Goal 13 Impact Platform

Voices from the market: How businesses are managing the transition to a zero-carbon, resilient and prosperous future



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More information

If you would like further information on the platform, please contact the G13 team at **goal13impactplatform@deloitte.co.uk**

Access the platform here: www.goal13impact.com

Over the past year, we have interviewed over 400 companies to hear their stories of climate action and build them into a repository available to all.

www.goal13impact.com

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Foreword

Voices from the market

The pandemic has made the start of the 2020s the most disruptive period this century. As we rebuild our economies and societies, while continuing to manage COVID-19, we need to address climate change with a similar degree of urgency. This decade is critical; we need to halve global greenhouse gas emissions by 2030 to avoid the most dangerous climate change impacts. That gives us just two business cycles to realise transformative change.

We started the Goal 13 Impact Platform, with a diverse group of partners, to showcase corporate climate actions. Over the past year, we have interviewed over 400 companies to hear their stories of climate action and build them into a repository available to all.

The overarching message that emanates from the interviews is that while there are a range of fantastic initiatives, organisations are yet to embed climate change into their business models as a driver of long-term value, and have not yet fully integrated climate across the organisation.

Yet, the drivers to change are growing, and are expected to endure, as expectations of society and company stakeholders continue to rise. Not least as climate impacts, e.g. from extreme weather, make climate change an even more pressing global issue.

Within this report there is coverage of drivers of change, of targets and commitments, of the key initiatives companies are carrying out, of barriers and of lessons learned.

We hope that you enjoy this distillation of stories on climate, which emanate from a broad spectrum of perspectives, programmes and projects. We envisage that this report, with its insights and inspiration, can help companies learn from others to overcome company-level barriers to change, as well as helping organisations better understand and align to realise system change.

Sam Baker **Deloitte** Veronica Poole Deloitte



CBI

It's inspiring to see what businesses are doing to tackle the challenges of climate change. And I'm encouraged to see a shift in approach: now they're talking less about the cost of decarbonising their operations, and more about the cost of not doing anything at all. These interviews shine a spotlight on what businesses are learning from each other and by sharing best practice, others can follow. Collaboration really is essential as we step up our efforts on the race to net zero.

Tony Danker, Director-General, CBI



Deloitte

Over the last year, we have seen more and more businesses committing to large-scale climate action. But there remains a critical gap between aspiration and action. As the report indicates, business leaders understand that cross-sector collaboration is needed to move the needle on an issue of this magnitude, but many are not sure where to start. That's why the stories and best practices shared in these pages are so vital to the work ahead, as we collectively transition to a low carbon economy.

Punit Renjen, Global CEO, Deloitte



Chapter Zero

The responses highlight the critical role that board members play in ensuring that climate risks and opportunities are integrated into strategic plans so they can be implemented and monitored effectively. While the external pressure on the board has arguably accelerated progress, leadership has been evidenced as both a driver and a barrier of progress in the interviews. It is clear more work is needed by boards across all sectors and scales to reach the emissions reductions levels needed.

Julie Baddeley, Board Chair, Chapter Zero



A4S

The responses highlighted that climate is not fully embedded into business models as a driver of long-term value. The role of finance, and in particular the CFO, as stewards of company value is critical to addressing this gap. They can support integration into existing processes and structures, provide information needed to drive decisions, allocate funds and lead interaction with the capital markets.

Jessica Fries, Executive Chairman, Accounting for Sustainability



Dell Technologies

The interviews have highlighted to us how important it is to consider the influence of all products and services throughout their life-cycle, and it has reaffirmed how important climate thinking is in everything we do as a technology leader. There is a need to involve all functions of the business on this journey. All business functions and leaders, including the CIO and CTO, have a fundamental role to play in accelerating climate action.

Aongus Hegarty, President, International Markets, Dell Technologies



Met Office

The interviews, and report, suggest that companies are becoming increasingly aware of the risks of climate change and the opportunities too, with initiatives such as TCFD gaining traction and becoming part of the regulatory toolkit in some countries. The report does, however, highlight the lack of prioritisation of resilience in the majority of participating companies, which is a concern and needs to be addressed.

Penny Endersby, CEO, Met Office

Executive summary

The Goal 13 Impact Platform

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, Boomi, and the Met Office. Together, the partnership has built a free and open repository of corporate climate actions from businesses who want to tell their climate story in the run up to COP26. The objectives of the initiative are to stimulate learning and collaboration through use of the platform and through events and reports.

This report: Voices from the market

This report summarises the interviews that have been carried out and illustrate these with attributed references. It represents the narrative of the businesses interviewed rather than the authors', and aims to complement the individual business level insight the platform provides.

Almost 420 interviews have been carried out to date. Whilst all interviews have informed the report, the analysis and attributed references represent a subset of these interviews (c.300), reflecting the lag between when interviews occur and sign-off is received from the participating business to use the information. The Partnership set out to capture as many voices from business as possible given available resources, regardless of size, sector, or geography. The distribution of the businesses interviewed across size and geography is shaped by the relationships and locations of the founding partners.

All businesses interviewed had some form of climate narrative they were willing to share. As such, it's highly likely that those interviewed are more progressive than the broader market.

The report is structured in the same way that the interviews were carried out, covering 6 areas:

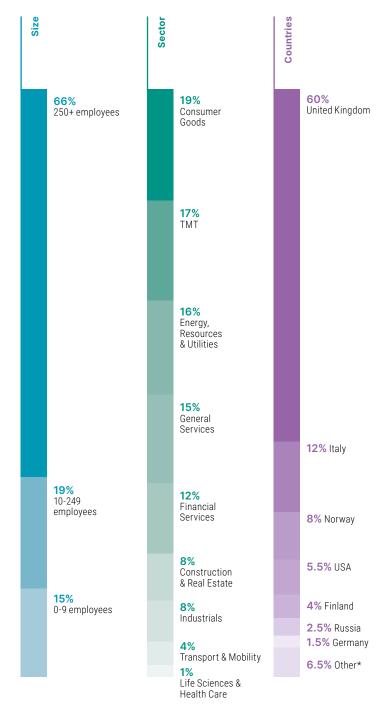
- What are the **drivers** that are stimulating businesses to act on climate?
- What targets and commitments has the business made?
- How are businesses **organising** their climate programs?
- What are the most impactful **climate initiatives** being undertaken?
- What **barriers** exist that prevent more being done?
- What lessons have been learned?

This executive summary distills the interviews into six factors that all companies should consider, five system-level conditions required to facilitate the level of change needed, and commentary by each area.



Figure 1 Overview and distribution of companies in the G13 Report

Headline figures of companies contacted, interviewed, and used in the report. Charts show the distribution of size, sector and countries of the 306 companies used in the report analysis (i.e., 66% of companies in the report were large companies with more than 250+ employees).



*Others: France & Netherlands represent 1% of the dataset. Australia, Austria, Bermuda, Canada, Denmark, India, Ireland, Luxembourg, Sweden & Switzeland have contributed 1-2 interviews each.

Six company commands

Through the course of our interviews it became increasingly clear that there are a small number of critical actions that every company needs to take to accelerate their climate action.



Reframe climate action within the

organisation. Reframe climate change from just one of many external considerations to a core driver of long-term value, incorporated into the business model and corporate strategy. This requires deep understanding and foresight of climate change and its implications, the capability to transform, and leadership buy-in.



Integrate climate into all key decisions across the organisation, from the board level down to functional leaders and section heads. Develop playbooks to explain how to integrate climate into decision making across functions, lines of business, and geographies. Bring climate action into the design phase of every major initiative, fostering alignment with other goals and ensuring it is fully part of the process and not relegated to the final impact-evaluation stage.



Enshrine climate thinking in the ethos and

culture of the organisation. Cultural adoption will help accelerate climate action: breaking down barriers, bridging silos, enhancing innovation, and stimulating grass roots collaboration. Ensure everyone has access to climate training so that all employees are empowered to accelerate climate action in their roles.



Reveal the challenges your organisation is facing on the road to net zero. Greenwashing and hubris must be avoided; companies are expected to communicate openly about both progress and challenges they face as part of their climate journeys. Understanding and listening are key as we bring together new combinations of experience and expertise.



Combine forces to realise change at greater

scale. Collaboration is needed to tackle many of the system challenges we face. Break down barriers of understanding between the public, private, and non-profit sectors. Be generous with time and resources and be clear on the pre-competitive space where this type of collaboration is necessary either to initiate or accelerate action.



Adapt to a rapidly-changing environment,

where almost all aspects are evolving at pace, from the policy and regulatory environment, to consumer and employee behaviour, to the types of solutions available and the dynamic cost-competitiveness of those solutions. Ensure flexibility and agility is built into climate programmes to manage risks and make the most of the opportunities on offer.

Five system-level conditions

While companies recognise that they must and can change to help address climate change, they also call out a small number of system-level characteristics that need to be in place to unlock broader and deeper climate action. These can be distilled into five conditions that apply across sectors and geographies:



Standardisation of climate information and

approaches, to catalyse uptake, enhance impact, and allow for cross-company and cross-sector comparison. This includes definitions of terms (e.g., net zero and carbon neutral), how climate considerations and action are reported, and which scenarios are used in projected future states. This need for standardisation extends to approaches to incorporate climate into strategy and operating models.



Absorption of the urgency of the situation and recognition of the value lost in delay.

This sense of urgency and the cost of delay needs to be commonly understood across the system and a key design principle as parties come together to resolve system-wide issues.



Raising the bar to deliver coherent, consistent, and stretching policy and

regulation. The trajectory of policy and regulation over the coming decade needs to be clear and specific to unlock long-term capital investment and to make the most of the two business cycles we have left until the world needs to halve emissions. Both market-based measures and targeted regulation will be needed to effect structural change at the pace and scale required.



Extension of responsibilities of organisations and systems to the influence they have on

climate, not just their more direct contributions in terms of Scopes 1, 2, and 3. Influence includes the indirect impact of products, services, and voice, which can often be more important than more direct emissions. This principle needs system-wide adoption.



Cooperation and active collaboration on key areas that have system-limiting

characteristics. For example, nascent climate technologies, advocacy and influence, standards and metrics, and responding to the pace of change. Everyone in the system has an active interest in unlocking faster progress to reduce the harmful impacts of climate change on the planet we all live and work on.

Observations on the corporate climate narrative

The body of this report is structured around the six areas of the interview carried out with companies. Each part of the conversation typically covered some positives, as well as some areas of concern and some form of expressed need. These are summarised here and expanded with company-specific references in the body of the report.

Drivers of change

- Positive: Stakeholder expectations are rising rapidly across consumers and employees, regulators, investors, and civil society.
- Negative: Expectations often lack specificity, a clear set of implications if not met, and urgency. Too often it's delivered, and heard, as a broad injunction to 'do something' on climate.
- Need: Organisations need better tracking of stakeholder expectations. This could include developing better predictive abilities, signal monitoring, gap analysis, and testing how changing drivers are likely to impact the organisation.

Setting targets

- Positive: More and more organisations, across sectors and geographies, are committing to ambitious targets and goals. There is an increasing 'quality' of goals in terms of coverage and links to science-based trajectories. The commitments are now more public, more central to market positioning, and as such are harder to back down from.
- Negative: Despite a wave of activity setting ambition, many of these targets are not backed up by detailed pathways, particularly in the medium-term. Continued issues with comparability across organisations is allowing some to undershoot. Scope 3 inclusion is limited and inconsistent, and the nascent 'Scope 4' of companies' influence on third parties' activities is largely missing.
 - Need: Targets need to be brought fully into the strategy and planning cycle so that they are embedded in mainstream systems and metrics. Extending planning timelines would also help to align with longer-term and deeper decarbonisation, and to enable better levels of cost-effectiveness and returns on investment. Collaborating on target standards is also important, building on initial initiatives striving for this goal.



Organising for change

Positive: Starting from the top; the good news is that leadership is often leading and looking to set ambition to drive action and to provide a 'guiding star' for their organisations to align with. Alongside strong leadership, there is also broad organisational appetite for engagement, which is helping to underpin ambitious climate programmes.

Negative: Involvement can be selective, and often self-selecting. Important roles can be left out of discussions and in turn that means that climate action, and the programmes that underpin it, are not fully integrated across the organisation, missing critical opportunities and making delivery more difficult.

Need: Climate needs to be embedded as part of the broader purpose agenda and integrated into business model design and strategy. Once integrated into purpose and strategy, climate then needs to be properly integrated into operations, business units, and culture to ensure all key decisions reflect climate aims and desired outcomes.

Key climate initiatives

- Positive: There are material initiatives for every key area of corporate emissions, many are commercially remunerative, and early traction is helping build momentum and strengthen ambition. These initiatives, together with extensive mention of capability building, including strategy and planning and enhanced dialogue with key business partners, suggest transformational change is coming.
- Negative: While there are numerous initiatives to point to, too many of them are having too little overall impact and avoid tackling the broader structural questions that need resolving to deliver on company climate targets and meet the expectations of stakeholders.
- Need: Ensure that climate action becomes embedded as a long-term driver of value creation. Design initiatives and their impacts to fully capture the opportunities presented by the system wide transition. Ensure that initiatives are bigger, better resourced, and aligned to the scale of impact required by the corporate targets.

Barriers

Positive: Barriers to greater ambition and impact appear to be well understood within businesses and have some commonality both within and across sectors. Many agree on the most significant barriers being policy and regulation, internal prioritisation, and customer and employee engagement. This shared experience holds out some hope for collective solutions.

Negative: Many of the challenges organisations face are systemic challenges which require sophistication and collaboration to address. These challenges put comprehensive alignment between the external environment and internal strategy and structure of the business out of reach. This in turn means climate programmes don't attract the priority and resources they need.

Need: Systemic challenges that are at the heart of several of these barriers require meaningful and well-structured collaboration to overcome. Lack of internal and external alignment will require integration of climate into the business model, but designed to be flexible and agile in the face of the changing landscape. Waiting is not an option.





Lessons

Participating organisations discussed the lessons they had learned in the initiation and development of their climate programmes. These constitute a set of core principles and can be grouped as:

Developing foundational capabilities

e.g. understanding and integrating climate into business model and strategy

Building momentum

e.g. capitalising on the building desire to engage on the agenda within the company

Collaborating

e.g. working with your sector to align sectoral policy and structure to accommodate the climate transition

Communicating

e.g. emphasising the early stage of progress and being transparent

The final word

Business is motivated to act on climate change, but existing efforts are of limited impact and urgency. Climate change needs to be designed into the business model as a driver of long-term value, and integrated into strategy, operations, culture, and communications. Climate needs to influence the most important decisions made in the business. Without this, climate programmes will fail to attract the level of attention and resource they require, and business will fail to meet the rising expectations of society and its stakeholders.

The platform initiative and this report

The Goal 13 Impact Platform

The Goal 13 Impact Platform is the result of a founding partnership between the Confederation of British Industry, Deloitte, Chapter Zero, The Prince's Accounting for Sustainability Project, Dell Technologies, and the Met Office. Together, the partnership has built a free, and open, repository of corporate climate actions from businesses who want to tell their climate story in the run up to COP26. The aim is to both enhance awareness of the climate challenge within the private sector, as well as inspire more companies to act.



Ambition

Make a **unique contribution to the climate transition** by creating an international, free to access, public repository of company-specific climate action covering both emissions reduction and adaptation

Amplify company progress against climate change, **facilitate learning** and **collaboration** between companies, **drive collective action** against shared challenges

Contribute to **bringing the business** community together for COP26,

working with the many, primary, business related national and international initiatives working to galvanise change

Approach

- Establish national partnerships, with business associations / climate initiatives
- 2 Recruit companies to participate in a structured interview, codify the output, and iterate to sign-off with the company
- 3 Publish the information on the platform
- Promote the platform at key speaking events, and through reports
- 5 Use the platform to stimulate collaboration between companies and collective action

High Commissio

International partners and the wider climate ecosystem

The climate crisis is a global challenge. To reflect this, the Platform has expanded globally by engaging with international business associations, which enabled access to a wider business community. This not only adds diversity of representation on the Platform, but also enables an understanding of commonalities and differences in climate considerations across geographies.

