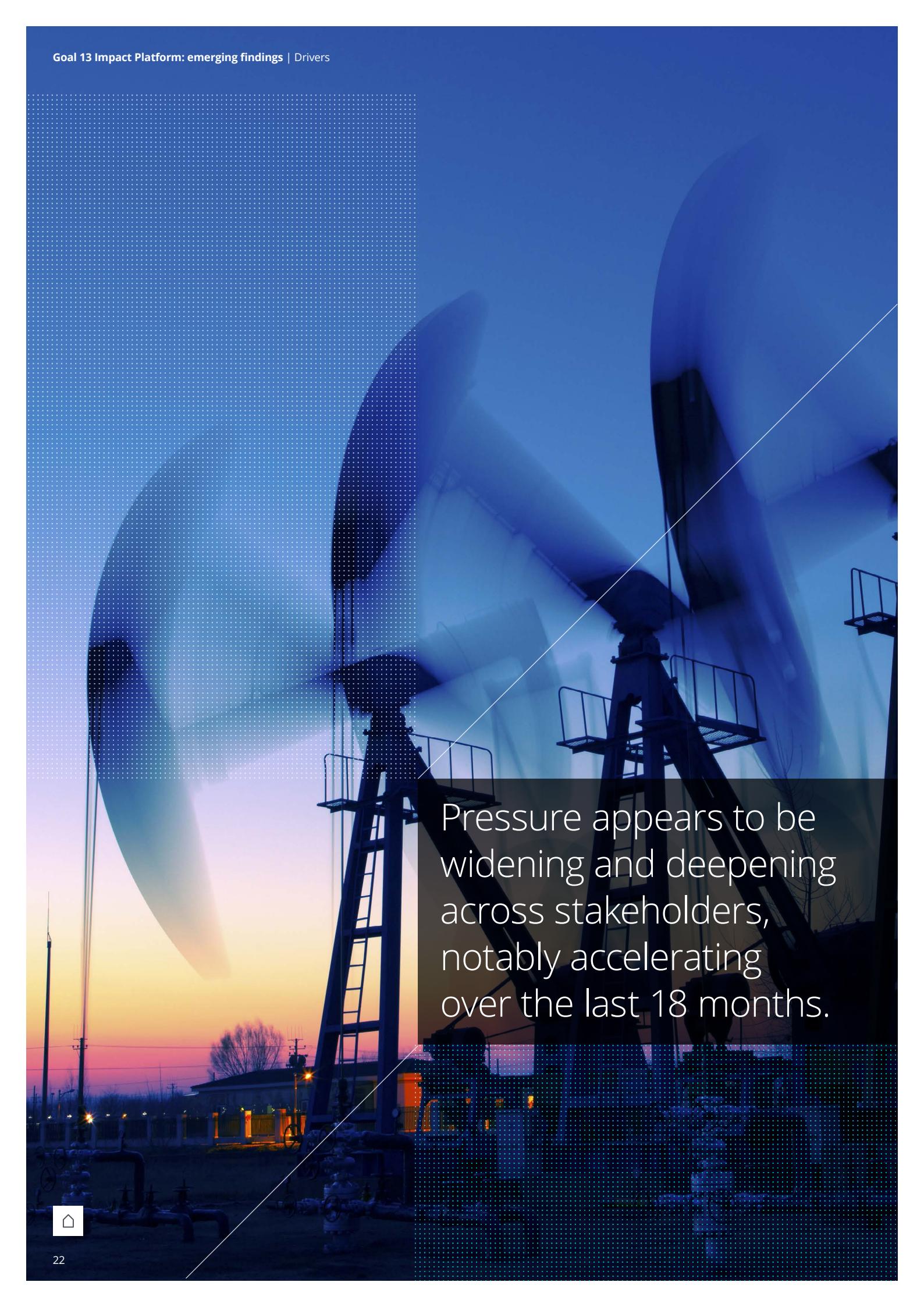
Headline targets reflect a range of approaches and contexts

Approaches and motivations to make climate commitments and set targets differ. For some, a bold and ambitious target is critical to signal a direction of travel and galvanise change. Others take a more conservative approach and spend time and effort ensuring plans and infrastructure are in place before making their commitment. Significant targets are being set across all sectors, not just by companies in the heavy carbon-emitting sectors such as Oil & Gas, which tend to be the focus of existing or developing policies on carbon reduction. Peer pressure and influence of stakeholders both play a role, and the motivation of senior leadership is often cited as a contributing factor to announcing a public target:

"Sustainability is also very much in the company's DNA from a cultural perspective... Investors are the main driver, and have a big interest in sustainability and the climate related matters... many customers are now pushing hard on their own carbon footprints."

EVP, Sustainability (Industrial Products)





Pressure appears to be widening and deepening across stakeholders, notably accelerating over the last 18 months.

Drivers

Respondents were asked, "What are the factors, both internally and externally, that drive your company to make climate change a strategic priority?"

Climate action is becoming the new normal

More than half of respondents talk about **broader societal shifts** or **implications for brand and reputation** as drivers for change, reflecting the increasing expectation for companies to be purpose-driven, and the way climate change is being managed as a critical part of corporate communications:

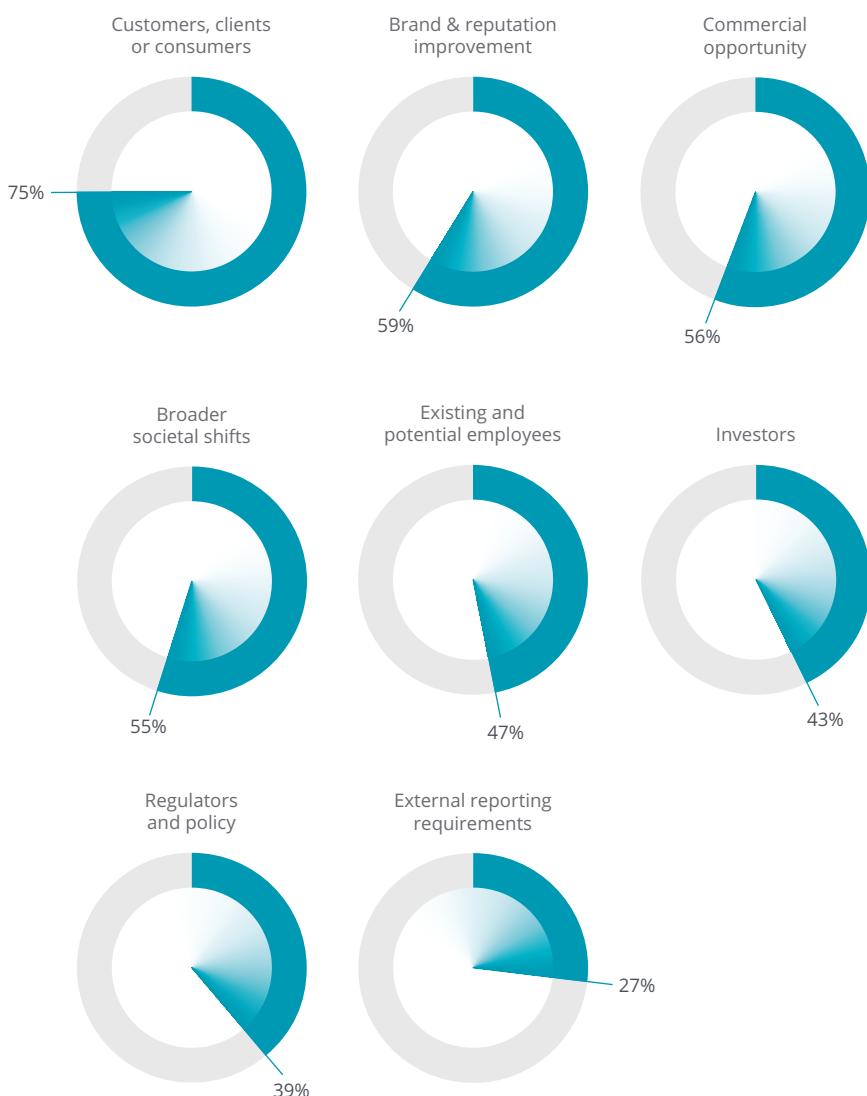
"Reputation is a big driver for us. Sustainability is a large part of our company, and an ethos of which we're proud."

Head of Sustainable Design (Professional Services)

Almost all companies indicated two or more driving forces for change. Pressure appears to be widening and deepening across their stakeholders, notably accelerating over the last 18 months. COVID-19 related concerns do not appear to have reduced this pressure, albeit the pandemic is having an effect on a company's ability to respond.

Drivers of change

% of total respondents



Companies are feeling pressure from all stakeholders

In terms of specific stakeholder groups, customers are cited as a main source of pressure most frequently (75% of respondents). This holds true across both B2C and B2B business models.