The Platform is also designed to complement the wider ecosystem of initiatives aimed at addressing climate change,¹ offering a free repository with unique insights on businesses' climate activities and contributing to collective action.

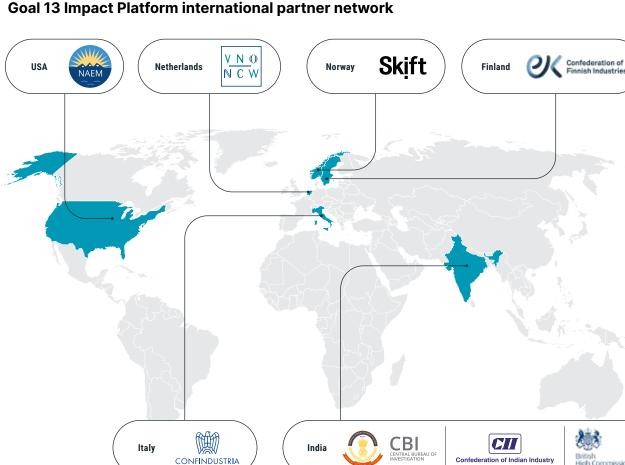


Figure 2 **Goal 13 Impact Platform international partner network**

Including initiatives such as, the UNFCCC Race to Zero, Carbon Disclosure Project (CDP), Task Force on Climate-related Financial Disclosures (TCFD), 1 the ICC SME Climate HUB, and World Economic Forum.

Outreach, interviews, and platform data

Over the past year, through our Partnership, allied organisations, and wider ecosystem networks—and enhanced by a presence at over 30 high-profile events — we have interviewed over 420 companies to hear their stories of climate action. These interviews were done with the help of a volunteer network of over 150 people, managed by a small core team representing the Partnership. Businesses would be contacted either personally through the networks, or through outreach from open and available lists, such as those of B-Corp entities.

Each interview was standardised to cover 6 key areas:

1

What are the **drivers** that are stimulating the business to act on climate?

- 2 What **targets and commitments** has the business made? Including target type and whether they are aligned to globally recognised standards
- 3 How are businesses **organising** their climate programs? Including where in the business the change programme sits
- 4 What are the most impactful **climate initiatives** being undertaken? Including impact on the business model, the role of finance, and broader climate impact
- 5 What **barriers** exist that prevent more being done? *Including internal and external barriers*
 - What **lessons** have been learned?

Once an interview was completed, interviewees approved compiled notes before they were migrated to the Platform. To encourage participation on the Platform, companies were also given the option to anonymise either their interview notes and/or their name. Only a small fraction requested this, however.

The Platform uses the data from the interviews to deliver updated baseline analyses in the six key areas, including filters by size, sector, and geography, as well as by target and commitment, initiative focus, type of barrier, and lesson. These categories and groups are based on a taxonomy created from globally recognised standards and definitions provided by initiatives, including the SBTi.

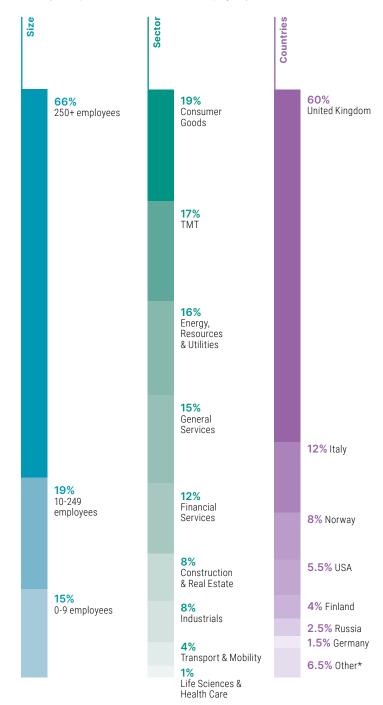
Enhancing the platform

This report complements, and amplifies, the Platform by adding a further layer of depth to analysis from the repository. It summarises interview responses and illustrates these with attributed references, while giving some insight behind the comments and observations. It represents the narrative of the businesses interviewed rather than the authors', and aims to supplement and explore the individual business-level insight the platform provides. The report microsite is designed to provide the top-level messages and headlines from the main report, while directing readers to the sections they are most interested in.



Figure 1 Headline figures of companies contacted, interviewed, and used in the report.

Headline figures of companies contacted, interviewed, and used in the report. Charts show the distribution of size, sector and countries of the 306 companies used in the report analysis (i.e., 66% of companies in the report were large companies with more than 250+ employees).



*Others: France & Netherlands represent 1% of the dataset. Australia, Austria, Bermuda, Canada, Denmark, India, Ireland, Luxembourg, Sweden & Switzeland have contributed 1-2 interviews each.



While all c. 420 interviews have informed the report, the analysis and attributed references represent a subset of these interviews (c. 300), largely reflecting the time between interviews taking place, notes compiled, and sign-off being received from the participating business to use the information.

The report includes a diverse data set, with over 20 sectors represented; over a third of respondents being small and medium-sized enterprises (SMEs), and; a third of interviews from businesses outside of the UK (from which Finland, Italy, Norway, and Russia are profiled within the report). Notwithstanding this diversity of voices, the report highlights significant commonalities for businesses on climate action, while also reflecting an array of unique challenges faced by individual companies and sectors. The report also includes contributions from the Founding Partners, providing insights on the importance of: government engagement (CBI); the role of the CFO (A4S); the CTO (Dell Technologies); the Board (Chapter Zero); and business activity around adaptation to and resilience amidst climate change (Met Office).

All references are quoted directly or para-phrased from the company interview. To remain true to the 'voices from the market,' most references have been validated by, and are attributed to, companies. Some are anonymised at the request of the respondent. In these cases, we have identified the business industry and sector to give the reader more context.



Representation and messaging

Although far reaching and diverse, this report does not claim to be representative of any particular sample set or attribute, nor of businesses' climate actions overall. The Partnership set out on a journey to deliver the voice of business. This was indifferent to size, sector, or geography. Therefore, it is weighted heavily towards larger corporates, with SME representation being in either established sectors which lend to smaller sized businesses or from new and emerging sectors.

Although the Partnership encouraged all businesses to respond regardless of which stage of the climate action journey they were on, the data set lends to businesses already on the journey, or at least starting to think about it. The platform does, however, encourage those businesses currently not thinking about this space to get involved, with the prospect of accelerating their activity through collaboration and leveraging others' insights and learnings.

Connections to COP26

We are at a clear inflection point on climate action. Global leaders are increasingly committing to enhanced efforts to decarbonise their economies and promote environmental sustainability. Amid growing uncertainties in the global operating environment, private businesses play a critical role in providing the investment, and innovation, to accelerate the transition to a zero-carbon economy, creating new market opportunities, and value, as they do so.

As world leaders gather in Glasgow for the highly anticipated COP26 fortnight, this report represents a clear voice from the market on what is needed from governments, policy makers, and businesses globally to deliver a net zero future.

Drivers of change

The pressure for change has broadened and deepened across all stakeholder groups



Overview

Participating organisations were asked to describe the main drivers of the origination and development of their climate change programmes.

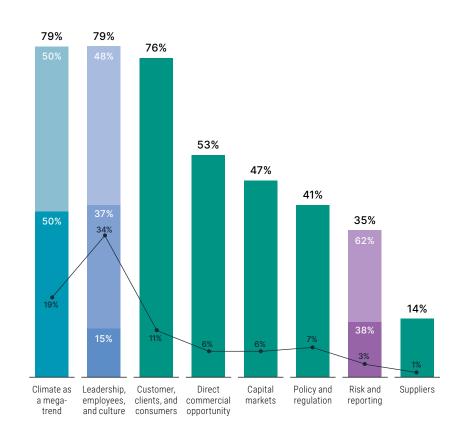
Virtually every organisation provided a response to this question, and while organisations typically describe a primary driver, on average just over 5 drivers were cited by respondents.

Figure 1 Driver categories and primary drivers cited

The percentage of respondents citing each driver is displayed as a bar chart, with the percentage of respondents citing that driver as their primary motivation overlayed as a line chart (i.e., 76% of respondents cite customers, clients, and consumers as a driver, but only 11% cite this as their primary driver). Where we have broken down the high-level driver into sub-drivers, the proportion of respondents citing each sub-driver is displayed as a stacked bar (i.e., 48% of those respondents who cite leadership, employees, and culture as a driver cite executive motivation as a sub-driver, versus 15% who cite existing and potential employees).

Broader Societal Shifts
 Brand Reputation
 Executive Motivation
 Culture
 Existing & Potential Employees
 Reporting
 Risk
 Primary Driver





We have noticed over the last one to two years that the climate change aspect of ESG has really moved into mainstream focus.

Fidelity International Ltd (Financial Services)

Key messages



The pressure to change has broadened and deepened across stakeholder groups over the last two years and continues to build. The pressure to act on climate change is felt across the market and has evolved from being largely an NGO-led consideration to encompassing many, if not all, external and internal stakeholders. This shift is seen to have accelerated over the last two years, and pressure continues to build. Respondents cite an average of five key drivers influencing their response to climate change.

We have noticed over the last one to two years that the climate change aspect of ESG has really moved into mainstream focus.

Fidelity International Ltd (Financial Services)

Climate change is recognised as a pervasive feature of both society and markets. The most cited driver is recognition that climate change is now a pervasive societal feature and demands a response from all organisations. This is typically paired with specific pressure from customers, clients, or consumers. Approximately 75% of all respondents cite these as key drivers.

Consumer expectations and behaviour were shifting before the pandemic. However, the pandemic has accelerated these trends into a huge societal shift, altering what people are looking for and expecting when they buy into fashion.

House of Baukjen (Consumer Goods)

Pressure from company leadership, employees, and alignment with company culture are catalysing change in many organisations but are less frequently the primary driver. Leadership stands out as a key driving force for the origination and development of corporate climate programmes. Employees are an important but secondary source of pressure, with some mentioning that responding to climate change is important for them because of their company culture ('it's the right thing to do'). This category is important but secondary to broad market considerations.

Our leadership is an important driver, with our CEO and Board making commitments that we then work out how to achieve as a business.

Sainsbury's (Consumer Goods)



Direct commercial opportunity is cited as a key influence on a company's response to climate change by over half of respondents. The identification of direct commercial opportunity is mentioned by many but is rarely a primary driver of change. The opportunities described are typically procurement and process savings rather than the development of new products, services, and market segments. Given the market pressures noted above, this can be expected to change as companies evolve their product and service portfolios.

We see a massive commercial opportunity in doing the right thing.

HH Global (Telecommunications, Media and Technology)

Capital markets, regulation and policy, and physical risk are cited less frequently as drivers of change but can be expected to be more important in the future. Capital markets are cited as a driver by 47% of respondents, but rarely as a primary driver. However, pressure and influence from capital providers is growing as the sector seeks to manage climate risk and wants to be seen as part of the solution. Regulation is seen as lagging, and as such is perceived more as a barrier to progress than a driver; however, this is likely to evolve quickly given pressures to advance policy and regulatory efforts. Physical risk, cited by less than a third of respondents and rarely as a primary driver, will rise up the agenda as extreme weather impacts caused by global warming proliferate.

As a FTSE100 company, there are increasing expectations from investors... to have a clear and long-term climate strategy in place.

InterContinental Hotels Group plc (General Services)

01 Climate as a mega-trend

The majority of respondents (58%) cite broader societal shifts as a key driver of their climate programmes, a mega-trend that cannot be ignored, is accelerating in impact, and demands a response. This broad acknowledgement is paired with an understanding of the corresponding change in stakeholder expectations, making a company's response critical to its brand (57% of respondents). Collectively, the recognition of climate as a mega-trend that has brand implications for business is cited by 79% of respondents.

79% of respondents cite climate as a mega-trend that has brand implications for business





Broader societal shifts

The recognition of ongoing societal shifts in attitudes and actions toward climate change is often cited as the foundation for a company's climate action programme. Those that cite this as a key driver typically go on to cite more specific, stakeholderprompted drivers. Responses show that businesses are recognising both the magnitude of these shifts and their implications for business.

Microsoft Corp's main driver of climate commitments and initiatives is the broader societal shift. Microsoft Norge (Telecommunications, Media and Technology)

We are driven by societal expectations about the way we operate. We need to decarbonise in order to ensure the business is ready for the future.

Coca-Cola European Partners (Consumer Goods)

Not only are societal shifts seen as demanding change, but there's an additional sense of urgency created by the understanding that this domain is accelerating in importance. Excepting a few smaller organisations, the pandemic is not seen to have slowed this trend; in some cases, it is actually perceived to have accelerated it. The world, consumer expectations and consumer behaviour were shifting prepandemic. The pandemic has accelerated many of these into a huge societal shift, altering what people are looking for and expecting and how they buy into fashion. House of Baukjen (Consumer Goods)

The shift in the importance of climate change has been phenomenal over the last 18 months. The world is going towards a low-carbon economy, so we need to get ready to support this transition. This is good not only for the planet, but it also makes business sense. BT Group plc (Telecommunications, Media & Technology)

While the responses are focused on climate, some companies are positioning this within the broader push for sustainable business.

The market expectation for sustainable business is accelerating the agenda. Freestar (Consumer Goods)

Wider society and markets are changing to take sustainability more seriously. Neste (Energy, Resources and Utilities)

Brand and reputation improvements

Brand and reputation are cited as a key driver of change by 57% of respondents. A significant proportion of these respondents (15%) describe it as a primary driver. This is most frequently associated with the perceptions of customers, clients, or consumers, rather than other stakeholders; positive action can be brand enhancing, while inaction or action that exacerbates the issue can erode brand value.

Our brand and reputation are important to us. We want our customers to associate us with sustainability and corporate responsibility, where climate action is an important part. Vinmonopolet (Consumer Goods)

One of our core goals is to enhance Burger King's brand reputation in the UK and responsible business is a really key part of this. Burger King (General Services) In several cases, a progressive approach to climate is seen as commensurate with the existing brand and as such a key driver.

We want our business to be considered as a force for good. Bird Eyewear (Consumer Goods)

We are positioned as an ethical and sustainable eyewear brand. Therefore, it is incumbent on us to lead from the front in terms of minimising our environmental impact.

Pala Eyewear (Consumer Goods)

The University did a rebranding exercise last year and put our environmental approach at the centre of our identity. University of Reading (General

Services)

Respondents also talk about brand with respect to other stakeholders, including investors, but this was minimal in comparison to the customer.

Attention to climate change issues has always been a priority for the Company's shareholders. Duferco Italia Holding (Industrials)





57%

Brand and reputation are cited as a key driver of change by respondents.

02 Leadership, employees, and culture

79% of respondents cite either their leadership (64%), their employees (50%), or their culture (20%) as key drivers of their climate programme.

Executive motivation

Responses that cite leadership as a key driver can be categorised as: those emphasising the personal passion of a leader, typically the CEO or founder; those referencing the board's and executive management's governance role; and those emphasising leadership involvement with execution.

At Wind Tre, sustainability and climate change issues have significant importance due to the impetus provided by company leadership. Wind Tre (TMT)

Personal passion of the CEO or founder is frequently cited, both in well-established companies and in new businesses with the founder still present. In the former, it's often a new leader who brings change. The main driver of our climate commitments and initiatives is the motivation of our executive management, with our owner spearheading the engagement. NorgesGruppen (Consumer Goods)

Significant influence for this came from the CEO – there was a strong push on when he stepped into the role. ABN AMRO Bank (Financial Services)

The importance of the board's and executive management's governance of climate programmes is also emphasised as a key driver of change. This stretches to influencing the ambition and shape of the programme but stops short of implementation. Sometimes this is climate-specific, sometimes climate features as part of the broader domain of 'sustainability.' The views of the board committee on sustainability is a key driver within the business.

Britvic (Consumer Goods)

Our climate commitments drive our strategy of acquiring and converting conventional farmland to organic and deploying regenerative farming practices. Farmland LP (Agriculture & Land-Use)

The leadership team is also cited as a key driver in terms of their involvement in implementation.

On a global scale, the Chief Sustainability Officer is pushing the whole organisation towards net-zero. Sweco Norge (Construction & Real Estate)

The commitment of the Group's internal functions to the issue of climate change is growing, particularly amongst top management. Investment Management (Financial Services)

Existing and future employees

Existing and future employees are cited as key drivers of climate change related programmes by 50% of respondents. Responses can be grouped into two categories: cases where there's pressure on the organisation to act to meet the expectations of existing and future employees; and cases where employees are mentioned as key supporting elements or co-collaborators.

Pressure from employees is described in a number of ways: broadly in the desire to work for a company that has purpose or a strong focus on sustainability, and more specifically in demanding climate-related change, and also going further to seek participation in related activities or programmes.

Employees want to know the role the company is taking in tackling this global challenge and want to understand how becoming more sustainable aligns to our purpose, strategy and operations. RB (Consumer Goods)

Potential employees are challenging us on our climate commitments, ambitions and strategy during interviews. Sweco Norge (Construction & Real Estate)

50% of respondents cited existing and future employees as key drivers of climate programmes

This pressure to change is seen as an opportunity for companies to enhance their brand in the labour market, particularly with the younger demographic. A strong climate or broader sustainability narrative can reposition an unknown or less loved company or sector.

We notice that sustainability has become a key consideration of both the graduate and experienced potential employees. This focus on environmental credentials drives our approach to climate, as we continuously aim to attract the best talent. Urenco Group (Energy, Resources & Utilities)

We are driven by the need to attract talent. Young people in Europe are focused on sustainability, so we won't be able to attract the right talent if we don't focus on our own sustainability roadmap. Kuwait Petroleum International / Q8 (Energy, Resources & Utilities)

The primary drive comes from within the company. This is in part a recognition of the paradigm shift in thinking about climate change by younger generations. If you want to attract a large pool of younger talent, you have to have an authentic and genuine desire to lower your carbon footprint to the greatest extent possible.

Smurfit Kappa Group plc (Industrials)

The second way that employees are seen as a key driver is through their enthusiasm and participation in developing and implementing climate programmes. Respondents also point to employees not just demanding corporate level change but wanting involvement.

Employees are creating pressure. They are now more interested in participating in climate initiatives and want more information about what the business is doing with regards to sustainability. British American Tobacco (Consumer Goods)

Staff engagement with climate change is strong. We have c. 500 people expressing interest in sustainable futures - an interest which has been curated and has been building over the last 10 years. NatWest Group (Financial Services)

When we talk about our roadmap, we see great engagement from our people. They want to create brands and products that work towards these targets. Nestlé (Consumer Goods)

Culture

Culture, variously expressed as shared values, common belief systems, or 'doing the right thing,' has been increasingly associated with the sustainability agenda and now climate change. This is cited as a key, and sometimes a primary, influence on the shape of the company climate programme. This is found both in established organisations and newer companies set up to address a societal challenge.

Our company leadership instils a culture that strives towards providing green energy solutions. Ørsted (Energy, Resources & Utilities)

Ecometrica was founded 13 years ago with sustainability as its core focus. We exist to help businesses measure their current impact and plan for the future. Ecometrica (Telecommunications, Media & Technology)

03 Customers, clients, and consumers

Customers, clients, or consumers are cited as a key driver for climate action by 76% of respondents. The responses can be grouped into expectations that: the company is committed to climate action; the existing product or service has a low or reduced carbon footprint; or demands for a new low-carbon product or service.

These expectations differ across the three types of customer: corporate or institutional customers, corporate or institutional clients (largely used for the professional services industry), and end customers or consumers.

Corporate or institutional customers

If the sector is traditionally a low emitter (e.g., IT or Financial Services) or the procurer is government, then the main expectation to be met is that the company is committed to reducing their carbon footprint.

Municipalities are rating sustainability within their tenders and two of our larger private sector clients are demanding their suppliers to be climate neutral. Media company (Telecommunications, Media & Technology)

We are constantly being pushed by politicians and officials, both directly and indirectly, for our climate commitments and initiatives. Ruter (Transport & Mobility) For corporate customers with Scope 3 emissions targets, the emphasis changes to expectations for low carbon products or services that will help the customer meet their targets.

Business customers such as Amazon want to know how we will assist in decarbonising their value chains. RB (Consumer Goods)

Key customers are influential and need us to help them reduce their scope 3 emissions. Manufacturing Company (Industrials) In some cases, the key driver has been called out as the opportunity to provide new products or services to meet a climate-related unmet need.

Commercial partners are a driver as more businesses look for plug-and-play propositions around carbon solutions. CoGo (Telecommunications, Media & Technology)

76% of respondents cite customers, clients, or consumers as a key driver for climate action.

Clients

Engineering firms, lawyers, consultancies, and other professional services firms typically refer to their customers as clients.

Spend on these services tends to be a small proportion of overall client costs, and have a relatively small carbon footprint. As such, expectations on companies in these sectors are not focusing on lower service footprints to help meet Scope 3 targets, but on company commitment to climate and to new products or services that can help their clients tackle the climate transition. Many (typically large) clients now look to whether an organisation has developed, or is taking steps toward developing, more sustainable practices and addressing climate change as a factor in supplier selection.

Addleshaw Goddard LLP (General Services)

The businesses that use our technologies are looking for energy efficiency improvements or improvements in power quality, and we respond to their challenges.

Gupta Smart Energy (Energy, Resources & Utilities)

End customers and consumers

For companies serving end customers or consumers, the nature of the pressure is influenced by the nature of the product or service and the company providing it.

If the carbon footprint of the product or service is difficult to intuit, then the pressure shifts to the company to demonstrate its corporate credentials. Responses suggest this holds for organisations with large fixed cost bases, such as universities, land owners, telecommunications, and utilities; for those whose products and services have low emissions, like IT, marketing, and financial services; and for those who have iconic environmental brands.

The longer students study at our University, the more important our stance on climate change becomes to them. Student satisfaction surveys influence University rankings, which are important in attracting future students. University of Edinburgh (General Services)

Our customers are a key driver and were very supportive of us going carbon neutral as a company.

Northumbrian Water Limited (Energy, Resources & Utilities) The expectations of our drinkers, customers and employees, who are all sensitive to environmental concerns, lie at the heart of our initiatives. Innocent Drinks (Consumer Goods)

Where a product or service is part of the identity of the company and perceived as emissions intensive, then the customer or consumer expectation is for a transition to a low or lower carbon iteration. This is reflected in responses from food and drink, transport, and events companies.

As the business shifts to next-generation products, consumer opinion is becoming more important, with more expected from companies whose products have electronic and plastic components. British American Tobacco (Consumer Goods)

External stakeholders are one of our most important drivers. Passenger attitudes are changing, with many now actively making climateconscious travel choices. Bristol Airport Limited (Transport & Mobility) For some companies, the driver is expressed as the opportunity to serve unmet demand with a new product or service. Examples include energy, oil and gas, and media.

Customers and compliance are important drivers for us. We want to transition from the distribution of natural gas to green gas.

Cadent Gas (Energy, Resources & Utilities)

We have performed studies which show that our stakeholders are highly engaged in sustainability topics such as climate change. Schibsted Media Group (Telecommunications, Media & Technology)

Influence of younger generations

Youth are seen to be particularly influential as end customers and consumers.

We don't want to lose our relevance, so we need to look at the way the expectations of younger generations are changing. Millennials have significant influence over the market and are pushing for systemic change in the standards met by products. It is becoming about preference over premium; if you're a premium brand, you'll stay premium with net-zero, but you won't become more premium.

Nestlé (Consumer Goods)

According to recent studies, millennials are willing to spend more on sustainable and ethically sourced products, which in turn helps drive our sustainability agenda without affecting business performance.

Freestar (Consumer Goods

Whether a question of compliance or opportunity, the immaturity of the market makes it difficult to ascertain what is truly climate friendly. This results in a requirement for extensive engagement and education to make sure the demand is well specified and can be met across corporate, client, and end customer and consumer markets.

04 Direct commercial opportunity

Direct commercial opportunity is called out as a key driver by over 50% of respondents, but as a primary driver by only 6% of respondents. However, when aggregated with the broader recognition that the market and customers are changing, it becomes a foundational driver that unites climate change with the business model and side-steps the ever-present debate about trade-offs and (financially orientated) fiduciary duty.

Direct commercial opportunity includes cost reduction, increased win rate in the market, and the targeting of new market segments. Most of the responses citing direct commercial opportunity as a driver reference cost reduction. These are often renewable energy-related but include process efficiencies and better management of climate-related regulation.

We see the economic case for renewable energy. For example, wind is now one of the cheapest methods of generation. Scottish Power (Energy, Resources & Utilities)

The number one driver in becoming more sustainable is reducing costs, particularly by avoiding Climate Change Agreement (CCA) penalties and improving energy efficiency. Pladis Global (Consumer Goods)





The link between climate-friendly initiatives and cost reduction is also cited in forward looking terms: companies expect emissions-heavy inputs to become more expensive, so reducing reliance on them could help control future costs and risk.

We need to decarbonise to ensure that the business is ready for the future – as fossil fuel energy costs rise, for example. Coca-Cola European Partners (Consumer Goods)

We recognise the commercial opportunities that arise from being sustainable, including reducing future costs and managing business risk. Network Rail Limited (Transport & Mobility)

50%

of respondents cite direct commercial opportunity as a key driver, but as a primary driver by only 6% of respondents The opportunity to perform better in tenders is mentioned as a key driver of the broader climate transition across sectors, including service, construction, and retail companies. This reflects the increasing instance of buyers factoring climate change into their purchasing criteria and requires companies to demonstrate their credentials.

One of our key drivers is the value creation and additional revenue derived from being sustainable. There are more opportunities to stand out in pitch responses and win. JLL (Construction & Real Estate)

Local councils and universities have very high sustainability aspirations, and many are now talking about zerocarbon builds and Passivhaus standards. In order for us to win this work, we need to have both relevant experience and be able to talk about what we are doing internally with respect to climate commitments. Stride Treglown (Construction & Real Estate) Direct commercial opportunities have also been identified in the form of new market segments to serve with new products and services. This does not necessarily translate into a mature internal climate action programme, but does help an organisation experience the impact of the climate transition and understand in part how it can become part of their business model.

With growing consumer demand for organic products outstripping the growth in organic acres and only 2% of farmland in the US certified as organic, there is a significant gap between supply capacity and demand. Farmland LP (Agriculture & Land-

Use)

The net-zero target is expected to become a competitive lever, increase and improve brand reputation and, through the development of more sustainable products, acquire new market opportunities. Brembo (Industrials)

05 Capital markets

Investor interest in the climate credentials of their investees has grown significantly in recent years, with climate sometimes sitting at the top of their agenda. 47% of respondents cite investors (typically equity but debt is also mentioned) as a key driver, but few suggest it is primary.

Our investors and shareholders consider our climate action a key priority, as clearly evidenced in their positive response to our recent sustainable bond offering.

The Weir Group plc (Energy, Resources & Utilities)

Interest from shareholders on the broader topic of sustainability is growing. This has moved to the top of the agenda in some investment meetings.

Barratt Developments Plc (Construction & Real Estate)



of respondents cite investors as a key driver





While interest in climate is generally observed across the market, it is particularly true of ESG funds, and companies are having to show their climate credentials to access this capital.

Our investor base is becoming more engaged in sustainability, with our main investors already pushing for the implementation of ESG criteria. The number of socially responsible investors has doubled over the last 3-4 years.

SAP SE (Telecommunications, Media & Technology)

We want to be considered by ESG investors to ensure that we are securing investment, for example from green investment funds. Retail, Wholesale & Distribution Company (Consumer Goods) The pressure from investors is often anchored in risk-related reporting and compliance, but there is some indication this is rebalancing towards opportunity and growth.

There is a CSR reporting requirement amongst the investor community. We track statistics on ESG over time and investors regularly check these.

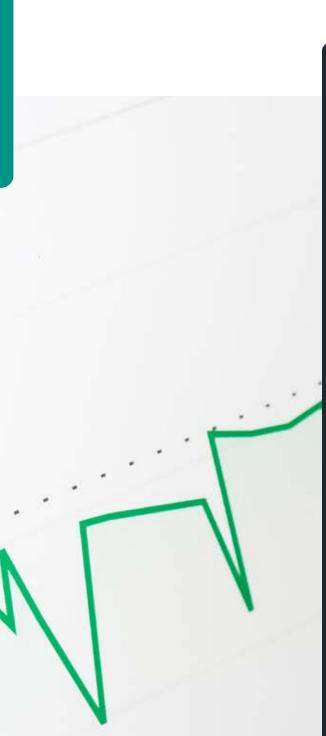
Burger King (General Services)

Investors have become more concerned with the green agenda but there is a level of immaturity in their understanding. It is more about risk rather than a true benchmark of carbon performance. Manufacturing Company (Industrials)

Interest in climate change has grown dramatically and will develop from its current compliance "dashboard" focus to more strategic, growthfocused thinking. RB (Consumer Goods) Investors are increasing the specificity of their requests, suggesting a desire to influence companies to increase their impact.

Pressure from investors has had, and will continue to have, a big impact. Having targets is not enough. We are also expected to show our programmes, investments, and trajectories to deliver on our targets. Anglo American (Energy, Resources & Utilities)

Central to our relationship with investors is their expectation that we have a net-zero strategy and are implementing it. Cory Group (Energy, Resources & Utilities)



Clearly the form of ownership and size of balance sheet will influence the extent to which capital markets are seen as a driver. Some sectors, such as professional services, have comparatively small balance sheets, making them less dependent on the capital markets. However, even those who do cite investors as a key driver rarely see this as a primary driver: this is in part due to the leverage they have, but also to an absence of data and standards.

- Leverage: Capital providers are often one of many existing sources; where alternatives exist, divestment has limited impact. The impact of stewardship is constrained by the time spent with management, the number of issues discussed, and the proportion of equity held. However, things are changing, with investors collaborating and AGM motions and voting being used more effectively.
- Data and standards: Investors often do not have the information they need to understand their investee company's position on climate. Standards are emerging slowly, data provided by companies is in many cases immature, and the cost to access from third parties can be high.

Investor pressure depends on the geographical location of shareholders, as regions differ in where they are along their sustainability journey.

Compared to other British and European banks, we have not experienced as much shareholder pressure on climate action as our shareholding base is Australian and they are further behind in their climate change journey. Virgin Money (Financial Services)

69 0

06 Policy and regulation

Policy, legislation, and regulation is collectively cited as a key driver by 41% of respondents, with only 7% describing it as a primary driver.

To some, it's the starting position or baseline for their response to climate change. This is most typically seen in the more regulated sectors.

The key driver of the Group's change programme is the political landscape and government targets for reduced emissions. AGS Airports (Transport & Mobility)

Regulatory change and the wider policy environment influence our climate commitments. Peel L&P (Construction & Real Estate) Respondents call out their desire to go beyond regulatory requirements, in part due to their inadequacy for addressing the climate change challenge.

Legislation is seen as the starting point and helps to "set the curve" in many respects. However, we try to remain ahead of the curve. Canary Wharf Group plc (Construction & Real Estate)

The initial focus on sustainability was driven by regulation. However, we have now progressed well beyond the regulatory requirement. Scottish Leather Group Ltd (Consumer Goods) It's widely accepted that the regulatory landscape is currently in flux and will change markedly, increasing its importance but also introducing significant uncertainty.