Consumers are looking for more climate-friendly products and services, as well as expecting the organisations with which they transact to make climate a corporate priority:

"Customers have a broader impact on driving change as they seek greener travel solutions and new generations dislike the perception of travelling on a vessel powered by fossil fuels."

Replace with CEO (Transport)

In some cases, this comes with a willingness to pay more, especially for niche brands or startups targeting segments with a relevant proposition. On the other hand, larger companies often think they need to make this shift even though consumers will not pay more, seeing it as a baseline expectation.

Business customers are equally demanding of change as they seek to manage their carbon footprint both in their operations and across their value chain, putting pressure on suppliers to reduce the footprint of their products and services. Pressure also comes from the greater need to report against scope 3 emissions, particularly in those sectors where this accounts for a significant proportion of a company's emissions. Influential business customers can also exert pressure on companies to evolve their products and services, with some companies increasing the value add or service element of their propositions:

"We are working with architects, engineers and property developers in more transparent and collaborative ways."

GM, Corporate Responsibility (Industrial Products)

This is seen in procurement processes as well as collaborative change programmes as customers work with their supply chains to both decarbonise and improve resilience.

This customer-led pressure is tempered for some by a lack of market-level information and understanding; for example whether a move to plastic-free packaging is more or less climate friendly, some reluctance to pay for the change they want to see, and a lack of alternatives in some markets that reduces customer power.

47% of respondents mention **employees** as a main driver of the pressure to change. Employees are increasingly expecting climate change priorities and plans to be clear and ambitious, and companies are seeing this as a factor influencing both talent retention and acquisition. This is particularly important for the heavy-emitting sectors and for people-centric business models e.g. professional services. Pressure is seen to stem more from younger generations, and there is some suggestion that it is more acute for smaller organisations who typically find it difficult to match the employee proposition of larger companies.

Some companies feel they can address immediate employee and labour market concerns by better communicating progress. Communications need to evolve as climate moves from one of many sustainability concerns, which can often be seen as an adjunct to the core business, to a strategic priority. Companies need to help unpack this for employees and link it to their own roles and activities:

"Being progressive against climate change is critical to hiring new talent."

Chief Sustainability Officer (Manufacturing)



43% of respondents cite investors as a main source of pressure to change. Investors are asking more questions, and having higher expectations, of the way their investee companies are managing the climate transition. This can be driven by increasing recognition of financial value at risk from climate change, expectations around climate being factored into financial statements, as well as a need for the investor to respond to the expectations of their own stakeholders. Respect for investor opinion is underpinned by the recognition that the capital markets are largely global and can re-allocate both within sector and between sectors. Sustainability-focused start-ups and SMEs feel they are benefitting from increased investor interest.

The issuance of green bonds demonstrates the change afoot, albeit some recognise that despite the prominence of climate as a discussion topic, penalties for inaction are rare.

Investment data on carbon footprints and the impact of climate change is seen as a pre-requisite for the capital markets to fulfil their promise as a catalyst for change, requiring both significant company resource and system-wide adoption of standards.

The European Green Deal is set of policy initiatives by the European Commission that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use.

39% of respondents see **regulators and policy** as a primary source of pressure to change. This can result from policy that mandates or incentivises change, such as through the Climate Change Agreements (CCA) in the UK and the opportunity to reduce a firm's Climate Change Levy (CCL), economic regulators' influence on both mitigation and adaptation (such as OFWAT and Ofgem's multi-million pound innovation fund), or the EU Emissions Trading System (ETS) rules. It can also result from ongoing dialogue with the regulator and the expectation that climate considerations will inevitably feature more significantly going forward e.g. expectations of the European Green Deal.

Companies recognise policy has a critical role to play, but some frustration is voiced over the lack of clear, longer-term road maps. This highlights the need to tailor policy based on the scale and nature of industry-specific challenges.

Leadership is often seen as a primary driver of change

Leadership plays a key role in translating the changes in stakeholder expectations into strategy and plans. Although not always selected as a 'driver', leadership attitudes and actions are seen as primary motivations for the company to act on climate transition. The CEO role comes up frequently, but also the board:

"Having the direction set by, and support from, the CEO from day one of his tenure to include climate in the company strategy has been instrumental to our recent achievements in this area."

Senior Sustainability Manager (Chemicals).

Expectations of direct commercial returns can help catalyse change

Multi-decade commitments to becoming net-zero are not driven by expectations of short-term commercial return; but climate action that makes a **positive commercial contribution** can increase internal support and stimulate greater ambition. 56% of respondents identify commercial opportunity as a main driver of change, many pointing to cost reduction opportunities as the pursuit of lower emissions drives process efficiency and energy savings, but many other sources of commercial benefits are cited, including:

- improving sales conversion, such as winning pitches with an environmental angle;
- greater resilience reducing the cost of disruption; and
- lower financing costs and greater availability of capital, such as green bonds.

The vast majority of those citing commercial returns as part of the pressure to change have already seen a positive financial impact from their climate actions.



External reporting influences

levels of ambition

While for some companies it appears that reporting remains a compliance exercise rather than an explicit driver of change, 27% of respondents cite expectations and requirements related to **external reporting** as important to developing their climate change agenda. Those respondents see the reporting process as challenging but valuable for ensuring that the implications of climate change are better understood in the company, particularly through the development of quantified scenarios of climate-related risks and opportunities. Some of these respondents also acknowledge reporting's role in developing a more cohesive and broader response, for example, preparations for the Task Force on Climate-Related Financial Disclosures (TCFD) for one organisation resulted in supplementing an existing focus on emissions with plans to enhance resilience. Reporting also builds a base of expertise that will help an organisation evolve as the broader climate change agenda and its impact evolves.

Key drivers differ by sector

Whilst our sample size does not allow for sector-based analysis and comparison, there are some significant differences appearing to emerge between types of sector and the drivers of change they experience. **Energy, Resources and Industrial** companies, which are comparatively well represented in our sample set, are c.40% more likely than other sectors to cite regulators and investors as sources of pressure.

Those in the services sector, and specifically **Professional Services**, are c.50% more likely to cite employee acquisition and retention as a critical driver.

The Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) develops voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.



Respondents see the reporting process as challenging but valuable for understanding implications of climate change and developing a more cohesive and broader response.



Organisation of climate programmes

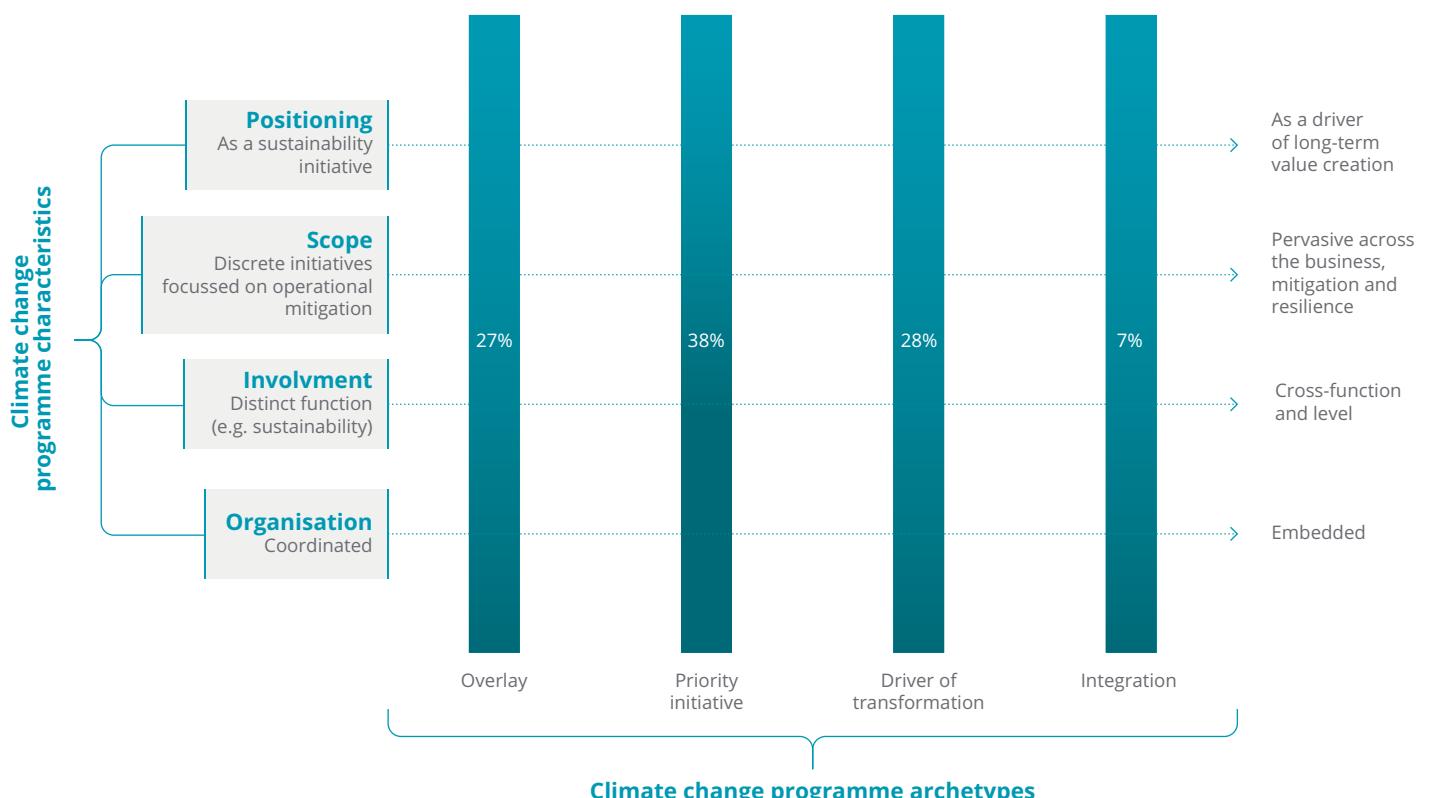
Respondents were asked, "How is your company organising your programmes of climate action?" These responses were supplemented with our own judgment on the maturity of organisations.

Emerging maturity model

The range of responses shared by respondents around the evolution of their climate action programmes suggests a maturity model² based on four main dimensions. Respondents are typically moving from left to right: making climate action more central, broadening the scope of the way they are considering climate change, involving more of the business, and increasing its level of integration.

The largest group of companies (38%) appear to align to Stage 2: Priority initiative, where they recognise the importance of the climate agenda, there is good leadership buy-in and there are a number of teams involved in delivering initiatives. However, this is typically yet to have a material impact on their business model. The majority of companies interviewed who are at the final stage of maturity are SMEs whose entire business model and

culture is predicated on climate mitigation and/or resilience and who are serving the environmentally conscious customer, with leaders and employees aligned at corporate and individual level. However, some do raise the potential challenge of maintaining this level of integration as they scale.



Positioning and scope of climate change and related actions

The level of importance, signalled in the ambition of the targets and commitments, is not always translating into the internal **positioning** that might be expected. Climate change considerations are driving change, but still frequently appear to be positioned as a sustainability initiative rather than central to the business model or long-term value creation. The types of companies where climate is more likely to be considered core to the current or future business include:

- Energy, resources & industrial companies, where the existing model is under threat from transition risks;
- Real estate companies, where there is increasing client demand for low-carbon, resilient infrastructure (including government buyers who have set their own net-zero targets); and
- Consumer business SMEs taking advantage of white space.

The **scope** of climate action is often noted to be narrower than might be expected, focused on particular areas of the business, emphasising operations over broader value chain engagement. There is also a stronger programmatic focus on mitigation over resilience; focusing on reducing emissions more than the adaptation of the business and its assets to respond to the effects of climate change.

Both positioning and scope impact who is involved in climate action and how it is organised.

Who is involved in climate action

Most (53%) respondents said their climate-related activity was led out of sustainability or CSR functions, with 18% mentioning the setup of dedicated climate change related programmes. The sustainability function's role typically includes target setting and monitoring progress.

63% of respondents cite **leadership's** involvement. Of those, 55% mention an executive owner who is most commonly the CEO, the CFO or the Chief Sustainability Officer as owning top-level governance, and 38% mention the involvement of the board. In some cases, governance is strengthened by including climate related targets in executive remuneration schemes:

"Climate change is now at the heart of the strategic and operational decisions we make, and is tied to executive remuneration."

Sustainable Finance Lead (Financial Services)

The sustainability function is increasingly being joined by **other functions and lines of business** in both agenda setting and delivery (56% of respondents). Functions most commonly highlighted are strategy, finance and procurement. Lines of business are particularly prominent when climate action is aligned to existing business drivers, such as process and energy efficiency or material changes in the product and services portfolio: *"historically, our programme was cross-functional across the business, but now it's much more embedded –*

for example, our factories have their own targets, commitments and projects which are then aggregated centrally to ensure strategic alignment" Group Head of EHS (Consumer Business). For more mature businesses, climate initiatives are fully integrated with the wider business activities across the organisation, with support from leaders and employees at the corporate and individual level.

Finance is rarely cited as the driving force, but plays an important supporting role (65% of respondents) in shaping the agenda, the initiatives and delivery. Additionally, finance provides its expertise in funding, business case development and investment decisions, and reporting. Finance's role in reporting is particularly important given the increasing demands for better quality information from stakeholders, and the lack of resources, controls and system support that is made available to sustainability functions.

How climate action is organised

The level of coordination and management between different climate-related activities differs across respondents, with some organisations coordinating closely across all parts of the business and others setting targets centrally but allowing business units and functions relative autonomy in how these are met.

A small number of organisations are supplementing their focused governance and delivery approach with initiatives aimed at cultural change: pervasive efforts to train and educate employees in relevant climate change related issues, and even include climate change action in staff assessment.





There is growing recognition of opportunities to market and monetise low-carbon products & services.

Initiatives

Respondents were asked: "What are the 1-3 key initiatives you have initiated that have had or will have the greatest impact on your climate transition?" For each initiative, they were asked to provide a description and explain the impact from both a climate and commercial perspective.

Operations remain a big focus for companies, but supplier and customer engagement are becoming more important

A significant proportion (45%) of initiatives mentioned by respondents focus on their own operations, such as energy efficiency in buildings and production, fleet efficiency and waste reduction. This is partly driven by the correlation in many cases between reducing carbon and reducing costs, which has helped companies (particularly those earlier in their progress) obtain sign-off on business cases:

"We identified in the mid 2000s that there was a correlation between reducing carbon within the business and costs."

Climate Change Manager (Utilities)

However, there is growing recognition of opportunities to market and monetise low-carbon products & services, with 40% of initiatives focused on customer or consumer-facing activity. As previously mentioned, respondents see demand for more climate-friendly products, and in some cases a willingness to pay more.

There is also recognition of the need to focus on closer engagement with suppliers, particularly as targets increasingly include scope 3, with 27% of initiatives focused on supply chain and sourcing. Two thirds of supply chain related initiatives involve sourcing low-carbon power and electric vehicles, with others focusing on closer collaboration related to the procurement of raw materials and supplier engagement programmes. However, significant barriers remain to implementing these initiatives, as elaborated on below.

Respondents in Consumer Business focus much more heavily on operations and their supply chain, while Energy, Resources & Industrials, Professional Services and Financial Services respondents are more focused on offering low-carbon products & services.

Supply chain engagement remains highly challenging

A number of factors hinder progress in supply chain engagement, including the fact that organisations can more readily baseline, influence and quantify impact for their own direct activities, and the belief that operational initiatives are more likely to have a direct commercial payback.