Legislation does play a part, but the key effect of policy now is uncertainty. It is delaying implementation and holding back investment. Barratt Developments plc (Construction & Real Estate)

There is a lot of fragmentation in regulation at the local level in the UK, and the lack of a clear national strategy acts a barrier. Businesses need a joined up and longterm roadmap to support investment in vehicles and infrastructure. DHL (Consumer Goods)

In some cases, regulatory change has been called out as a driver of climate-related opportunity.

Policy changes like the Climate Change Levy (CCL) in the UK have driven new commercial opportunities, for example the manufacture of bioethanol. Associated British Foods (Consumer Goods)

41%

of respondents cite policy, legislation, and regulation as a key driver



Engaging with Government to shape the pathway to net-zero

Introduction

The scale of the challenge of reducing global emissions and limiting rises in temperatures to 1.5 degrees requires collaboration across all sectors of business, government, and civil society. Businesses inevitably are critical actors, providing the investment and innovation to deliver the necessary change. This however, cannot be in isolation. Governments, in particular,

Key messages

Whether responding to climate-related policies and regulations, or seeking to get ahead of them, all businesses need to understand the role of government in shaping the environment for decarbonisation and track how this is developing. create the conditions to enable effective business action, setting standards to shape markets, designing incentives and using their spending power to promote change. In addition, many governments and businesses see opportunities to be exploited through new, innovative green solutions and technology, and are putting net-zero at the heart of their broader economic plans. Governments also provide democratic legitimacy, helping ensure the impacts of change are considered across the population. As a result, respondents have regularly referred to government interactions and engagement as important factors in determining the success of their initiatives, whether as a catalyst or as a barrier.

By setting well-designed regulatory standards, governments can enable new markets for businesses and encourage investment.

Rather than pushing back against regulation, many businesses want to see more robust regulatory frameworks established to give them greater confidence to invest in green initiatives. Many governments are opting to guide markets towards green investments by establishing 'long lead-time' regulations aimed at phasing out higher carbon technologies.

Tax and spend policies can be effective tools in crowding in finance from the private sector and reducing the cost of climate technologies.

01 The role of regulation and policy in shaping corporate climate action

A shift to a net-zero economy requires a transformation of markets and consumer behaviours in a short space of time. A business-asusual approach will not see the necessary reforms or investments made sufficiently quickly, necessitating the government. Businesses are motivated to act independently of governments, but without government setting the direction of travel for the economy and establishing the standards it expects, businesses cannot move forward with certainty.

Around 40% of contributors cite regulation and policy change as a driver of their climate action. However, a much smaller proportion – just over 5% - believe this to be the primary motivation for their initiatives. Further insight from responses suggests that policy and regulation are viewed as factors that shape and influence initiatives and their impact, rather than instigating change.

Externally, the business view of government regulation has historically been caricatured as sceptical, with such intervention railed against on the grounds that it could increase costs, create an uneven playing field, or stymie innovation. The reality is much more nuanced. Respondents have cited examples of regulations that have been poorly designed or targeted, but more generally businesses recognise the importance of regulation in providing certainty, shaping markets and counteracting rogue players in the market, or unfair competition. Many businesses have cited the absence of comprehensive and effective policy and regulation to be a barrier.

As commitments from an increasing number of national governments become more ambitious and the concept of net-zero becomes more widespread, climate change will intersect with ever more aspects of policy. In a world where emissions were expected to be reduced rather than eradicated, businesses might have fallen into the trap of believing that their own carbon footprints would lie within the residual emissions, and therefore be out of scope for government intervention. That expectation is becoming less prevalent, with businesses across the economy recognising their responsibilities and expecting more actions from government to support or compel them to decarbonise. As businesses grasp the urgency and severity of our predicament, they are anticipating a policy environment that changes significantly and adapts quickly.

The question is not whether we need regulation to enable business action on climate change – we clearly do – but how regulatory systems can best be designed to support companies on this journey.

02 Businesses' perception of a good regulatory environment

Businesses do not want to be taken by surprise by regulation. Often the stability and predictability of the regulatory system rank in importance alongside the design and targeting of the regulations themselves. Respondents expressed a desire to get ahead of potential policy changes, rather than reacting to changes. This underlines the imperative for companies to monitor and influence the regulatory environment, rather than wait for it to dictate their futures.

We don't want to be driven by increasing regulations related to sustainability, but rather aim to be a front-runner in sustainability matters and incorporate sustainability into our business operations.

Neste (Energy, Resources & Utilities)

Businesses require sufficient time to plan and adapt their operations. Depending on the industry, investment cycles can span a decade or more, and so need to understand the likely pathway for decarbonisation and the implications for technology developments well into the future. Businesses can accommodate new rules, standards, or policy initiatives, as long as they have sufficient time to plan and have confidence the changes will be long lasting.

For most countries, climate change policy is characterised by long-term targets for cutting greenhouse gas emissions. This in turn is translated into potential indicative pathways for different emissions categories - like energy production and distribution, transport, and industry. Some governments have therefore started to favour the implementation of 'long lead-time' regulation, giving businesses early notice of a necessary change, and a chance to adapt in line with their normal investment cycles. In the UK, these rules are emerging with particular prominence in parts of transport and buildings policy, but will need to be extended across the economy going forward. The establishment of these rules generates new questions among businesses affected – 'Where do we need to invest to meet this new requirement?' and 'What support will we require to get us there?':

Significant engagement across the sector was achieved only after the government mandated diesel trains be phased out by 2040. This statement has transformed senior leadership's view on this, resulting in the sector making significant investment decisions as a response.

Avanti West Coast (Transport & Mobility)

In addition, businesses require signals from governments to help guide their investment to places where they are likely to generate returns. Often when new green technologies are introduced and sufficiently advanced, coordination is required at a national or local government level to create efficiencies and reduce the risk of stranded assets. For example, the development of hydrogen has multiple potential uses across the economy from industrial processes to heavy transport vehicles, to some forms of home heating.

Ideally, we would generate renewables at our sites to both power the treatment plants we operate and to charge small electric vehicles. Similarly, we would use the biomethane we produce to create hydrogen for fuelling larger tanker vehicles and to sell to other fleets. However, we are never going to be able to do this on our own – it requires government intervention and support to help set up hydrogen networks. In this way we can all work to a common set of standards and goals.

Dŵr Cymru Welsh Water (Energy, Resources & Utilities)

The infrastructure and utilities sectors which are often characterised by natural monopolies, have an especially symbiotic relationship with regulators. In the UK, many firms in sectors such as energy, water, and telecommunications are accustomed to high levels of intervention from independent economic regulators. Unsurprisingly then, respondents from these sectors were much more likely to call out regulation as a primary driver of their climate initiatives, highlighting the important role that regulators have in promoting tangible climate action on a broad scale. Many regulators are working closely with leading businesses in their respective sectors to ensure ambitious targets are met.

There are 2030 targets for the water sector, which the Regulator will ensure we meet. We had put forward a very forward thinking and innovative business plan, that had some challenging targets. We effectively agreed a high-level carbon reduction plan with the Regulator, rather than a clearcut reduction target.

Northumbrian Water Limited (Energy, Resources & Utilities)

To unlock business investment, economic regulators need to operate in a way that is consistent with delivering net-zero. At present, most UK economic regulators are not bound to consider their contribution to progress towards the UK's net-zero ambition. There are therefore growing calls from business for economic regulators to have a remit and objectives to contribute to reaching the UK's net-zero target by 2050, and for them to be required to report on their progress on delivering these objectives.



03 Government spending's impact on corporate climate action

Government spending can also be a powerful tool in catalysing corporate climate action. Respondents point to examples where public sector spending has been instrumental, particularly in stimulating innovation and helping to bring down the cost of key climate technologies:

Finance is pivotal as expansion and scaling of our turbine operations and deployment requires funding. In order to scale, we require governmentbacked support as well as long term investors that understand the timelines of these projects and their longer than conventional payback periods.

Orbital Marine Power Ltd (Energy, Resources & Utilities) In the UK, the experience of deploying offshore wind power is illustrative of the power of government market-making and co-investment. The subsidy mechanism, the Contracts for Difference scheme, has invited bids from private sector power companies for new projects, providing developers with high upfront costs and long lifetimes with direct protection from wholesale price volatility. The competitive element of the mechanism has driven down the cost of the technology rapidly with significant falls in the strike price over a short period.

Businesses are keen to see this experience replicated for more technologies, which could be critical to achieving the UK's net-zero ambitions. In doing so, it could also create new growth and export opportunities for firms. For example, there is an opportunity to compete with other leading countries in the development of hydrogen power for cross sector use, carbon capture technologies and sustainable fuels for shipping and aviation.

The CBI is the UK's leading business organisation, speaking for some 190,000 businesses that together employ around a third of the private sector workforce. With offices across the UK as well as representation in Brussels, Washington, Beijing, and Delhi, the CBI communicates the British business voice around the world.

07 Risk and reporting

Risk is cited as a key driver to climate action by 17% of respondents. While there is transitional risk inherent in not responding to the changing expectations of stakeholders, risk is more typically framed around direct loss from climate shocks, e.g., physical risk to infrastructure.

Pressure starts with the recognition of risk to our book from climate change, risk to our stakeholders, and risk to society.

NatWest Group (Financial Services)

Physical risks are a real threat for the business, even in western Europe. Temperatures, drought, flooding, extreme heat, and water scarcity have all already affected the business.

Coca-Cola European Partners (Consumer Goods) In fewer cases transitional risk has been called out as a driver, both the risk inherent in failing to keep up with the market and regulatory risk.

We believe that companies who do not have sciencebased climate commitments and do not take ambitious climate action will fail to attract consumers, investors and employees. This is critical for the future success of any company.

Volvo Cars (Industrials)

Mining has been under the spotlight for environmental damage for many years, creating a risk to brand and reputation. Therefore, it is necessary to demonstrate that we are having the smallest impact possible. Anglo American (Energy, Resources & Utilities)



17%

of respondents cite risk as a key driver.

= PAT

Reporting, and particularly the Task Force on Climate-related Financial Disclosures (TCFD) process, has helped educate companies on the nature and quantum of risk within their business and has acted as a catalyst.

Interest in climate change, still primarily interrogated through targets, TCFD and ESG reporting, is a much greater focus now than it has been. RB (Consumer Goods)

TCFD requires us to report on how we are assessing the non-financial risks to the business that are associated with climate change. Managers are then expected to consider the risks and opportunities associated with their projects and present these arguments to the investment committee. Lendlease Group (Construction & Real Estate)

08 Suppliers

14% of participants have mentioned suppliers or the supply chain as a driver, but almost never as a primary driver of change.

The supply chain is cited in some cases as a key driver due to the high proportion of a company's emissions it can account for and the evident need to work with suppliers to reduce these.

There is a drive to generate systemic change within society around carbon impact and a push to advocate for this climate transition with policymakers, suppliers and customers. Royal DSM (Life Sciences & Healthcare)

Local supply chains are playing an increasingly important role. Through the control of contractors and procurement practices, we have been and are able to utilise local companies, so as to reduce our indirect emissions. Bristol Airport Limited (Transport & Mobility)





Supply chain resilience can be a concern and can influence a company's climate programme.

Initiatives such as the building of our new factory in Rotterdam will provide us with greater control over our supply chain by bringing operations largely in-house. In the long-term, this will contribute to supply chain security. Innocent Drinks (Consumer Goods)

14%

of participants have mentioned suppliers or the supply chain as a driver Suppliers can also be catalysts for change, willingly partnering with organisations they supply to, and being a source of innovation.

Suppliers are keen to partner to promote sustainable practices.

All England Lawn Tennis and Croquet Club (General Services)

We have a sustainable supply chain charter which outlines how we want to work with suppliers to mitigate the effects of climate change. We have a Business Innovation Lab team which reaches out to the supply chain to develop innovative solutions. United Utilities Group plc (Energy, Resources & Utilities) In fewer cases, changes made in the supply chain create a need to change downstream, for instance to accommodate a new or adapted product or service.

The anticipated legislation on packaging, particularly regarding plastics, could affect some of our products. Food & Beverage Company (Consumer Goods)



Targets and commitments

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

Overview

Contributors were asked to state their key climate-related targets and commitments and responses were grouped into five categories (see Figure 1). They were asked to provide the base and target year, indicate which targets are aligned to specific third-party initiatives, such as the Science Based Target Initiative (SBTi) and RE100, as well as offer additional contextual commentary. 89% of participants provide at least one target. This section covers emissions reduction targets, target standardisation, the target setting process, and the extent of wider sustainability targets.

Figure 1 Categorised targets

The aggregated target categories, and sub-categories, as a percentage of total responses (i.e., 48% of stated targets are related to overall emissions reduction, with 13% of targets specifically relating to carbon neutrality).

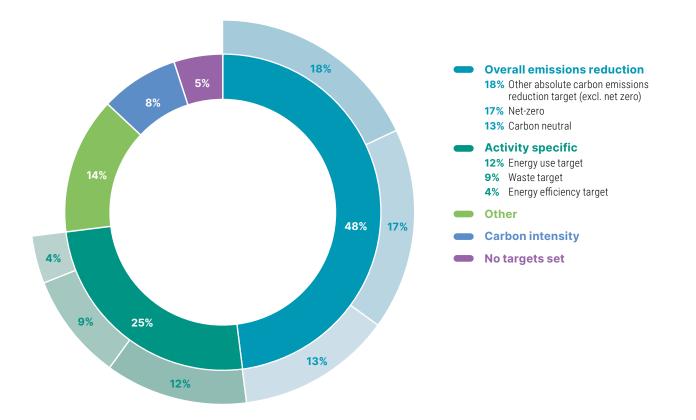


Figure 2 Target categories broken down by company sector

Responses for each target category are broken down by sector (i.e., 45% of waste targets are set by companies from the Consumer Goods sector). Responses for each target category are displayed as a percentage of total responses (i.e., 17% of stated targets are related to net-zero).

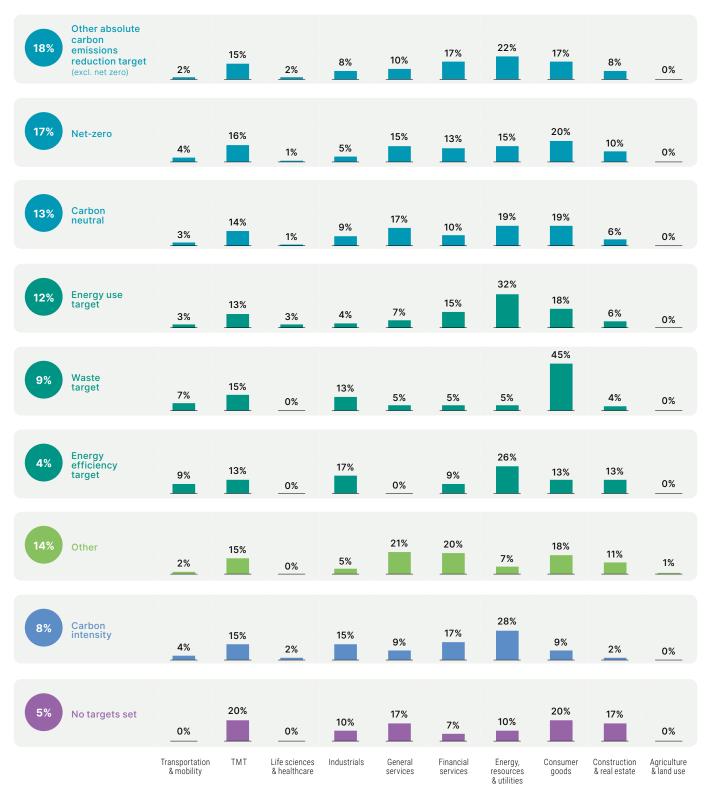
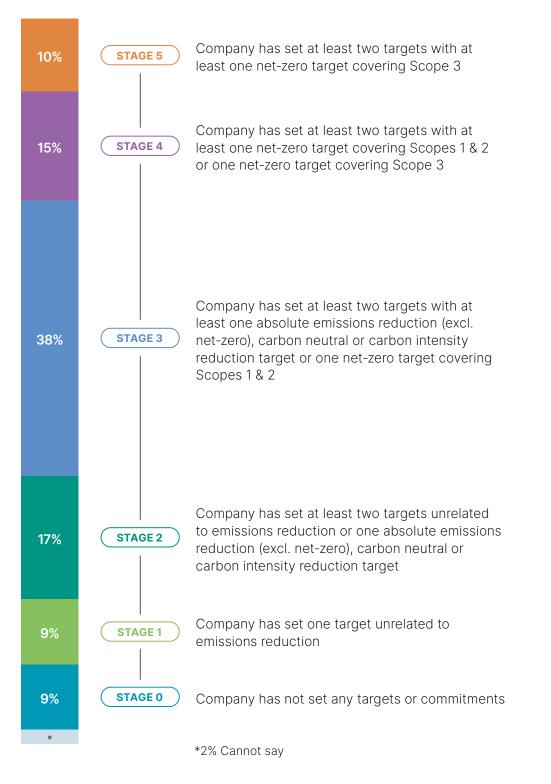


Figure 3 Distribution of companies by target setting maturity

Respondents are assigned to one of five stages of target setting maturity, according to their stated climate-related targets and commitments. The percentage of respondents at each stage of maturity is displayed as a stacked bar chart (i.e., 10% of companies are at Stage 5, implying they have set at least two targets with at least one net-zero target covering Scope 3).