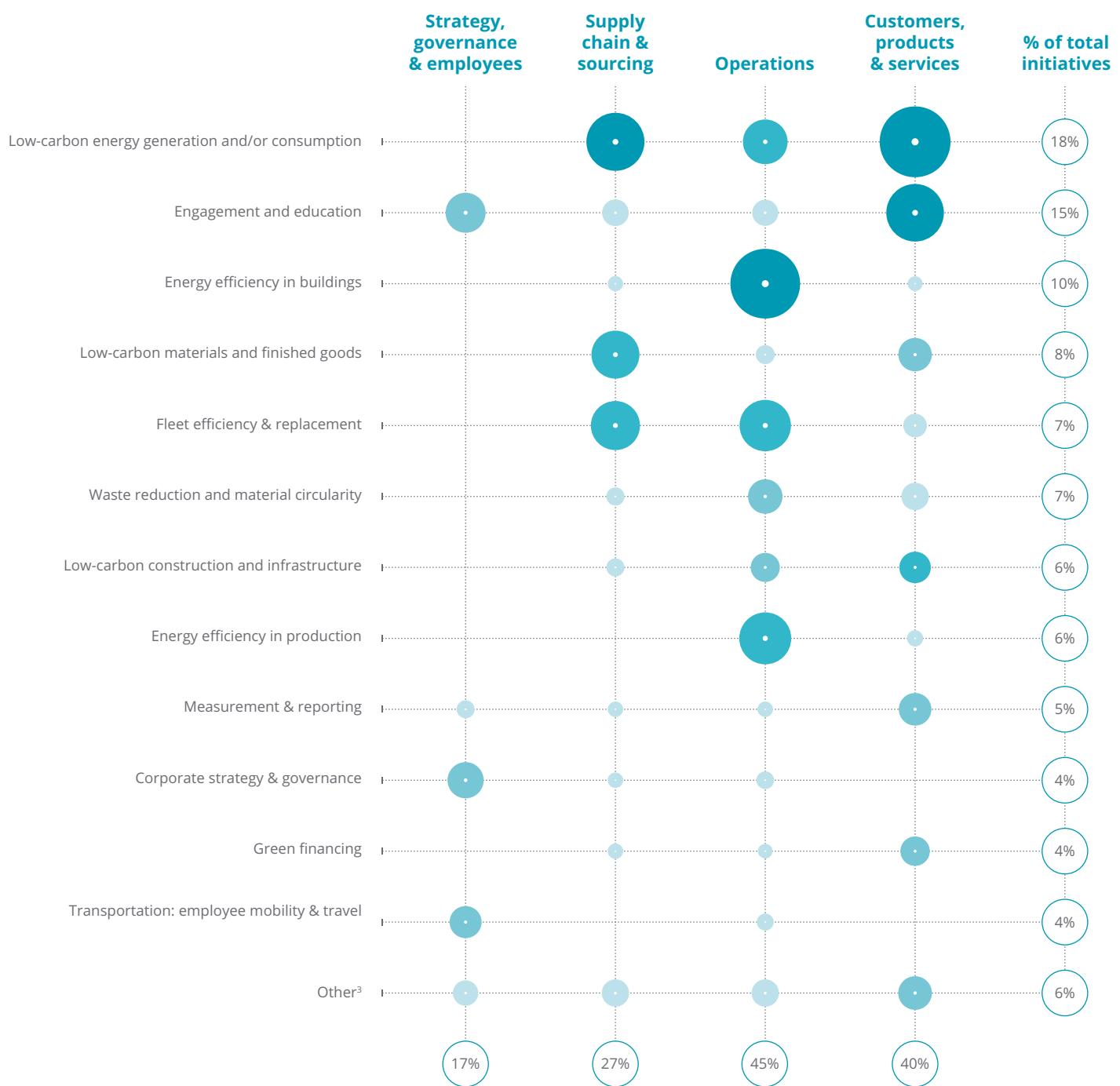
Many companies raised the inherent challenges in collaborating across the value chain, including fragmentation of the supplier and customer bases. The more dominant players in particular value chains are starting to exert more influence around climate, for example a large grocer influencing its customers to set net-zero targets, a telco choosing suppliers based on their ability to meet climate reporting and delivery standards, and a large industrial products company influencing its customers to review and improve their own emissions. Implementing these initiatives is particularly important where a company's scope 1 and 2 activities only account for a small percentage of their total emissions.

Collaboration and data issues are discussed in more detail in the Barriers and Learnings sections reflecting respondents' input.



Initiative breakdown by focus area

% of total initiatives – see Appendix for definitions



(total is >100% due to a multi-select option)

3. Other includes green financing, adaptation of assets, and offsetting and/or carbon capture.

Digital is an increasingly important enabler of climate initiatives

Greater focus on climate initiatives happens at a time at which most organisations are becoming more sophisticated at embedding digital technology, partly catalysed by COVID-19. Respondents often mention data and technology as important enablers of many of their initiatives, and effective use of data insights and resulting efficiency gains helping them to reduce emissions. Examples called out include digitising mines that optimise operations and reduce waste, greater uptake of remote working enabled through effective IT, using digital methods for running events rather than plastic wristbands, and improving the efficiency of internal and customer-facing processes (e.g. sales). *"We are digitising internal sales, onboarding and support processes, which should enable emissions per client to go down as we collaborate with AWS on cooling servers, reduce our travel and use of offices. This will also enable us to scale the number of customers we can serve, and reduce our cost of acquisition"*

CFO (Technology).

While adaptation is moving up the agenda, there is still a much greater focus on mitigation

The majority (79%) of initiatives raised by respondents were focused on driving reductions in emissions, while only 17% impacted resilience across physical and human assets. There are a number of potential contributing factors here including the fact that most headline company targets are based on carbon reduction and responding to external pressure.

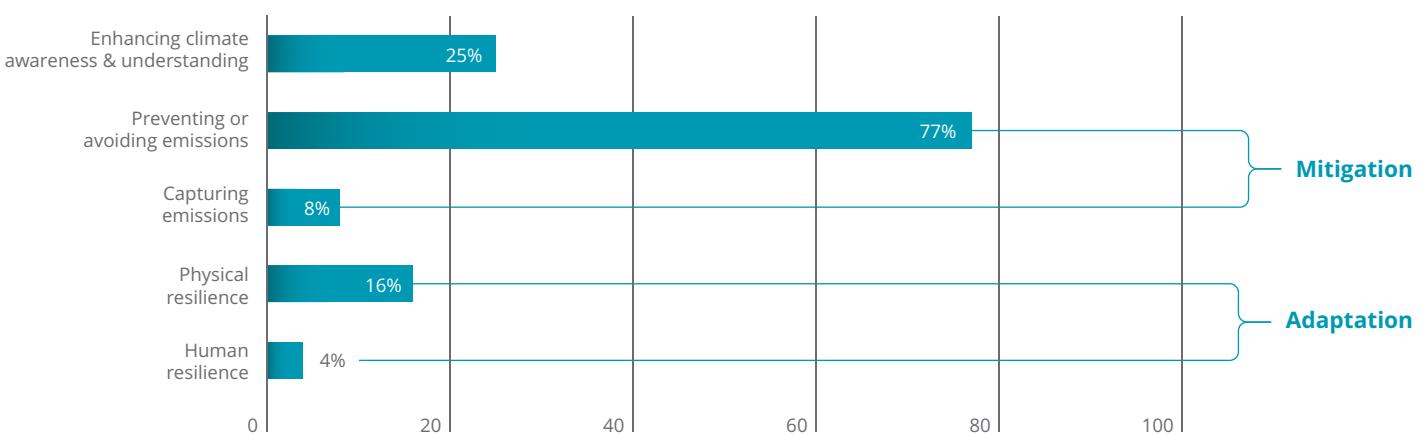
Furthermore, as the key drivers of change are customers, consumers and the need to improve their brand & reputation: mitigation initiatives are often perceived to present more immediate and quantifiable impacts. For some companies, resilience e.g. the assessment of flood risk for an insurer, may be core to the business model but may not be called out as a climate initiative, and as such may not be configured consistently with other parts of the climate transition transformation.

While many respondents are unable to quantify the emissions impact, examples from those who could include:

- efficient office design achieving 30% energy savings;
- energy efficiency in stores driving a 20% decrease in total company emissions;
- innovative construction methods reducing embedded carbon footprint of buildings by 38%;
- biomethane trucks emitting >80% less CO₂ than a standard diesel alternative;
- a hydrogen project with the potential to remove 40 MT/CO₂ every year by 2040;
- switching to renewables reducing footprint by 79%; and
- switching energy source reducing emissions by 50,000 tonnes per year.

Climate impact of initiatives

% of initiatives selecting this option (total is >100% due to a multi-select option)



The companies citing adaptation initiatives are primarily those with supply chains and operations in regions suffering the greatest impacts of climate change. Real estate and construction firms are recognising market opportunities in more resilient infrastructure, and are incorporating resilience targets and planning in their advice and builds.

"Climate resilience and creating places that are fit for purpose in the face of, for example risks of increased flooding, is vital for us. Customers are becoming more vocal with these questions and concerns. This is a business differentiator."

Head of Sustainability (Construction)

Several consumer business companies are also considering how they can better build resilience into their business models; driving factors include damage already incurred from climate change to assets and greater recognition of future physical risks through the implementation of TCFD.

"We have a limited focus on resilience at this stage, but we have publicly given our support to TCFD, which is prompting a longer-term strategic approach, looking at climate-related risks and opportunities and how these can be integrated throughout the business to ensure we build back better."

VP, Global Corporate Responsibility (Hospitality)

A food and beverage company with extensive operations in bushfire-prone areas has focused on improving the carbon footprint and resilience of their own factories and supply base, due to adverse impacts on operations in 2019.

Resilience is also being incorporated into the portfolios of financial institutions such as banks, insurers and asset managers. For example, some companies are considering this when managing mortgage risk associated with increased flood risk, or more selectively underwriting or lending based on large customers' plans to take climate action. This underscores the critical role capital and the financial markets can play in the climate transition.

Many companies have seen a positive commercial impact from their initiatives

As already mentioned, many companies have looked at efficiency initiatives as a more commercially acceptable way to start their climate journey, with 41% of the initiatives associated with OpEx reduction impact and 12% with CapEx reduction where responses were provided. Much of the OpEx reduction is driven by greater energy efficiency.

Some asset upgrades are reducing CapEx by improving the lifespan and performance of existing equipment: *"Our solution can extend the lifespan of a typical electrical substation on the distribution network by 15-20 years"* CEO, (Energy & Resources). In other cases, new assets can reduce reliance on external suppliers:



"We have increased the level of renewable energy that we generate, to reduce the requirement to purchase energy from the Grid. These investments have had a payback period of 0-5 years and have resulted in a reduction in our energy bill of £2.6m last year."

Climate Change Manager (Utilities)

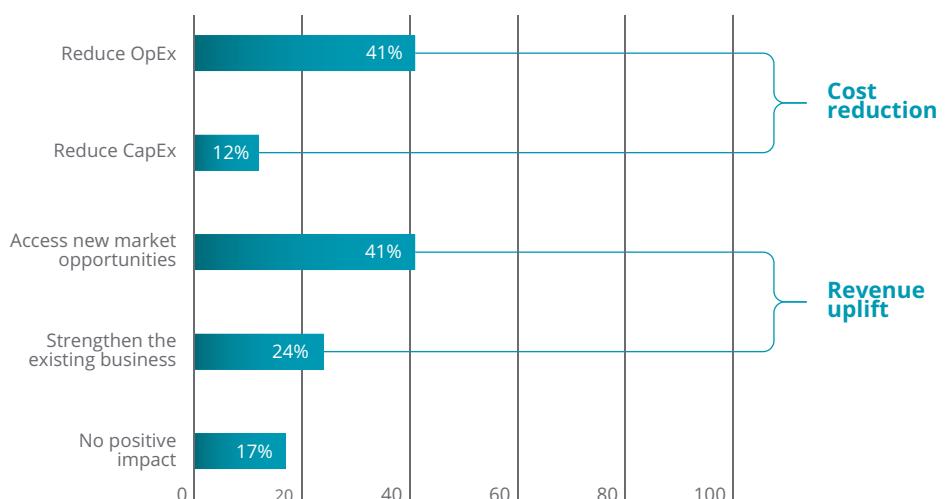
Organisations are increasingly considering initiatives that open opportunities for revenue growth: 24% of the initiatives highlighted revenue upside that strengthens the existing business, and 41% of the initiatives where the company is able to access new market opportunities. Several professional services companies have spoken about the commercial upside of greener service offerings in accessing new opportunities and customers.

The majority of initiatives have an identified payback period, a fifth of which are within one year

Of those respondents providing information on the payback period for their initiatives, 72% of initiatives were thought to have an attributable payback period. Of those that did, 22% have a payback either immediately or within one year,

Commercial impact of initiatives

% of initiatives selecting this option (total is >100% due to a multi-select option)



but many also have difficulty quantifying the exact period due to data issues. Types of initiatives with a shorter-term payback include process efficiencies and those where more energy-efficient assets are less expensive than existing assets (e.g. new refrigeration units). Those with longer payback include those with large upfront CapEx requirements such as new mining technologies, ground water heat extraction pumps and production technology to more effectively manage factory waste. This suggests that as more of the 'low-hanging fruit' such as operational efficiency is implemented, companies need to look to longer-term, more transformative initiatives across the value chain to realise targets.



Payback period on initiatives

% of initiatives selecting this option (of respondents who select 'Yes' to payback period)



Some initiatives do not have a specific commercial return or business case, and are instead executed for reasons including building foundational capabilities (such as in data), aligning to the market and protecting brand:

"The initiatives are broadly considered to have a short-term profitability hit, but are necessary to achieve our long-term strategic objectives and are expected to pay off in time."

**Group Sustainability Director
(Construction)**

Future initiatives suggest increasing focus on measurement, reporting, target setting and innovation

When speaking to respondents about planned initiatives, the mix is similar to current initiatives. However, there is an emphasis on establishing more ambitious and effective foundations for their broader decarbonisation strategies. Areas of focus include:

- finalising and announcing ambitious net-zero and carbon neutral targets;
- setting clear KPIs for leaders and employees around performance against these targets;
- transitioning to new measurement and reporting platforms to centralise data collection;
- engaging more closely with suppliers to collect emissions data, such as the development of an agricultural footprint for a grocery company;
- developing innovative tools to complete life-cycle assessments (LCAs); and
- implementation of TCFD and incorporation into strategic decision-making.

There are also some more innovative projects planned, such as:

- developments such as precision application for fertiliser technology, blending bio-components into traditional oil products, and R&D into technologies to make steel without carbon; and
- re-imagining working patterns due to COVID-19, for example permanently reducing office space.

Key

Within one year
1 - 5 years
5 years
Unable to quantify



Initiative commentary and examples

(highest frequency initiatives)

Low-carbon energy consumption and generation

Sourcing of low-carbon power: companies have undertaken various initiatives such as long-term Power Purchase Agreements (PPAs) in wind and solar, using renewables for electricity heating to replace gas, installing onsite solar arrays and switching to green gas. These are powering everything from offices, housing and stores through to factories and mining operations.

Hydrogen innovation: utilities companies are working on various pilots and partnerships including: 1) blending hydrogen into the current gas network to serve homes; 2) implementation of hydrogen projects across the value chain in energy, mobility and industry; and 3) a consortium to decarbonise refineries and their power plants through a blue and green hydrogen hub and post-combustion captures.

"We reduced our carbon footprint by 79% by switching to renewable energy, and increasingly we have commercially viable renewables on our site too"

Director of Environment (Utilities).

"We were able to reduce CO₂ emissions in a single factory by 50,000 tonnes through the use of nuclear generated electricity"

EVP Sustainability (Industrial Products).

"Blending 20% hydrogen into the gas supply could reduce home carbon emissions by 6%"

Director of Strategy, (Utilities).

Engagement and education

Supplier engagement: a telco set up a supplier forum focused on sustainability and innovation, developing best practice in ten areas (including ecodesign and carbon reduction), and assessed suppliers. This assessment was used as a basis for upskilling, and a challenge was run to source sustainability ideas that the supplier and company could work on collaboratively.

Customer engagement: a manufacturer is working with customers to map the footprint of the product lifecycle, and working with the marketing and purchasing teams to implement more sustainable solutions.

Employee engagement: a hospitality franchise has developed a platform with ideas for both managerial and operational actions to support franchisees to reduce their environmental impact. They are required to log on monthly to provide utility data, and a central team generates year-to-date performance reports and engages regularly with franchisees to drive improvements.

"This [supplier forum] was considered a success as the creative solutions were really exciting. This action has since driven similar requests from competitors, so the suppliers that had worked with us were actually ahead of the game"

Head of Environmental Sustainability (Telco).

"There is research that suggests that if you design and develop it in the right way, our solution can take more carbon out of the customers' supply chain than it adds. In a typical supply chain, our product adds 3-6% of a customer's emissions footprint, research suggests that the right materials and design can take out 7-9%. If we can map customer usage of our products e.g. what it is used for, and how many times it is touched from machine to retailer, we can design something that will realise these reductions"

Chief Sustainability Officer (Manufacturer).



Energy efficiency in buildings

Store upgrades and process: a hospitality company has been able to improve its building operations through two main projects: 1) implementing back-of-house operational procedure changes for franchisees to adhere to (e.g. in lighting and cooking); and 2) upgrading building features such as replacing lightbulbs with LED lighting to cut down on electricity use, moving thermostats to better locations. These projects are expected to reduce their total emissions by c.10%.

More effective refrigeration: a grocery chain has invested in energy and refrigeration efficiency improvements such as LED lighting, sub-metering, doors on fridges, aerofoil technology, refrigerant leakage reduction and colleague culture change initiatives, to improve its in-store energy efficiency. It is also looking at switching from hydrofluorocarbons (HFCs) to natural gas and other lower carbon gases.

Low-carbon materials and finished goods

Product R&D: a manufacturer in industrial products is focusing its R&D efforts on replacing single use plastics and removing plastic as much as possible from manufacturing processes by working with clients. For example, straws were identified as being a \$7.8b market, and they are coming up with a viable non-plastic product that does not get soggy and is more durable.

Reducing packaging: a technology company is sourcing recyclable materials for its packaging, reducing the plastic and paper inputs, and working on new innovations to create more streamlined packing design.

Portfolio footprinting: an industrial products company is footprinting every product in their portfolio, with a directive that the footprint of those products needs to reduce over time. The footprinting exercise includes scope 3 (supply chain) emissions, and this data is being made available to customers to encourage them to switch to more sustainable products.

"In just four months we successfully saved the equivalent of 115 trees and 15,562kgs of CO₂ and also generated 11.9MWh of power"

Business Development Manager (Legal Services).

"Adding doors to fridges in our stores and rolling out aerofoil technology is expected to save 15% of the energy currently used"

Responsible Sourcing Manager (Grocery).

"To achieve reduced packaging use, we want to get from 2.27 to 1.13 tonnes/£m revenue, and we plan to get to 85% recyclable packaging by 2025"

Global VP, Environment Health and Safety (Industrial Products).