Key messages

Headline targets addressing Scope 1 and 2 emissions reduction are widespread across all sectors, while Scope 3 target setting is in its infancy. Interim targets are present in larger, more progressive entities. Offsetting remains a key element of net-zero commitments. Climate targets are affecting investment decisions. Those without formal targets are anticipating setting targets in the near term.

We are committed to reaching our science-based emissions targets for Scopes 1 and 2, with a 42% reduction targeted by 2030 and a 100% reduction by 2050.

United Utilities Group plc (Energy, Resources & Utilities)

100

Respondents seek progress to reach a consistent and universally adopted taxonomy of climate-related targets. Science-based targets are present but are not yet pervasive.

We have introduced an SBTvalidated supplier engagement target which requires that 71% of group suppliers have an emissions reduction target by 2023. Suppliers will be required to set these targets in line with the science-based criteria.

Imerys (Energy, Resources & Utilities)

The target setting process is typically iterative, data led, and often requires the involvement of external expertise.

We aim to become carbon neutral by 2023 with respect to Scope 1 and 2 emissions, and net-zero by 2030. This ambition is based on limited knowledge at the moment and we would like to reach this target more quickly and move to carbon positive. We are in the process of defining our net-zero roadmap with external consultancy help. We haven't made any SBTi targets yet but will do so as part of this roadmap.

abito (Financial Services)

Primary emissions reduction targets are often supported by other sustainability targets, with some addressing resilience.

Our target is to have net-zero operational emissions by 2030. We are also aiming for a net gain in biodiversity, increasing the abundance and diversity of plant and animal species at our grounds. Together with partners, we established an education space during The Championships in 2019 to promote sustainability and climate action.

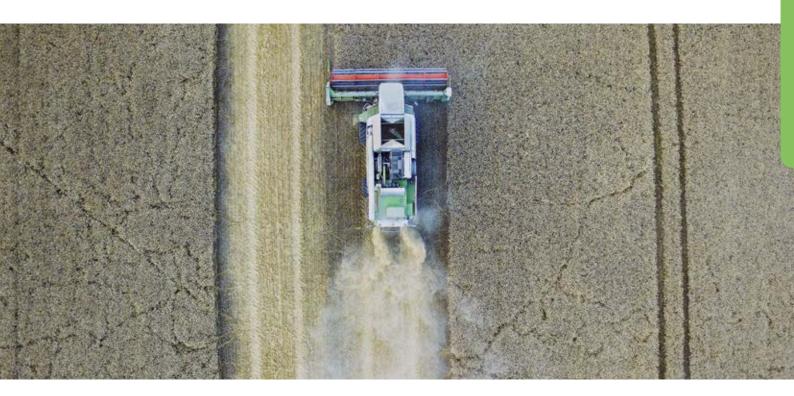
All England Lawn Tennis and Croquet Club (General Services)

01 Emissions reduction targets

Headline targets addressing Scope 1 and 2 emissions reduction are widespread across all sectors, while Scope 3 target setting is in its infancy. Interim targets are present in larger, more progressive entities. Offsetting remains a key element of net-zero commitments. Climate targets are affecting investment decisions. Those without formal targets are anticipating setting targets in the near term.

89% of respondents shared at least one climate-related target

59% of net-zero targets targeting 2035 or earlier, ambition is evident



Headline Targets

89% of respondents shared at least one climate-related target. Absolute emissions reduction, carbon neutrality, and net-zero targets are the most prevalent types of goals stated, accounting for 48% of all targets and commitments (see Figure 1); they are often cited as the headline commitment. 10% of respondents are at a mature stage of target setting: i.e., they have set at least two targets, with at least one net-zero target covering Scope 3 emissions (see Figure 2). 9% of respondents are at the least mature stage, with no set targets or commitments. A high proportion (38%) of respondents find themselves in the middle of these two extremes, having set at least two targets with at least one emissions reduction target (excluding net-zero) or one netzero target covering only Scopes 1 and 2.

Most targets have a baseline year post-2015 (the year of the Paris Agreement). The time frame for targets varies, although with 59% of net-zero targets targeting 2035 or earlier, ambition is evident; fully 20% of net-zero targets have a target year prior to 2025. Commitments targeting 2035 and beyond are nearly all (91%) set by large corporates, suggesting a more cautious approach due to their greater complexity and size.

Using 2004 as the original base year for emissions, the business has currently achieved an 80% reduction in carbon emissions and are confident in achieving our goal of net-zero ahead of our 2025 objective.

Scottish Leather Group Ltd (Consumer Goods) The breadth and pace of climate commitments varies widely, with some—albeit a very small proportion—having not set targets and others much further progressed, with headline SBTiapproved targets supplemented by interim and other sustainability targets.

We have a goal to be netzero by 2050. In the shortterm, our overarching climate change objective for 2030 is to align our greenhouse gas emissions to the +1.5°C scenario and reduce our greenhouse gas emissions (Scopes 1, 2 and 3) by 50% per finished product. L'Oréal Group (Consumer Goods)

Scope 3 emissions

Scope 3 emissions reduction is often cited as a challenge due to cost, level of effort and administrative burden, and the inability to reliably monitor and measure. Respondents describe a range of approaches to setting Scope 3 targets, with many respondents expressing enthusiasm for the effort while noting that formal targets are in the early stages of development.

Our commitment is to reduce Scope 1 and 2 emissions by 100% by 2030. We are targeting a reduction in Scope 3 emissions by 50%, as these lie outside of our processes and are more difficult to track and control along the supply chain. We believe that 50% is a realistic target for Scope 3 emissions reduction at this point in time. Innocent Drinks (Consumer Goods)

There are a range of definitions for Scope 3 emissions across the respondents (see target standardisation section), making cross-company comparisons difficult. Nearly half (47%) of those companies with Scope 3 targets apply them only to a subset of activities, such as purchased goods/services, business travel, or employee commuting, based on perceptions of both materiality and feasibility.

31% of those setting Scope 3 targets are from the General and Financial Services industries despite accounting for only 27% of the dataset. Scope 3 emissions are particularly significant to these sectors given the high proportion of indirect emissions within their value chain compared to direct emissions.

The emissions of the companies we invest in are several orders of magnitude larger than the emissions we produce. Therefore, we want to ensure that by 2030 we have reduced portfolio related carbon emissions (Scopes 1 and 2) by 50% compared to a 2019 baseline and that the remaining 50% will be eliminated by 2050 at the latest. WHEB (Financial Services)



Interim targets and progress

The SBTi state that they expect companies to set interim targets in addition to net-zero commitments, incentivising short-term emissions reduction and maximising accountability. 37% of those with emissions reduction targets have interim targets, supplementing longer-term targets. 91% of those with interim targets were larger companies (£50m+ revenue) that may have greater resources to establish the necessary measuring and monitoring capabilities and incorporate additional detail into their headline targets. Small organisations are more likely to cite measurement difficulties, often due to a lack of oversight across their full value chain. The data shows that non-UK companies and those from the Energy, Resources and Utilities, Financial Services, and Consumer Goods sectors are more likely to set interim targets, with heavy emitters over-represented in the data.

As an interim step towards our target of becoming climate neutral across our value chain by 2040, we aim to reduce our lifecycle carbon footprint per vehicle by 40% between 2018 and 2025.

Volvo Cars UK (Industrials)

We are committed to reaching our science-based emissions targets for Scopes 1 and 2, with a 42% reduction targeted by 2030 and a 100% reduction by 2050.

United Utilities Group plc (Energy, Resources & Utilities)

91% of those with interim targets were larger companies (£50m+ revenue)

A number of those with longer-term targets (2035+) are surpassing their interim target emissions reductions. Many respondents noted that the pandemic had improved their emissions reduction efforts during 2020, when business operations and travel were constrained. Many noted that the pandemic has further acted as a disrupter to business norms, with home working being the most commonly cited change that has had a positive impact on emissions.

We have made a net-zero commitment for our Scope 1 and 2 emissions by 2050. To achieve this goal, we have set milestone targets compared to 2015/16 levels: 35% absolute reduction by 2020 and 60% by 2025. We have already achieved 37% compared to the baseline. To support these targets, there are separate targets to source 65% of our electricity from renewable sources by 2020 and 100% by 2030. As of 2020, we were at 68%.

Retail, Wholesale & Distribution Company (Consumer Goods)

We promote flexible working where possible, giving employees the option to work from home which reduces carbon emissions from their commute.

Made Open (Telecommunications, Media & Technology)

Offsetting

Many organisations expressed a strong preference for reducing absolute emissions by changing behaviours and adapting internal processes. However, carbon offsetting still plays a role to address unavoidable emissions, with many recognising that offsetting is a secondary option. Some were actively promoting their eschewing of offsets in favor of purely focusing on absolute carbon reduction. Relative to companies with carbon intensity reduction targets, companies with carbon neutral targets are more likely to offset their emissions (e.g., through verified carbon removal projects or carbon credits).

To reach net-zero by 2040, we will first focus on reducing emissions as far as possible, before investing in projects which remove carbon from the atmosphere or verified carbon-offset projects.

Coca-Cola European Partners (Consumer Goods)

and an an and

Our net-zero carbon emissions target is for Scopes 1, 2 and 3. This target is for a full reduction in business emissions and is not based on any carbon offsetting.

Scottish Leather Group Ltd (Consumer Goods)

Climate policy and investment decisions

Corporate investment decisions are cited as being significantly impacted by the company's climate commitments, with 86% of respondents noting that investment choices will be impacted by climate policy. Some stated that they are accepting a lower rate of return on investments that have greater environmental benefits, suggesting that capital allocation is not solely focused on shortterm financial returns. Larger companies in high emitting sectors were more likely to modify their investment strategy than smaller companies, as were those in the Consumer Goods and Energy, Resources, and Utilities sectors, although the vast majority of all respondents, regardless of size and sector, said that their commitments do affect investment decision making.

Investment in environmental measures will have lower required rate of return than other investments. NorgesGruppen (Consumer Goods)

For the last 10 years, carbon emissions and climate resilience have been considered within our investment programme. Anglian Water (Energy, Resources & Utilities)

86% of responents noted that investment choices will be impacted by climate policy

Within the Financial Services sector, investment managers are focusing on reducing the emissions associated with the companies that they invest in. Those emissions are several orders of magnitude greater than the emissions they directly produce. Some investment managers are targeting SBTiapproved net-zero investments by increasing financing of projects, companies, and assets that actively contribute to climate change mitigation climate change.

We measure all investments in our portfolio to ensure that they have the positive impact that we expect. We track the climate impact of our portfolios and aim to reduce this in line with the decarbonisation pathways required to meet the target of 1.5°C warming. EQ Investors (Financial Services)

We have a goal of net-zero greenhouse gas emissions for our investments by 2050, consistent with a maximum temperature rise of 1.5°C. Storebrand (Financial Services)



Those without targets or commitments

While many are putting in place Paris-aligned targets to reach net-zero within the next few decades, some have not yet made any formal commitments. Of the 9% of respondents who have not set targets, the majority (63%) are large international corporates with revenue greater than £50 million. However, there is also a notable portion (17%) of small start-ups who have not set targets, frequently citing cost and capability limitations, as well as the inability to monitor and measure progress. The pandemic was occasionally cited by smaller companies as inhibiting progress of their climate agenda.

We have given considerable thought to climate commitments, particularly in terms of energy reduction, but we have not yet stated a clear target. The current intention is to set a net-zero target for 2030.

Burger King (General Services)

The business is early on in its sustainability journey and has not yet set any external climate-related targets. We are considering aligning with RE100 and are looking at setting other science-based targets, but nothing is formalised at present.

Food & Beverage Company (Consumer Goods)

All of those without formal targets acknowledged the importance of climate change and were enthusiastic about making commitments soon, with many citing that they are building monitoring and measurement capabilities before formal commitments are made. A number hoped to formalise their efforts in the lead up to COP26.

86% of responents noting that investment choices will be impacted by climate policy

02 Target standardisation

Respondents want a consistent and universally adopted climate-related taxonomy for goal setting. Science-based targets are present but not yet pervasive.

Lack of consistent terminology

Many terms are used to describe the type of climate targets and commitments made. 'Net-zero' is the most widely used target by our contributors, although others such as 'carbon negative,' 'carbon positive' and 'net negative' are also used, each with their various nuances.

The inclusion of different emission Scopes in companyspecific targets results in varied definitions even under the same target heading. For instance, many respondents with carbon neutral targets define these with respect to their energy consumption and direct emissions but not their supply chain, while others include the supply chain.

Definitional challenges are compounded when supply chains are comprised of companies that are not at the same level of awareness or capability to prioritise and implement actions and collect and report data accurately, such as those with smaller companies and/ spanning multiple geographies)..

While there is not yet consistent use of climate-related terminology in broader target setting, respondents cited the importance of agreeing on internal definitions of various climate terms, such as climate neutral and carbon positive, so that stakeholders within the organisation have a common understanding.

Overall, progress is needed to ensure consistent, generally accepted, and universally adopted climate definitions that allow stakeholders to fully comprehend the nuances of various targets. We don't actually like the term 'net-zero', as we don't feel that it is very inclusive for small businesses. There doesn't seem to be one clear definition of what 'net-zero' actually means. Shed 1 Distillery Ulverston (Consumer Goods)

The definition of 'value chain' for net-zero purposes and from a financial services perspective is complex, and we are referencing the work of external organisations to help define our 'value chain'. Habito (Financial Services)

Science based targets

The SBTi champions science-based target setting as a way of future-proofing companies' growth in the transition to the low-carbon economy (SBTi, 2020). Companies have two years from the time they commit to have their targets independently assessed and approved through the SBTi. At present, SBTi guidance is not available for all sectors, including Oil and Gas and Transport. In this report, 'SBTi alignment' includes respondents who are officially SBTi approved as well as those who are not approved but have set targets that are in line with SBTi principles.

Many respondents cited that their SBTiapproved carbon reduction targets aligned to a 'well below 2-degree' trajectory. Since the data collection, the SBTi has announced that they will be increasing the minimum ambition from 'keeping warming to well below 2 degrees' to '1.5 degrees' above pre-industrial levels, suggesting some existing targets may need to be reassessed.

We seek to reduce emissions in line with SBT within 2030. Our emissions reduction target is not formally approved by SBT, but we rather seek to be aligned with the SBT target goals and eventually adjust them in accordance with future modifications to the SBT.