Fleet efficiency and replacement

Transition to EVs: A utilities company's fleet is 70% vans and 30% company cars, and they are targeting a transition to electric vehicles by 2030. They have introduced a flexible benefit scheme to incentivise employees to purchase EVs, together with an employee engagement programme to encourage uptake. As charging infrastructure was a significant barrier, they have acquired an EV charging solution startup.

Operational efficiency: A transport provider has invested in fuel monitoring systems and educated its employees in operating the vessels more efficiently, such as driving slower and leaving and arriving at the port on time. This is now supported by performance KPIs for employees.

Waste reduction and material circularity

Reducing fast fashion: a fashion company has adopted a philosophy that everything should be made to order and to last, avoiding overproduction and reducing waste. There is also a big push towards making the design of the products timeless and classic, rather than trendy, increasing longevity.

Repurposing production waste: an industrial product company recently expanded the capacity of a plant to eliminate waste and transfer this into energy. This has accounted for c.30% of the carbon reduction within the business.

Incentivising circular products: a technology company worked with stakeholders across the supply chain to lobby for circular products and promote these to consumers. As an example, pushing circular principles into aftersales processes in automotive, by repurposing materials to put back into the market.

"We are on course to cut carbon emissions by 5% this year. The significant reduction in carbon is mainly down to the use of fuel monitoring systems, increasing operational efficiency and diligent work by all involved in the business"

CEO (Transport).

"We are encouraging our clients to design their products in such a way that they can be reused, in line with the principles of circularity. This process is important to educate organisations, allowing them to visualise and quantifiably measure the waste they are putting out and think about more circular business models"

Director (Marketing Services).





The lack of clear policy roadmaps is cited as contributing to significant uncertainty.

Barriers

Respondents were asked: "What do you see as the 1-3 biggest barriers to putting in place more ambitious commitments and/or delivering on initiatives?" both in terms of external and internal barriers.

All organisations have cited one or more external barriers, and 75% have included at least one internal barrier

External barriers

45% of respondents identify barriers relating to **policy and regulation**. The lack of clear policy roadmaps is cited as contributing to significant uncertainty:

"Government incentives have grown and shrunk a number of times over the years, leading in some cases to a 300% difference in revenue year-on-year for the company."

Founder / CEO (Utilities)

Coherent policy across jurisdictions is also an issue for those with significant international footprints. Some of the key policy issues cited include:

• lack of a coordinated approach or framework in areas where there are multiple competing technologies and pathways, such as in heat and transport. This means that the market for certain products and services are fragmented and lacking direction, such as a lack of comprehensive EV charging rollout policy;

- uncertainty about the future cost of different types of energy and carbon pricing policy;
- lack of a systemic approach to incentives and penalties, as decisions are often made within a sector without proper consideration for knock-on (and sometimes detrimental) effects in other sectors; and
- insufficient investment available to de-risk new technologies or significant upgrades for companies and consumers, such as retrofitting the housing and commercial stock to target levels of insulation and energy efficiency.

43% of respondents identify barriers related to **industry structure**. Within this category, there are concerns about the differences between geographic markets, a lack of shared ownership, and reliance on markets or sectors that are still nascent.

- regional differences impinge on companies' abilities to achieve their decarbonisation commitments, such as the availability of renewables exacerbated by supply chains that are difficult to relocate;
- respondents feel that ownership and incentive models in some parts of the value chain lead to a lower sense of ownership of climate-related issues, and instead lock in a transactional and short-term focus. Examples include: the commercial buildings sector, where agents tend to have a short-term financial

focus in contrast to owner occupiers; franchisee models in food or hotels where the franchisee is often focused on short-term financial performance with a view to disposal; and commodity markets where the lack of differentiation limits the opportunity for customers to buy more climate friendly products.

"Intermediaries in the market are often not interested in long-term building performance."

Head of Sustainable Design (Professional Services)

- companies are particularly dependent on the progress made in some markets/sectors to deliver on their own targets, such as energy and transport. The early stage of transition of some of these sectors is cited as an issue, for example EVs and charging infrastructure. However, this also represents an opportunity for companies who can lead and create new sources of value, such as those attracting customers by providing EV charging points alongside their core proposition (e.g. grocery store parking lots, fuel stations).



With the growing need to be responsible for, and report against, scope 3 emissions, engagement with **supply chains** is ever more important. This is a barrier cited by 21% of respondents. For many companies and sectors, scope 3 emissions create the most significant source of climate-related impact. Yet there is a lack of consistency and clarity in defining the scope of the emissions a company should be responsible for, and in some cases result in companies defining their boundaries too narrowly.

"There's a lack of a systems approach, with a tendency for many organisations to adopt a linear value chain view without understanding interdependencies."

Director of Brand (Retail)

Furthermore, engagement challenges are compounded in supply chains (e.g. populated by smaller companies and/or cross-geography) that are not at the same level of awareness or capability to prioritise and implement actions, and collect and report data accurately. This points to the need for clarity on boundaries and definitions of what is exactly included in scopes and related commitments to increase collaboration up and down the value chain.

Customers, whether consumers or organisations, whilst a key driver for many companies, are also cited as a barrier for 39% of respondents. Challenges typically revolve around a lack of understanding, and the related issue of willingness to pay.

- Customers may not understand the carbon implications of their choices, nor the relative standing in climate terms of the companies they buy from:

"Consumer understanding of the bigger picture is limited... information is often incorrect or misleading, and there is no independent body to hold organisations to account with respect to ambitious targets or claims, incentivise climate friendly behaviours or produce guidance to help people make informed decisions."

CEO (Apparel)

- Related to this lack of understanding, some respondents cite a perceived unwillingness of customers to pay a premium for climate friendly products and services, resulting in companies bearing the increased cost:

"There are still many clients who aren't yet interested in engaging on climate related issues and aren't willing to pay a premium for them... this is a difficult balancing act, and it's impossible to please everyone."

Global Head of Resilience and Sustainability (Financial Services)

Current market disruption, and particularly COVID-19 related issues, is cited as a barrier by 27% of respondents. Disruption does not appear to be taking climate action off the table but can result in re-organised priorities: with short-term financial stability and employment occupying management's time and focus, and an expectation that policy change will be slow. However, operational changes brought by COVID, such as reduced need for office space and business travel suspension, has accelerated focus for some, and others believe that any slowdown will be short-term and more than matched by a medium-term acceleration of focus.



Availability of technological solutions is cited as a barrier for 13% of respondents, largely industrial companies. Examples include looking for a replacement factory with a fundamentally different carbon footprint, re-inventing an industrial process or developing carbon capture technologies.

Internal barriers

A recurrent theme, sometimes cited as a positive but also as a barrier, is the extent to which climate change and transition features in the hierarchy of **company priorities** (cited by 51% of respondents). This is often signalled by a lack of investment for climate related initiatives, exacerbated by perceived uncertainty about the time or realisation of commercial benefit:

"There's a perception that being sustainable costs more... creating a challenge of upfront investment."

Managing Director Sustainability & Social Impact (Construction)

Unsurprisingly, there is some suggestion that companies with less commercial resilience, such as lower margin or smaller companies, feel this more acutely.

Employee buy-in is seen as important but difficult to achieve by 21% of respondents. Culture takes time to build, and existing KPIs and ways of measuring performance hold employees to the existing way of doing things. Climate change is a powerful and emotive topic, but this does not necessarily translate into support for and desire to contribute to the company commitments and initiatives.

The necessary **data and systems** to baseline both emissions and resilience, and track progress against them, are difficult to implement. Their absence is seen as a barrier to progress by 20% of respondents. The challenge is significant: standards are evolving, required data might not be available, reporting reach has to extend up and down the value chain, and the sustainability functions that often manage this have a fraction of the resources of the finance function.

"Work needs to be done on the infrastructure and approaches required for data collection... there's a lack of public, national statistics."

Director of Brand (Retail)

Some respondents are clear on the need for **new skills and capabilities**, with 20% stating this as a barrier. As climate change moves from relatively specialist, involving a small number of people, to something that is far more pervasive, change is required from more of the organisation. Specific capability gaps cited include the ability to build climate scenarios, revisit the basis of product or service design, analyse and enhance infrastructural resilience, and communicate the climate change transition.





Sharing experience across the entire value chain is critical to the success of initiatives.

Learnings

Respondents were asked: "What are the 1-3 most powerful learnings that your organisation has accrued over the last year in relation to the climate transition? Consider what has worked well, and any initiatives that in hindsight you would not have invested in".

Collaboration is often cited as a key lesson (44% of those providing a response to this question) and take multiple forms:

- up and down the supply chain to reduce emissions:

"There are many opportunities in the climate transition through the entire value chain. Sharing experience between the entire chain is critical to the success of initiatives."