Schibsted Media Group (Telecommunications, Media & Technology)

We are committed to keeping our greenhouse gas emissions flat at the 2018 level until 2030. It is not a sciencebased target because much of what we do is based on organic compounds that require carbon, and technological solutions do not yet exist in some of our carbon-intensive operations to support SBTi based targets.

BASF (Energy, Resources & Utilities)





42% of emissions reduction targets are noted as being aligned to SBTi. Of these, many were noted as being officially approved by SBTi. Most emissions reduction targets (54%) from respondents in high emitting sectors, including Energy, Resources and Utilities, Industrials, and Transport and Mobility, were not science-based. Many of those whose targets were not officially approved by the SBTi noted that they were in the process of having their targets approved, with many citing the aim to be SBTi-aligned within the next 1-2 years. Those who are not setting SBTi-aligned targets expressed reluctance to commit to something they do not yet know how to deliver.

We were one of the first signatories of the United Nations Framework Convention on Climate Change (UNFCCC), where we committed to measuring, reducing, and reporting greenhouse gas emissions, in line with sciencebased targets and well below the 2-degree scenario in the Paris Agreement.

Formula E Holdings Ltd (Telecommunications, Media & Technology) Of the targets that are specifically related to renewable energy, 21% are aligned to the RE100 initiative.

Despite many positive examples, the relatively low number of SBTi and RE100 officially approved targets and the fact that high emitting sectors are currently less likely to have SBTs suggests that further progress is needed to ensure consistent, universally adopted commitments that provide a clear pathway to meeting the goals of the Paris Agreement.

A small number of respondents, mostly large corporates, have set targets for their suppliers to set their own SBTs. These respondents commented that having SBTs is a factor that is considered when determining whether a partner is chosen to be on their supplier list or not. We have introduced an SBTvalidated supplier engagement target which requires that 71% of group suppliers have an emissions reduction target by 2023. Suppliers will be required to set these targets in line with the science-based criteria.

Imerys (Energy, Resources & Utilities)

We require 100% of our suppliers to be climate neutral and register on KlimaHub our internal climate tracking system for suppliers. All our suppliers are required to submit their climate accounting statements and suggest future action plans and initiatives. Fjordkraft (Energy, Resources & Utilities)

21% of the targets that are specifically related to renewable energy are aligned to the RE100 initiative.

03 Target setting process

The target setting process is typically iterative, data-led, and often requires the involvement of external expertise.

Respondents' processes can be categorised as ambition-led and strategy-led. The former often cited an 'ambition first, implementation plan second' approach where a high-level, long-term target is set first before the detail is worked through on how the target is to be achieved, with amendments made subsequently to bring the target date closer.

We aim to become carbon neutral by 2023 with respect to Scope 1 and 2 emissions, and net-zero by 2030. This ambition is based on limited knowledge at the moment and would like to reach this target more quickly, and move to carbon positive. We are in the process of defining our net-zero roadmap with external consultancy help. We haven't made any SBT targets yet but will do so as part of this roadmap.

Habito (Financial Services)

We are consulting with Edge Environment, a specialist sustainability advisory company, to develop SBTs and map out our carbon neutral path. We work in a culture of continuous improvement to reduce impact, engage our customers and campaign for change. KeepCup (Consumer Goods) Strategy-led companies spend time and effort to first understand their current environmental impact and baselines before setting a formal target. Data availability is key to strategy-led target setting, with contributors citing the need for extensive data gathering before formal targets are set.

We work closely with BITC, whose carbon taskforce are promoting a "2030 is Possible" campaign. We are about to undertake our carbon footprint calculation so that we can establish our baseline and set commitments accordingly. Burger King (General Services)

04 Wider sustainability targets

Primary emissions reduction targets are often supported by other sustainability targets, with some addressing resilience.

These targets include waste (especially plastic) and water reduction, recycling, afforestation, education, biodiversity gains, green financing, and donation commitments. These targets tend to be sector- and product-related. The Consumer Goods industry, for instance, is over-represented in the data set for having waste targets (see Figure 1).

100% of water used in industrial processes will be recycled and reused. Innovation will allow all consumers to reduce their water consumption by 25% on average and per finished product compared to 2016. L'Oréal Group (Consumer Goods) The wider sustainability targets are often linked to and support headline carbon reduction targets, while sitting under the umbrella of company-wide sustainability targets. The secondary targets provided by respondents included those focused on resilience.

Our target is to have netzero operational emissions by 2030. We are also aiming for a net gain in biodiversity, increasing the abundance and diversity of plant and animal species at our grounds. Together with partners, we established an education space during The Championships in 2019 to promote sustainability and climate action.

All England Lawn Tennis and Croquet Club (General Services)

We have a handle on how climate change impacts our supply chain, specifically the farms, and tracking and enhancing resilience is important. With TCFD coming as well, management attention paid to resilience is increasing, with climate risk fed directly into the risk register. British American Tobacco (Consumer Goods)



Organising for change

There are increasing 'quality' of goals, but they now need to be backed up by detailed pathways.



Overview

Participants were asked to explain how their company is organising their programme of climate action, which virtually all respondents (c. 97%) provided. Responses can be described across four main dimensions, with varying degrees of maturity evinced across each dimension:

- **Positioning** captures the extent to which climate change considerations are central to an organisation, ranging from self-contained climate initiatives to incorporation into the business model and the heart of strategy.
- **Programme scope** covers both the breadth of climate issues considered (e.g., the full scope of emissions reductions as well as resilience strategies) and whether or not climate action is extended to all parts of the organisation (e.g., across geographies and lines of business).
- Organisational involvement reflects the degree to which this is an all-employee, all-function concern or more narrowly owned by a distinct function or group.
- Management mechanisms cover the way the programme is managed or coordinated, whether through metrics or outcomes, activity or actions, or through a combination.

Figure 1

Dimensions of change programmes

There are 4 climate change programme dimensions and the overall degree of maturity. The blue bars represent the range of responses (illustrative). Few, if any organisations have positioned climate change as a long-term driver of value.



Overall degree of maturity

Degrees of organisational maturity

Against these dimensions, the organisation of climate programmes can be categorised into four archetypes of maturity:

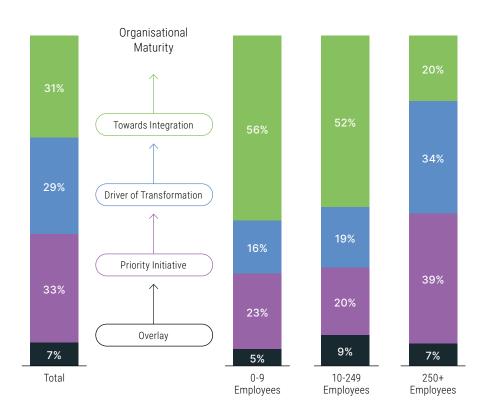
- C. 7% align to the least progressive or mature archetype, where climate is an **overlay** with limited alignment to, or integration with, the business.
- C. 33% have climate programmes that can be described as a **priority initiative**. These are often companies with leadership buy-in and teams from across the organisation involved in delivery. However, the scope of initiatives is constrained, and climate considerations are not at the heart of strategy or operational decision making.
- C. 29% of companies have programmes where climate is a driver of transformation. A wellstructured programme of climate action exists, which has transformational implications for the business. Delivery involves a significant number

of dedicated resources, and climate is beginning to influence the company's business model and strategy.

• C. 31% of companies can be classed as working **towards integration** of their climate programme into every part of the business. For these firms, climate action is becoming aligned to, and an influencer of, the overall company purpose and strategy; initiatives are becoming embedded within wider business activities and the operating model; climate-related issues shape the organisation's business model; and employees are equipped and strategic processes designed to deliver the required outcomes. C. 55% of small businesses fall into this archetype, reflecting the high proportion of businesses in this category with a climate-centric mission.

Figure 2 The organisational maturity status of companies

The percentage of respondents at the various organisational maturity stages broken as a whole and broken down by size of the company (i.e., 55% of companies with 0-9 employees fall under the more mature, towards integration category).



Key messages

Radical change is required to meet climate targets and the evolving expectations of stakeholders. The way that businesses organise their programmes of change needs to reflect this, supporting the level of transformation implied. Many do not. Some businesses are demonstrating this need for change by incorporating climate change into legally binding charters.

Our new 'purpose' statement has changed the legal purpose of the business. It is not just profit, but low carbon too.

EDF Energy (Energy, Resources & Utilities)

Progressive organisations are thinking of climate change and their response as a driver of long-term value, a core component of the business model, and a basis for strategic decisions. However, most businesses have yet to reach this point, resulting in climate programmes competing for resources and attention with the legacy business and too often being de-prioritised. This influences the way in which the programme is organised.

We need to shift the mindset from compliance to business opportunities.

Schibsted Media Group (Telecommunications, Media & Technology)

Overview 75

The scope of corporate climate programmes typically emphasises emissions reduction over resilience, and the scope of emissions reduction is rarely comprehensive, particularly in terms of Scope 3. Programmes are often applied asymmetrically across geographies and lines of business. More mature organisations embrace a broader scope and wider and more coherent application across countries, supply chains, and lines of business.

Having control of your supply chain is essential. In this way you are also in control of the technology and resources used in all production processes.

Flokk (Consumer Goods)

Many companies locate their climate programmes within small, dedicated sustainability teams, reflecting the historic home of climate change-related knowledge. Their continued involvement is often critical, but as climate change becomes more central to the business, progressive companies are recognising the need to expand the effort to include all functions and levels and embed climate into corporate culture.

It is critical to have an aligned purpose and culture, where employees are given the mandate and ownership to take control and experiment.

Tyman plc (Industrials)

Given the rapidly shifting dynamics and complexity of climate change, close management and central coordination are key management approaches. At the same time, many corporates see value in leaving some scope for local teams to adapt programmes to their circumstances. Increasingly, firms collaborate with competitors, customers, or suppliers to deal with climate change.

All publicly communicated targets have some form of plan behind them. We don't set targets and plan how to get there later.

Smurfit Kappa Group plc (Industrials)



01 Radical organisational change is required to meet ambitions

Targets demand fundamental change

Companies are increasingly setting targets that imply fundamental change to the business and its operating environment. The more progressive businesses are accepting this and embarking on organisational transformation.

Within every process, we continue to ask ourselves: "is this as sustainable as we can do it?"

Reasons to be Wild (Consumer Goods)

Some respondents characterised this organisational change as more significant than digital transformation or efficiencybased improvements, influencing all aspects of the business from purpose through strategy to the daily activities of junior employees. Many businesses struggle with this positioning, which is reflected in the priority they currently afford climate change and the way they organise. Our new 'purpose' statement has changed the legal purpose of the business. It is not just profit, but low carbon too. EDF Energy (Energy, Resources &

Utilities)

A comparatively high proportion of smaller companies that provided responses put climate change, either alone or as part of a broader sustainability focus, into their purpose or charter, often from inception. Frequently these were influenced by thirdparty certification programmes, e.g. B Corps.

Action on sustainability in business is for smaller organisations often founderdriven, which is in contrast to the case of corporates where the driving force is regulation. PlanA.Earth (General Services) B-Corp certification has completely changed our internal operations as a business. House of Baukjen (Consumer Goods)

We went into the certification process thinking that we had a strong understanding of what was required, but quickly realised that there was a lot we had missed.

Altor Wealth Management LLP (Financial Services)

02 Positioning for value

Re-thinking the link between profits and climate

Progressive firms discussed putting climate change at the heart of their business model by positioning climate change as a long term driver of value, explicitly incorporating it into their strategic plans and success metrics. This avoids a trade-off mentality that can exist between commercial decisions and the climate change programme, and helps win stakeholder buy-in.

However, climate initiatives and programmes are still seen in many companies as a cost, with c. 11% of respondents citing prioritisation as one of the barriers to a more integrated climate programme.

Framing the journey as an innovation programme, with business opportunities, is key to motivating employees.

SAP SE (Telecommunications, Media & Technology)

We need to shift the mindset from compliance to business opportunities.

Schibsted Media Group (Telecommunications, Media & Technology)





Approaches for prioritisation

Internal carbon pricing is cited by some respondents as a way to reflect the implications of climate change in investment decisions, incorporating a shadow carbon price into the appraisal process for new projects. Sometimes this is accompanied by hurdle rates that are adjusted in line with their carbon footprint. Active and growing carbon markets in most major economies provide some external reference points, although these markets remain highly imperfect and limited in scope.

[Businesses] are required to consider the shadow cost on carbon and present their arguments to the investment committee at the regional and global level.

Lendlease Group (Construction & Real estate)

We have two CIOs -Investment and Impact. At all times: both have the right to veto each other, both have to be in agreement to move forward on investment, and both CIOs hold us tightly to our mission.

Tribe Impact Capital (Financial Services)

Some businesses are building climate priorities into remuneration policies. Typically, this applies to the executive/ board level, but there is some suggestion this may change and be cascaded down the organisation. We have introduced a carbon reduction metric into our long-term management incentive plan alongside EPS and ROIC – a move that was driven by CCEP's board-level remuneration committee. Coca-Cola European Partners (Consumer Goods)

Scorecards and bonuses are good way of rewarding and recognising climate work - the link between performance and environmental action is really important which is why 10% of eligible BT managers' bonuses is tied to BT's performance on digital skills and carbon reduction.

BT Group plc (Telecommunications, Media & Technology)

Effective communication is another way to help position climate appropriately. The company climate change narrative needs to be linked to the priority concerns of both external and internal stakeholders.

Climate action tends to be more successful when companies make the issue relevant to the individual and talk about small concrete actions that people or organisations can take. Bemari (General Services)

The message needs to be in a language that is understood and accessible by everyone. It is important to make sure people understand what the trade-offs and implications of achieving sustainability are. Britvic (Consumer Goods)

Re-aligning priorities is difficult

Many companies are still grappling with the integration of climate change into their business models and strategy.

We have experienced that it is challenging to take the step from just speaking about climate change to acting on it. For sustainability and climate change to be prioritised, we must give up on something else.

Tine (Consumer Goods)

Trade-offs take place not only against financial objectives but also in response to other stakeholder priorities. Companies that do not fully integrate climate action into their corporate strategy and instead view it as part of a distinct ESG agenda may de-prioritise climate change mitigation in favour of other ESG issues.

It is important to do a materiality analysis to get buy-in and prioritise where to focus across sustainability. Although it is good to see that climate change is high up on the global agenda, climate is seen to be a particular priority in some countries. Pladis Global (Consumer Goods)

We have actively been engaging with employees and the priority issue at the moment, is racism. Our priorities right now are more social, for example, dealing with diversity and inclusion. Argo Group (Financial Services) Climate change programmes can be derailed by exceptional developments, e.g., the impact of the pandemic, M&A, or material competitor or market changes. Respondents recognise that climate change needs sustained and long-term focus but also acknowledge the challenge they have in maintaining that focus when other issues can appear more urgent.

As a result of COVID, there have been more mixed signals to employees on commitment to climate change vs. their health and wellbeing. We need to be careful with communications but also careful not to roll back commitments.

JLL (Construction & Real Estate)

There is the opportunity for a green recovery from the impact of COVID, but there are multiple demands on businesses and competing priorities.

Weber Shandwick (General Services)



03 Programme scope

Resilience an afterthought, emissions reduction not comprehensive

Only 2% of key initiatives specifically relate to adaptation or resilience in the face of climate shocks, and the breadth of emissions covered is rarely comprehensive, particularly in terms of Scope 3. Stakeholder pressure and greater transparency is resulting in broader-scope programmes, but many are still constrained.