EVP Marketing (Oil and Gas)

- with the sector and policy makers to lobby for the necessary change: for example, ResponsibleSteel is the steel industry's first global multi-stakeholder standard and certification initiative, in which two contributing company have played a pivotal role since its establishment in 2015;

- with customers to properly understand their needs:

"Sometimes, brilliant solutions from an engineering perspective are not necessarily what our customers are looking for and we have found that 'perfect' can sometimes be the enemy of the 'good'."

CEO (Utilities)

- with peers to stimulate ambition, work on joint innovations in more nascent technologies (e.g. in hydrogen, EVs), share the cost and reduce the downside risk due to the scale of the issue:

"We are working with peers and third parties on carbon capture and utilisation (CCU) technology to improve efficiency of older plants."

GM Corporate Responsibility (Heavy Industry)

31% of respondents highlighted the importance of **market-wide understanding and communication** to demonstrate ambition and generate momentum around the common cause. It is also important to stimulate debate around the realities of challenges and trade-offs to move away from making "trophy" commitments. Another important aspect of communication is customer and consumer engagement and education, so they can understand the climate implications of changes such as moving to plastic-free packaging or substituting palm oil.

"We need to take consumers with us... be more factual and break myths around a tech neutral approach to address the carbon challenge."

Head of Political Affairs and Government Relations (Consumer Goods)



Buy-in from leadership is called out by 31% of respondents as a key learning. Clear and vocal support from the CEO and board provides the motivation, opportunity and very often the resources to put in place an effective programme around climate action.

30% of respondents mention benefits of **employee engagement**:

"We approached different parts of the business and convinced people to own and be responsible for these initiatives... tailored for the particular audience."

Sustainability Manager, Property Services (Retail)

When this works well, employees become a source of innovation and inspiration. For example, a company in Heavy Industries engaged their younger employees across the business to identify new initiatives and present business cases to senior management.

Resourcing (22% of respondents) the climate action programme adequately and early, and organising in a way that is embedded in the business are typically talked about together and as foundations of success.

Whilst **data and systems** are often cited as barriers, companies that have invested early in capabilities are reaping the benefits, and 16% of respondents cite this as an important learning. Benefits include increased stakeholder trust, quality insights for prioritisation and strategic decision-making, and opening up new opportunities e.g. green financing.

"Good systems and data are pre-requisites for setting appropriate targets and designing the right interventions."

Group Head of Environment, Health and Safety (Consumer Goods)

Less mature organisations are still struggling to effectively engage their stakeholders due to limited focus on capturing evidence of success in a structured manner. Those who are more advanced suggest that **pilot projects** (13% of respondents) are critical for demonstrating the impact of projects on emissions or resilience, as well as commercial viability, to effectively communicate with key stakeholders, secure buy-in and ensure credibility. Discrete pilots create learnings and clear impact stories that maintain interest and momentum in the short-term, build confidence and lead to bigger ambitions.



“If businesses are keen to get into sustainability, they will be pushing against an open door. This was the case pre-COVID, but post-COVID, the level of awareness and interest in sustainability and climate change has spiked.”

Business Development & Services Director (Industrial Minerals)



Appendix

Company maturity model: criteria

Companies' climate action programmes are assessed against four main dimensions to create a maturity model:

	Stage 1: Overlay	Stage 2: Priority Initiative	Stage 3: Driver of transformation	Stage 4: Fully integrated
Positioning	Positioned as separate sustainability initiative, with some employee engagement	Initiatives are prioritised, with leadership buy-in and funding in place	Viewed as top priority for the organisation, with strong leadership commitment and largescale funding in place	Fully aligned to and drive organisational strategy/ambition
Scope	Focused on operational mitigation, with limited alignment to core business activities	Extend to products and/or service offerings but yet to have fundamental impact to core business activities	Bring transformational changes to the organisation's business model, or products and/or services	Pervasive across the business, focussed on both mitigation and resilience
Involvement	Mainly driven by a distinct function (e.g. Sustainability) or a few people	A number of cross business / function / geographical teams involved	Involve significant number of dedicated resources across the organisation	Leaders and employees aligned at corporate and individual level
Organisation	Limited involvement of other teams, BUs, or departments	Coordinated support and delivery via other teams, BUs, or departments	Embedded and aligned to overall organisational strategy/ambition	Impacts business model and culture, employee performance and remuneration

Initiative focus areas: definitions

Adaptation/ resilience of physical assets	Modifying assets such as buildings, vehicles, plant and equipment to be more resilient to climate impacts such as rising sea levels, flooding, higher temperatures, drought and violent storms, price and availability of petrol/diesel, exposure to policy or regulation changes.
Corporate strategy and governance	Setting overarching climate and/or related business strategies, or changing governance models (e.g. board constitution or roles, incentives, performance measurement and KPIs).
Energy efficiency in buildings	Using less energy to provide the same level of service through more effective processes and/ or assets in buildings such as offices and stores. This includes e.g. lighting, cooling and heating.
Energy efficiency in production	Using less energy to provide the same level of output through e.g. streamlined manufacturing processes or more effective machinery.



Initiative focus areas: definitions cont.

Engagement and education	Working with stakeholders (employees, suppliers, customers or other) to share knowledge and influence behaviour. This could include influencing suppliers to set net-zero targets or educating customers about the climate related implications of their purchasing decisions.
Green financing	Activities related to the allocation of capital on the basis of climate or broader sustainability considerations. Related concepts and terms include responsible investment, sustainable finance and climate finance.
Low-carbon construction and infrastructure	Activities focused on reducing the carbon footprint of the construction phase of buildings and other physical assets.
Low-carbon energy generation and/or consumption	Activities related to reducing the carbon emissions associated with energy generation and/ or consumption. This includes both greater carbon efficiency of traditional sources of energy as well as a switch to renewables.
Low-carbon materials and finished goods	The sourcing and/ or production of lower-carbon materials and/ or finished goods.
Measurement and reporting	Activities relating to baselining emissions, setting up structures and processes to track them, and reporting through channels such as company annual or sustainability statements, often against external frameworks or standards e.g. SASB and TCFD.
Offsetting and/or carbon capture	Mechanisms to reduce CO ₂ e in the atmosphere that sit outside the core business model, and often outside the corporate boundaries, used to offset a company's emissions.
Transportation: employee mobility & travel	Any activity targeting the reduction of emissions stemming from employee travel covering both reduced volume and changes in the mode of travel.
Transportation: fleet efficiency & replacement	Activity related to enhancing the CO ₂ e efficiency of a transport fleet, including both modification and replacement.
Waste reduction and material circularity	Activities targeting reducing waste, including reduced consumption, changes in consumption, enhanced levels of recycling and adoption of broader circular economy principles.



G13 Impact Platform Interview questions

Climate targets & commitments	
1	What climate related targets and/or commitments has your business made, and for what year? For example, SBTs, EV100, EP100, RE100
Overall change programme & key drivers	
2a	Where in the business is your change programme to manage and deliver on these targets and/or commitments positioned? For example, are initiatives embedded across the business or sitting in a discrete function, programme etc?
2b	What are the main drivers of your climate commitments and initiatives, both internally and externally? For example, transition risks, influence from investors, regulators or customers, reporting requirements, cost saving opportunities.
2c	Do these targets and/or commitments affect your investment decision making? If yes, how?
Summary of key initiatives	
3a	What are 1-3 key internal/external initiatives that your organisation has initiated in the last 2 years, which have had (or are expected to have) the highest impact on your/your clients' transition to a low-carbon future?
3b	What do you have in place today to measure the different climate impacts of these initiatives? Consider whether done internally or by third parties, whether there are dedicated people, what systems are used, etc.
Impact of initiatives	
4a	<p>For each of these initiatives: Who is involved in this initiative:</p> <ul style="list-style-type: none"> • Which functions are involved in the management or delivery of this initiative? What is the role of Finance in planning & execution?
4b	<p>What impact has this initiative had (or is it expected to have) on your climate transition:</p> <ul style="list-style-type: none"> • What are the main impacts of the initiative on your climate transition? Consider impacts on mitigation (emissions), resilience and value creation • Are you able to quantify any of these impacts? For example, % emissions reduction
4c	<p>What commercial impact has this initiative had (or is it expected to have):</p> <ul style="list-style-type: none"> • What are the main positive financial impacts of this initiative? For example, new product & service revenue, energy spend savings • What are the main types of investment / negative financial impacts for these initiatives? For example, investment in new assets, marketing costs • Will there be a payback period on this initiative? If so, approximately how long • Has this initiative had (or will it have) a material financial impact on the business?
4d	Are there any other broader impacts from this initiative you would like to mention? (e.g. reduction in water usage, impact on other SDGs)