Throughout the organisation there is a limited focus on resilience at this stage. InterContinental Hotels Group plc (General Services)

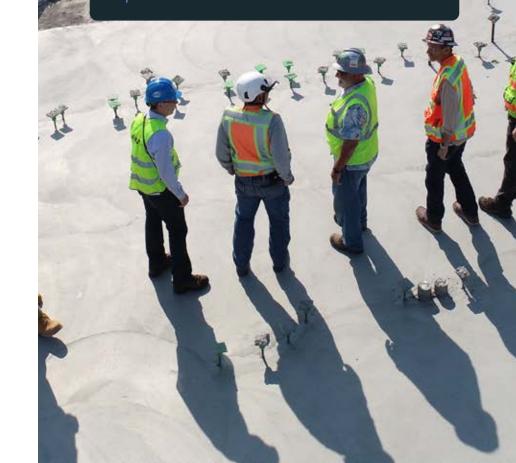
Climate action across business units and locations

Businesses rarely have cohesive cross-country climate programmes or include all lines of business. In part, this reflects differences in local needs and context, but targets are typically being set at a corporate level and as such can only be met by a whole company response.

Each of the 5 regions is developing and embedding their own plan for carbon reduction to support the national strategy and targets.

Network Rail limited (Transport & Mobility)

We have a team to help countries, cities and large corporates decarbonise. Resources Company (Energy, Resources & Utilities)



04 Organisational involvement

Climate is a collective challenge

The scale and urgency of the transformation means that putting an effective climate programme in place is a collective challenge for the entire organisation. Firms that ensure that all internal stakeholders can contribute may innovate more effectively and can address internal conflicts early on.

We would have spent more time making sure business units understood the seriousness and used more up-front time to educate and make clear the importance. Rockwool Group (Industrials)

Climate action needs to be woven into the fabric of the business and can't be off to the side. No one can do it in isolation.

Habito (Financial Services)

Climate action needs to involve all key functions

C. 63% of organisations involve sustainability teams in their climate change programmes. Sustainability teams typically provide some of the expertise necessary to shape an effective programme, but broader involvement is required to ensure the programme is effectively integrated.

Initiatives are owned by the businesses but championed and supported by the sustainability functions. Lendlease Group (Construction & Real Estate)

We do not have a dedicated sustainability team, as we want responsibility to be embedded across the business.

Guardian News & Media (Telecommunications, Media & Technology) Progressive companies are engaging established executive functions and recognise the important roles they have to play in the climate transition.

Larger organisations must consider the role the board has to play in incorporating climate change into governance.

The Board has increased oversight, not just from a compliance point of view but how performance is measured and improved. RB (Consumer Goods)

The CFO can play a crucial role in developing pathways towards net zero, appraising business cases, reporting progress, and integrating net zero into decisionmaking processes. C. 57% of companies involve their finance functions in their programmes, although this is skewed towards larger companies.

Goal 13 Impact Platform Organising for change



CASE STUDY

Climate leadership in the boardroom

Introduction

Boards of directors are under increasing pressure to understand and respond to the risks and opportunities of climate change. This is driven in part, by the factors that influence business behaviour on any issue, the expectations of stakeholders and the policy and regulatory landscape. In addition, the personal implications individuals on the board may face if they don't steward the company through the challenges caused by climate change also plays a part. An increase in litigation against directors, shareholder activism, public scrutiny and the

Key messages

The changing external landscape and responsibilities of board members mean their engagement and leadership are critical in shaping how climate change is integrated into business strategy.

The scale of transformation needed means climate change must be embedded in all parts of governance, with the whole board taking responsibility for toughening of some governance codes has led to a greater sense of individual accountability for climate risks in the boardroom. This is a complex and fastmoving challenge for boards to contend with. We've witnessed a marked shift in how they have been and are engaging with climate change as a result.

Leadership is a key driving force behind the development of corporate climate plans and the lack of board prioritisation is one of the significant barriers to progress identified by respondents. From the responses, over half cited executive motivation an important driver for change but the role of the board was less evident. Given the strategic role the board plays in enabling businesses to develop and implement effective climate transition plans, the value of its leadership should not be underestimated.

Board leadership is critical to driving business transition in four areas: strategy, governance, ambition and incentivisation.

the strategy, with aspects of it supported by individuals and committees.

Climate change doesn't necessitate that the board has topic experts in its membership, but it does need to have enough competence to oversee the creation and delivery of an ambitious and robust climate plan. Incentives linked to the climate plan connects the prosperity of the company with the risks posed by not acting on climate change and ensures there is a clear structure for accountability.

01 Board accountability for climate change and strategy

The board and its members are responsible for ensuring 'the company's prosperity by collectively directing the company's affairs, while meeting the appropriate interests of its shareholders and relevant stakeholders'.¹ This means setting the vision and values of the company, defining the strategy, overseeing its management and how it is implementing plans, and monitoring ongoing success.

Climate change impacts businesses in a number of ways and therefore influences these responsibilities. In the longer-term, the board may decide to engage in significant transformation. But there are also immediate physical and transitional risks. Notably, as the links between climate change and financial risk have become more apparent, the expectation that businesses disclose the risks they are exposed to has ramped up. The adoption of the Taskforce on Climate-related Financial Disclosure (TCFD) principles by governments and financial regulators has been one of the key forces driving greater board engagement with the issue.

Considering these responsibilities and external influences, the board's engagement has become critical in shaping how climate change is integrated into the business strategy, how that is implemented and reported on, and in setting out an ambitious vision for the future. Our climate programme is fully aligned to and influences the overall organisational purpose and strategy. Initiatives are integrated within wider business activities and the operating model. The Board has increased oversight not just from a compliance perspective, but also on how performance is measured and improved. The Senior Vice President of Sustainability sits in the global executive and is involved across board matters.

RB (Consumer Goods)

02 Embedding climate into governance structures and committee functions

The scale of transformation needed within business to reduce emissions to the levels required means climate must be embedded in all parts of governance. While integrating climate change into the strategy should be a whole board responsibility, individuals and committees will be responsible for aspects of it. Likewise, aspects of the strategy need to be vertically assigned to the appropriate internal teams, as well as horizontally supported through cross-functional working.

The emerging role of the Chief Sustainability Officer (CSO) reflects a move away from climate and sustainability being an add-on activity, towards being something that is central to decision-making and governance.

From respondents, it is clear that the support of executive functions like the CEO or CFO is fundamental for driving climate action. However, the nonexecutive directors (NEDs) are an equally important group. They fill most board seats, and their independent nature means they can radically influence the nature of a board discussion, particularly if more than one NED is driving the climate agenda.

With the emergence of the CSO, there has also been a movement to establish Sustainability Committees or equivalents, which are often responsible for the detailed background thinking needed to inform the board's decision-making.²

We have a governance and compensation committee at the Board level involved in our sustainability charter. From the Sustainability Office, Group Executive Council, Business Leadership, Facilities Management Group, Infrastructure Creation Group, HR, Finance, Corporate Affairs, Marketing and Risk Office, each has a set of sustainability responsibilities against which they are measured.

Wipro Limited (General Services)

¹ Standards for the Board, IoD

² Chapter Zero, August 2021, What we've learned from Sustainability Committee Chairs

Initiatives in our change programme are driven by committees that both set targets and execute against them. Our Board of Directors provide the strategic guidance on sustainability, our Group Executives are accountable for our sustainability programmes and they appoint: our Compliance Committee; Sustainability Committee; and, QHSE (Quality, health, safety, and environment) Committee. The Sustainability Committee set our targets, review our strategies and manage performance. Environmental Policy Committee execute programmes, whilst assessing their viability.

Ørsted (Energy, Resources & Utilities)

03 Overseeing ambitious targets and robust plans

The board is accountable for making sure that the ambition the company has to reduce emissions, is based on where its impacts are created (including all scopes) and where it needs to adapt or increase resilience, with targets supported by a robust plan and short-term milestones.

This plan must include the steps necessary to ensure the organisation has a culture to support its transition, that teams are empowered to act, that capital is allocated in the right areas and that opportunities for innovation or growth are maximised.

For board members, setting the right metrics to understand what is happening across the business is key to an effective oversight role. Using these as the basis for reporting, including acknowledging where gaps remain or where challenges exist is now expected from business and goes beyond merely a compliance exercise.

The board should recognise that transparency about progress is important in the success of the climate plan as this helps engender confidence among stakeholders. Likewise, communication both internally and externally is increasingly important if a company is to get the buy-in needed.

While board composition is an important part of effective climate governance, few boards have sustainability or climate experts within their membership³. They should instead be focused on building broad competence of the subject, drawing on the expertise of employees and external advisors as plans develop. This will support successful implementation as the plan is founded on a realistic understanding of what is possible for the business.

Our overarching climate strategy at the CEO level, is core to the Purpose of our organisation, which in turn underpins our strategy and the decisions we make on the future direction of the business. This ensures that targets and activities are ambitious enough to meet strategic objectives, which is further supported by our governance measures, which are tied to climate performance.

NatWest Group (Financial Services)



04 Incentivising leadership to deliver

Aligning climate targets with executive compensation and remuneration is becoming increasingly common. The board should ensure that 'executive incentives are aligned to promote the long-term prosperity of the company including climate related targets'.⁴ This directly links the prosperity of the company with the risks posed by not acting on climate change, and ensures there is a clear structure for accountability.

While performance-based incentives are one approach, another complementary one is to drive the internal change by recognising team or departmental progress. Linked directly to the integration of a climate strategy vertically within the business, finding ways to incentivise and reward progress internally (while avoiding the creation of unhealthy competition) can accelerate bottom-up progress.

We have introduced an internal carbon fee mechanism of \$15 per metric ton on all carbon emissions, which was doubled in 2019. This internal "tax" was established in 2012 to hold our business divisions financially responsible for reducing their carbon emissions. The carbon fee is set each year based on the estimated cost of internal efficiency, renewable energy, carbon offset, e-waste recycling, and other innovative research projects to be carbon neutral.

Microsoft Norge (Telecommunications, Media & Technology) The increased drive towards transparency and the scrutiny companies find themselves under means that the board is incentivised to deliver. If directors are ultimately responsible for climate change action, they are also responsible if the company fails to deliver.

Accountability for our senior leadership is through our longterm incentive plan. Our CEO led the launch of the targets and has taken ownership for the topic. Ultimately the Board level CSR committee, Executive leadership team and board of directors are accountable. We have introduced a carbon reduction metric into our longterm management incentive plan alongside EPS and ROIC - a move that was driven by CCEP's board-level remuneration committee.

Coca-Cola European Partners (Consumer goods)



Chapter Zero, the Directors' Climate Forum, is building a community of non-executive directors and equipping them to lead crucial UK boardroom discussions on the impacts of climate change. Its 1,700+ members are helping ensure their companies are fit for the future and that global net zero ambitions are transformed into robust plans and measurable action.

Established by a group of non-executives in 2019, Chapter Zero offers its members tailored events, toolkits, relevant information and a peer network to draw on for experience, inspiration and ideas. Visit **www.chapterzero.org.uk** for more information.

4 How to Set Up Effective Climate Governance on Corporate Boards: Guiding principles and questions, World Economic Forum.



The important role of finance in progressing towards net-zero emissions

Introduction

"As awareness of the need to reach net-zero GHG emissions ('net-zero emissions') has grown, so has the need for a common understanding on what netzero emissions means and how to achieve net-zero goals. Investors are putting pressure on companies to lay out their plans for reaching net-zero emissions and to demonstrate how net-zero pathways are integrated into their long-term strategy." <u>Larry Fink,</u> <u>CEO Letter</u> BlackRock (Financial Services)

The whole finance system has a crucial role to play in achieving global net-zero emissions. Chief Financial Officers (CFOs) and

finance teams can support the efforts and plans of organisations to progress towards net-zero emissions by supporting integration into existing processes and structures, providing information needed to drive decisions, allocating funds and leading interaction with the capital markets.

Key messages

The board and executive management (EM) are responsible for ensuring the organisation's long-term viability and that the interests of its shareholders and key stakeholders are being met.

The culture of the finance team needs to be aligned with the organisation's net-zero ambition such that it embraces the strategic vision and business case for change and can support the organisation to meet its goals. Finance has a key role to play when embedding net-zero targets into the decisionmaking processes. This includes budgeting and capital investment, with projects being included within the regular strategic planning and budgeting cycle, ensuring that adequate funding is available.

Making a public commitment to achieve net-zero shifts the discussion on net-zero from 'whether' to 'how' and kick-starts essential conversations. Investors can hold directors accountable by: ENGAGING – driving the dialogue with the board to press for change; VOTING – opposing resolutions or reappointments where progress is too slow or efforts and plans seems ineffective to achieve the net-zero goals; DIVESTING – a public display of diminishing confidence in the organization's future.

01 The role of the board, executive management, CFO and finance team

The board and executive management (EM) are responsible for ensuring the organisation's long-term viability and that the interests of its shareholders and key stakeholders are being met. In response to the risks and opportunities arising from climate change, the board and EM should set the tone and define a clear strategy for implementation. Finance is a trusted business partner and adviser to the board and EM. As custodians of value, the CFO and finance team have a decisive influence over strategic, financial, risk management and other business decisions. By understanding the business case for change, finance can actively support and challenge the board and EM, to adopt a business

model that is aligned with a netzero commitment. They can help integrate net-zero targets into the organisation's strategy and operations and report progress to the board and EM on a regular basis. They can also support the board and EM in responding to questions from investors on the organisation's net-zero strategy and targets.

A net-zero strategy needs to align with and support the overall business strategy. Delivering a successful net-zero strategy requires a shift in mindset and operations for the entire organisation. The finance team can support this by integrating net-zero considerations into financial processes and decisions, ensuring alignment with overall business strategy. By demonstrating a strong business case for more sustainable buildings and close alignment with our corporate strategy, our Board has been engaged and supportive from an early stage...Our then CFO, now CEO, played a key role in demonstrating the business case for sustainability and its relevance to a range of business areas.

The British Land Company plc (Construction & Real Estate) **>**

02 Aligning the culture of the finance team with net zero ambitions

The culture of the finance team needs to be aligned with the organisation's net-zero ambition such that it embraces the strategic vision and business case for change and can support the organisation to meet its goals. Finance teams should start to think and operate in an integrated way, which will require a significant shift not just in their processes but also in their culture. A useful starting point for many finance teams is to update or develop induction and training syllabi to incorporate the knowledge and tools that will be needed to support a net-zero strategy over the long-term.

Our finance team has established a Climate Technical Forum, which brings together staff from multiple areas involved in the carbon emissions calculation process to understand the methodologies and assumptions involved in developing their climate impact, providing also a platform to discuss the practical actions needed. We have also created local climate champions across multiple business areas.

NatWest Group (Financial Services)

03 Embedding net-zero targets into decision-making processes, including budgeting and capital investment

As the organisation's understanding of the GHG emissions gap improves based on the transition pathway developed, new strategic initiatives and capital investment projects will start to emerge to support the pathway to net-zero. Finance has a key role to play in ensuring that these projects are included within the regular strategic planning and budgeting cycle and that adequate funding is available. Where a new data set is required or where greater reliance is being placed on existing data sets, it is especially important to provide robust and meaningful information to decision makers. This discipline is core to the finance team, and finance's role in capturing and subsequently reporting this information is critical. Finance plays a major role in appraising investments and developing business cases. We have developed a sustainability investment appraisal tool that applies both financial and nonfinancial measures, including the carbon saved per pound of investment. Finance had developed the tool with technical input from the sustainability team and external experts.

Heathrow Airport Limited (Transportation & Mobility)

04 Making a commitment and measuring and reporting progress

Making a public commitment to achieve net-zero shifts the discussion on net-zero from 'whether' to 'how' and kick-starts essential conversations. Many organisations setting the goal of reaching net-zero emissions are making commitments to address climate and nature crises, and the corresponding social challenges. For example, there are nature-based solutions such as preserving and restoring forests, and the just transition that considers environmentally and socially sustainable jobs and sectors in the face of the climate crisis. The finance team can help to evaluate the natural, social, and human capitals through a financial lens.