Key barriers	
5a	What do you see as the 1-3 biggest external barriers to putting in place more ambitious commitments and/or delivering on initiatives?
5b	What do you see as the 1-3 biggest internal barriers?
Key learnings	
6	What are the 1-3 most powerful learnings that your organisation has accrued over the last year in relation to the climate transition? For example, what has worked well, any initiatives in hindsight you would not invest in again
Planned initiatives	
7	Are there any other high impact initiatives that are in planning stage that you would like to mention?
Wrap up	
8	What would be of most value to you through this platform? For example, specific insights from other organisations, collaboration opportunities

Link to TCFD recommended disclosures

TCFD's recommended disclosures	Covered under:
Governance The organisation's governance around climate-related risks and opportunities.	The board and management's role in assessing and managing risk and opportunity is called out in management of change programmes, as well as drivers of change. Interview questions: 2a, 2b
Strategy The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.	The impacts of climate-related risks and opportunities on the organisation's business and strategy is called out in whether climate targets affect investment decision making, the commercial and broader impact of climate initiatives. Interview questions: 2c, 3b, 4b, 4c, 4d
Risk Management How the organisation identifies, assesses, and manages climate-related risks.	The need for identifying, assessing, and managing climate-related risks are called out in drivers of change, as well as covered more broadly under key initiatives. Interview questions: 2b, 3a
Metrics and Targets Metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	The metrics and targets used by organisations are captured under overall climate commitments and initiatives, as well as called out in barriers and learnings. Interview questions: 1, 3b, 4b, 5, 6

Source: https://www.fsb-tcfd.org/wp-content/uploads/2020/03/TCFD_Booklet_FNL_Digital_March-2020.pdf



Further reading

Deloitte.

Deloitte's insights on climate change: <https://deloitte.co.uk/climatechange>

The Deloitte Global Millennial Survey 2020 explores the views of more than 27.5K millennials and Gen Zs, both before and after the start of the COVID-19 pandemic, to understand their perspectives on business, government, climate, and the pandemic, among other issues: <https://www2.deloitte.com/uk/en/pages/about-deloitte-uk/articles/deloitte-global-millennial-survey-2020.html>

Deloitte's quarterly CFO Survey is firmly established with media and policy makers as the authoritative barometer of UK corporates' sentiment and strategies:

<https://www2.deloitte.com/uk/en/pages/finance/articles/deloitte-cfo-survey.html>

2030 Purpose: Good business and a better future: <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/purpose-2030-good-business-better-future.html>

#DigitalWithPurpose - Delivering a Smarter 2030: Digital technology can have 'transformational' effect on achieving the UN Sustainable Development Goals (in collaboration with GeSI)

<https://gesi.org/research/gesi-digital-with-purpose-full-report>

CBII

Priorities for a green recovery following the coronavirus pandemic:

<https://www.cbi.org.uk/articles/green-recovery-priorities-following-coronavirus/>

The Low-Carbon 2020s – a decade of delivery:

<https://www.cbi.org.uk/articles/the-low-carbon-2020s-a-decade-of-delivery/>



A4S's CFO Net Zero Statement of Support:

<https://www.accountingforsustainability.org/en/activities/net-zero.html>

Met Office

The latest industry relevant insights and information from the Met Office's industry experts:

<https://www.metoffice.gov.uk/services/insights>

UKCP18 is the fourth generation of national climate projections for the United Kingdom and provides users with the most recent scientific evidence on projected climate changes with which to plan for the future: <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/about>

The Met Office five-year climate forecast provides annually updated five-year climate predictions at global and continental scales: <https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2020/increased-capability-creates-five-year-window-into-the-future>



Those interested in our world-wide governance initiative may wish to participate in the Chapter Zero: Directors' Climate Journey. It is an open-source framework designed to provide a foundation of climate knowledge and confidence in your ability to take the conversation into the Boardroom. <https://www.chapterzero.org.uk/directors-climate-competence/>

Glossary of terms

CO2 – Carbon dioxide, a gas released through human and natural activities. One of a range of greenhouse gases (GHGs – see below) that amplify climate change.

Carbon dioxide equivalent (CO2e) – a standard unit for measuring carbon footprints. The impact of each different greenhouse gas is expressed in terms of the amount of CO2 that would create the same amount of warming.

Carbon capture and utilisation (CCU) – refers to technologies designed to capture and recycle carbon dioxide (CO2) for further usage. CCU may become a viable response to the global challenge of significantly reducing greenhouse gas emissions from major heavy emitters.

Carbon footprint – the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organisation, or community.

Carbon neutral – refers to achieving net zero carbon dioxide emissions.

Carbon pricing – an approach to reducing carbon emissions that uses market mechanisms to pass the cost of emitting on to emitters.

CDP – is a not-for-profit charity that supports investors, companies, cities, states and regions to manage their environmental impacts. It aims to make environmental reporting and risk management a business norm, and drive disclosure, insight and action towards a sustainable economy.

<https://www.cdp.net/en/info/about-us/what-we-do>

Circular economy – is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

Circular products – are designed with the entire life cycle in mind in order to maximise the value of them and their component materials.

Climate transition – is defined as activities required to help companies and society move to a low-carbon and climate-resilient world. At a corporate level this breaks down to mitigation, resilience and adaption activities.

COP26 – also known as the 2021 United Nations Climate Change Conference, is the 26th session of the Conference of the Parties. It is scheduled to take place in November 2021 in Glasgow.

Emissions – is the term used to describe the gases and particles which are put into the air or emitted by various sources. In reference to climate change, it usually refers to greenhouse gas emissions.

European Green Deal – is set of policy initiatives by the European Commission that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use.

EV – Electric Vehicles. EVs fall into three classifications: Battery Electric Vehicles (BEVs); Plug-in Hybrid Electric Vehicles (PHEVs); and Hybrid Electric Vehicles (HEVs).

EV100 – is a global corporate initiative led by The Climate Group, that brings together companies committed to accelerating the transition to electric vehicles.

<https://www.theclimategroup.org/project/ev100>

Goal 13 – the 13th SDG (refer to Sustainable Development Goals below); Goal 13 Climate Action aims to:

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries;
- Integrate climate change measures into national policies, strategies and planning; and
- Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

<https://www.un.org/sustainabledevelopment/climate-change/>

Greenhouse Gases (GHGs) – are any gases that contribute to the “greenhouse effect” by absorbing infrared radiation and preventing it from leaving the Earth’s atmosphere. The most commonly under scrutiny are carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O) and fluorinated gases, such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).



The Global Reporting Initiative (GRI) – is a non-profit organisation promoting sustainability reporting standards.
<https://www.globalreporting.org/>

HFCs – see Greenhouse Gases.

Hydrogen – is a flammable gas which has no associated carbon emissions; the only waste product on combustion is water. It can be blended with natural gas or burnt as a pure gas and is seen as a “clean” fuel.

Net-zero – refers to achieving an overall balance between GHG emissions produced and taken out of the atmosphere.

Paris Agreement - entered into force in 2016, and requires the 189 ratifying parties to take ambitious efforts to keep a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. The agreement also aims to strengthen the ability of countries to deal with the impacts of climate change.

Physical risk – The TCFD have divided climate-related risks into two major categories:

- (1) Risks related to the transition to a lower-carbon economy, and
- (2) Risks related to the physical impacts of climate change.

Physical risks resulting from climate change can be event driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organisations, such as direct damage to assets and indirect impacts from supply chain disruption. Organisations' financial performance may also be affected by changes in water availability, sourcing, and quality; food security; and extreme temperature changes affecting organizations' premises, operations, supply chain, transport needs, and employee safety.

RE100 – is a global corporate renewable energy initiative, led by The Climate Group in partnership with CDP, that brings together businesses committed to 100% renewable electricity.

<https://www.there100.org/re100>

The Sustainability Accounting Standards Board (SASB)
– is a non-profit organisation which aims to develop sustainability accounting standards. <https://www.sasb.org/>

Science-based targets (SBTs) – an emissions reduction target is defined as ‘science-based’ if it is developed in line with the scale of reductions required to keep global warming below 2°C from pre-industrial levels.

Scope 1, 2, 3 emissions – Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain.

Sustainability – has many definitions and covers a broad range of topics from financial sustainability to social and environment sustainability. A frequently cited definition is that from Our Common Future: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

<http://www.un-documents.net/our-common-future.pdf>

Sustainable Development Goals (SDGs) – 17 Goals were adopted by all UN Member States in 2015, as part of the 2030 Agenda for Sustainable Development.

<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

The Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) – develops voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders. <https://www.fsb-tcfd.org/>

Transition risk – The TCFD have divided climate-related risks into two major categories:

- (1) Risks related to the transition to a lower-carbon economy, and
- (2) Risks related to the physical impacts of climate change.

Transitioning to a lower-carbon economy may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organisations.



Key contacts and acknowledgements

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