The pathway to net-zero for different organisations may include a range of activities and initiatives. New metrics and targets need to be developed to drive action along the pathway, and finance plays a key role in the measurement and reporting to facilitate informed decision making. These may include:

- Financial information including climate-related risks, opportunities and investments targeting net-zero, and the impact on income
- Reporting to management, the board and external stakeholders
- Technical information, such as emissions reduction data across scope 1, 2 and 3
- Non-technical information such as resource levels or cultural and behavioural metrics

All of this information should be integrated into business as usual processes over time, such as:

- Reporting to management, the board and external stakeholders
- Informing the strategic planning
 process
- Incentivising management via remuneration schemes

Measuring and reporting our financed emissions involves a multidisciplinary approach. The finance team collaborates with the sustainability, risk and strategy teams as well as commercial business lines. We take a three-step approach to accounting for and managing financed emissions: measuring, reporting and steering.

ABN AMRO Bank (Financial services)



05 Engaging with and responding to investors

Investors play a pivotal role in driving the future direction of most organisations. Increasingly, they require a broader base of information to inform capital allocation and other decisions. There is an expectation that reported information, is reliable. In respect of achieving net-zero emissions, investors can hold directors accountable by:

- ENGAGING driving the dialogue with the board to press for change.
- VOTING opposing resolutions or reappointments where progress is too slow, or efforts and plans seems ineffective to achieve the net zero goals.
- **DIVESTING** a public display of diminishing confidence in the organisation's future.

Mitigating climate-related transition risks and putting an organisation on a pathway to net-zero requires investment. Investment can be provided either internally or externally. The choice of route might depend on the nature of the initiative. Often described interchangeably as 'green', 'climate' or 'sustainability' funding, several options for external funding are available. For lenders, the growth in this kind of finance reflects the clear link between sustainability performance and credit risk, and the realisation that their reputation, and those of their borrowers, are linked. For borrowers, a more engaged relationship with lenders enhances their ESG credentials and may lead to a potentially lower cost of debt due to a more transparent risk profile and greater access to capital.

The impact of climate change is an increasingly important consideration when making investment underwriting decisions and determining the value of businesses. Climate change and business valuations are inextricably linked. When determining the value of a business, one must consider all the risks and opportunities, of which climate change is one.

We announced that it would be giving shareholders a nonbinding advisory vote on its climate transition action plan. By putting the action plan to a vote at the annual general meeting, we aim to strengthen the nature and the quality of the investor engagement and demonstrate our commitment to follow through on the plan and a willingness to be held accountable for delivery against the plan. The vote received over 99% shareholder support.

Unilever plc (Consumer Goods)



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.



CASE STOL

The role of CIOs and IT decision makers in climate action

Introduction

The 2020s are the decade of digital transformation. The role of CTOs and CIOs has shifted from IT operations to digital transformation and strategic business development. Today, digital solutions are underpinning and transforming most aspects of business operations and customer relations.

In parallel, the 2020s are also the decade of delivery on the UN Sustainable Development Goals. Most importantly, it is the decade to deliver on the climate commitments from the Paris agreement and reduce global carbon emissions by 50% by 2030.

Today, it is estimated that the ICT sector is responsible for a little over a half-gigaton of carbon emissions annually (Recommendation ITU-T L.1470, 2020). Clearly, there is a need to continuously reduce the emissions from the operations of digital technology. At the same time, there is an untapped potential in leveraging digital solutions to enable and drive the sustainable low-carbon transformation with AI, ML, and IOT enabled solutions to drive resource efficiency in production, transport, cities, agriculture, and more.

CTOs and CIOs have a key role to play in driving the digital transformation of their organisations whilst reducing the carbon footprint of the digital solutions and seizing the opportunities to drive sustainability benefits and carbon emission savings with smart digital solutions, including interactions and linkages systems within the broader ecosystem. The CTO and CIO need to be front and centre of the climate conversation, given tech has a critical role in the transition to a low carbon economy. An important first step is to forge strong relationships with those leading the organization's climate action programme, particularly the sustainability function, to identify the highest priority opportunities to affect change. Engaging procurement and the supply chain to understand how purchased assets are impacting the organization's footprint will help to highlight actions to reduce emissions, including the deployment of more digital solutions to have the greatest impact.

This section talks through the role of the IT decision maker in terms of Procurement, Operations, Digital Solutions and Partnerships.

Key messages

Future capabilities and enablers such as IT and IT solutions need to be aligned to targets and commitments. This means fully integrating sustainability and climate into procurement practices and processes, including features such as: going for the more sustainable solution, and; making sustainability count in the evaluation.

When integrating IT and IT solutions, it is important to consider operational practices

which optimise outputs, while minimising impact from their use. This means considering impact across the products lifecycle and enabling decision making that supports climate targets and commitments.

Digital solutions can be used to either enable, or power climate transformation within an organisation. By exploring and exploiting new technologies, this can help drive change in the business model, accelerate climate initiatives and reduce impact through resource efficiency and carbon emission reductions.

Collaboration and integration with the organisation's sustainability function is key to delivering success. It spreads risk, pool's resource and ensures the right skills are applied to the tasks at hand. This can also be expanded externally among industry peers to help accelerate activity through partnerships and expanded relationships.

01 Procurement of IT and IT solutions

Successful integration of sustainability within the business model is dependent on an organisation's ability to future-proof their capabilities, including ICT, with robust and modern procurement practices. When procuring IT and IT solutions two key factors need to be integrated: actively choosing sustainable solutions, and; making sustainability a core part of the evaluation process.

Go for the more sustainable solution

When investing in IT solutions, new technologies and engaging in procurement practices, go for the more sustainable choice. The best ways to make the sustainable choice are by ensuring technology and supply partners have strong environmental programs and that they can provide products that meet leading standards and frameworks. For example, your IT partners should be able to provide:

- Equipment with recognized eco-labels like EPEAT and Energy Star
- Product carbon footprint analyses
- Carbon offsets or a carbon neutral certified solution using a credible scheme
- Asset take-back and reuse, resale, recycling services with reporting on data-wiping and management of equipment

In addition, your procurement and supply partners, and technology deliverers should:

- Be reporting climateperformance annually, and publicly, through CDP
- Have science-based and preferably SBTi-validated climate targets for scope 1, 2, and 3.
- Have a robust program for supply chain social and environmental responsibility aligned with leading industry standards like Responsible Business Alliance (RBA).
- Have innovative sustainability programs with quantified targets for the amount of recycled or renewable materials in products and packaging.

These are attributes and considerations that can be applied across sectors and size of business, knowing that some decisions may have environmental trade-offs which need to be weighed and considered. The relationship with climate programme and/or sustainability organization will make that evaluation process more effective.

Our 'Beyond Zero Impact' initiative takes our commitment to a positive impact on climate change beyond the direct impact of our own company. We want to drive future technology to be relevant to sustainability, both through R&D, sales and marketing. Our initiative aims to develop software and create technological solutions for our customers, not only to improve the efficiency of their operations but to also aid them indirectly in achieving carbon neutrality.

VMware, Inc.

(Telecommunications, Media & Technology)



Make sustainability count in the evaluation

Make sustainability count in the evaluation and selection of your technology Partner. Chose an overall cost evaluation model based on total cost of ownership rather than upfront investment. Apply a mix of minimum criteria for qualification and award criteria for innovative or aspirational features and give it a weight of minimum 10% in total evaluation criteria. Although investment may result in a short-term increase in CAPEX, they can deliver significant cost and competitive advantage in the long-term. Therefore, integration of these decisions in line with the longterm business strategy is critical to ensure optimal value from the investment, which should include considerations for the carbon impacts happening behind the scenes. We have a target to be net-zero for our operational emissions by 2030 and for our end-to-end Scope 3 emissions, including supply chain and customer emissions by 2040. We are well on our way of meeting our targets, having reduced the carbon emissions intensity of our operations by 57% since 2016/17 and by 19% for our supply chain in the same time period.

BT Group plc (Telecommunications, Media & Technology)

02 Technology associated operational practices and decision-making

Once technology is procured and delivered, operational practices also need to reflect the organisation's climate objectives. This may include selecting low impact service delivery models, as well as integrating full lifecycle management of outputs, so as to take into account their true impact.

Consider 'as a service', consumption-based models for technology solutions

Though organizations traditionally have preferred to buy and own their equipment there are many good reasons to transition towards an 'as a service' based consumption model, whether for printing, computing, or datacenter solutions. A consumption-based model is more adaptable to changing needs. It supports better utilization of the underlying technology infrastructure. It can offer lowcarbon opportunities for energy sourcing. Also, it can ease the process of ensuring that technology assets are reused or disposed of responsibly at endof-current-use. We see that the future is working more with leasing rather than selling, so that the product will automatically be brought into the value chain. Bringing electronic waste back into the loop is a huge opportunity. When electronic waste is the highest growing waste stream in the world, we need to act and take responsibility for the products brought into the market by us.

RECONO.ME

(Telecommunications, Media & Technology)

Full lifecycle management

Especially when buying equipment, it is imperative to consider a total cost of ownership approach and responsible end-of-use management. Factoring in the total lifecycle cost amplifies the business case for investing in higher quality, more resource efficient solutions, and those with lower energy consumption over the lifetime. At end of the first use-cycle, make sure to factor in a robust and responsible take-back program with a certified standard for secure data-wiping. This allows organisations to refurbish and resell the equipment for a second life or reuse, and recycle materials and components at end-of-life. Incorporating metrics related to the saved emissions (and other data) as well as final disposition information will ensure that the process meets expectations and can be properly calculated and included in reporting. Exploiting the circular economy substantially reduces our impact and holds significant opportunities for our business. Working with partners such as Dell Technologies. We aim to stretch the life cycle of the products, thus reducing their impact, especially from production emissions. By adapting our business model to include repair, recycling, and reuse services, we have managed to bring products back into the value-chain. It will also allow us to exploit the electronic waste market.

Media company (Telecommunications, Media & Technology)

03 Digital solutions to accelerate the low-carbon transformation

Drive resource efficiency and carbon emission reductions

Sustainable IT and digital transformation can offer benefits across all parts of an organisation. CTOs and ClOs should explore how digital solutions like AI, Machine Learning (ML), and the Internet of Things can enable their organisation to reduce its environmental impacts by:

- Optimising resource efficiency in supply chain, production, and logistics.
- Reducing carbon emissions in buildings and campuses with integrated systems optimizing light, cooling, heating, water, and energy supply.

- Reducing datacentre or production carbon emissions with AI and ML enabled solutions to shift workload according to availability of renewable energy.
- Shifting to more 'as a service' and consumption-based business models, reducing the production of 'stuff' and optimization of resources in use.

We are supporting the development of digital tools and data usage for projects to achieve more efficient design, to visualise mitigation and resilience, and to take a holistic approach to lowcarbon, whilst ensuring better informed decision-making. For infrastructure, we want carbon assessments to be integrated in the decision-making process that works across different sectors linked to Building Information Modelling (BIM). Technologies we're considering include digital twins, Internet of Things and Artificial Intelligence.

Mott Macdonald (General Services)

04 Partnerships: internal and external

Advancement requires new or expanded relationships

CTOs and CIOs don't have to do this work in a silo and should consider:

- Building a strong, working relationship with their organization's sustainability team
- Familiarizing themselves with any sustainability-related materiality analyses completed by their organization
- Identify specific IT priorities to help advance the organizations

broader sustainability and/or climate commitments

 Connecting with industry peers also interested in exploring the role of IT capabilities in larger solutions providing positive social and/or environmental impact

We launched a five-year sustainability plan in August 2019 and all business units now report regularly on progress against this plan. Energy champions assigned, trained and deployed across each business unit, have responsibility for reviewing energy data monthly, setting targets to reduce energy consumption, and supporting the business units to implement appropriate changes to reduce energy consumption. The role is embedded within people's day jobs, with a range of different people/job titles (including IT services) undertaking this work to align to business need.

Peel L&P (Construction & Real Estate)

DCLTechnologies

Dell Technologies' climate goals are part of the next evolution of its environmental, social and governance (ESG) program and public commitments called <u>Progress</u> <u>Made Real</u>, led by a net zero goal and a collection interim, time-bound, science-based targets to address emissions reduction across Scopes 1, 2 and 3. Dell Technologies' focus on the full value chain, from operations, the supply chain and even the use of sold products is critical and requires global cooperation and collaboration. This includes deep engagement with customers and partners to leverage our technology to help their own transition to a low carbon environment and evolving solutions, like Dell Technologies' APEX as a Service (aaS) offering. Finally, we believe that we must lock arms with other like-minded organizations in public-private engagements to do more together. To that end, Dell Technologies is pleased to be a founding member of the Goal 13 Impact Platform and to participate in a number of key alliances and organizations to advance the transition to a low carbon economy.

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Executive support is critical

CEO leadership of the climate programme is seen as important in organisations of all sizes. C. 64% of respondents call out the vital role of company executives in driving climate action, and this typically translates into a mature organisational response: c. 86% of those climate programmes assessed as the most mature have significant executive support.

Both large and small corporates often say that CEO engagement on climaterelated matters is critical for driving change. CEOs' responsibility for leading strategic pivots is important to overcoming institutionalised aversion to change at large organisations, while smaller firms tend to point out that a CEO's personal enthusiasm for climate action can be an inspiration for other employees.

The importance of the CEO being on board cannot be understated. Everyone now wants to build sustainability and climate into their own area of the business and presentations. This has helped drive an incredible transformation in a short space of time.

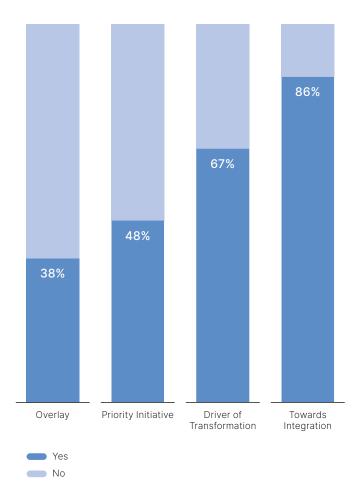
British American Tobacco (Consumer Goods)

Sustainability has become much more topical and we are seeing personal passions being put forward by leaders in the business. People can hold the executive team much more to account, as it is a detriment if leaders are seen not to be acting on climate change.

Retail, Wholesale and Distributions Company (Consumer Goods)

Figure 3 Importance of executive motivation in driving initiatives

% of respodents determining importance



The percentage of respondents per organisational maturity category that deem executive motivation as important in driving initiatives (i.e., 86% of companies that fall under 'towards integration' consider executive motivation as significant drivers of their climate change initiatives).

New roles to strengthen climate capabilities



New positions are being created to address the complexities of a net-zero transformation, e.g. Programme Director of Carbon, Head of Carbon Neutrality, Chief Climate Risk Officer, or Sustainability Champions/Ambassadors. Such 'Champions' help embed initiatives and act as a conduit for information about the broader climate strategy to individual teams, but they also facilitate the flow of information in the other direction, channelling experience and ideas upwards.

Legislation in the sustainability field and carbon regulation are encouraging new, efficient governance methods.

Leroy Merlen (Consumer Goods)

Each business location has a designated CSR champion. Walgreens Boots Alliance, Inc.(Life Sciences &



Culture ties all layers of an organisation to climate action

Many respondents think it is important to engage all staff in climate action. They acknowledge that without grassroots involvement, initiatives will stall or not be as effective as they could be. Progressive firms reference the benefits of a culture that supports universal ownership of the climate transition and places climate considerations at the heart of the organisation.

It is critical to have an aligned purpose and culture, where employees are given the mandate and ownership to take control and experiment. Tyman plc (Industrials)

In order to try and be an environmentally focused business you have to make it part of your culture. Harsco Environmental (Industrials)

Sustained engagement required

Addressing climate change requires sustained engagement over decades. Focus and enthusiasm for continual change can be challenging to sustain, particularly if this change is not seen as central to the success of the business and all those who work in it.

Change fatigue: our businesses and colleagues have had to make a lot of changes to their lives and ways of working over a very short period of time. Finding the head space for more change can be a challenge. Food & Beverage Company (Consumer Goods)

05 Management mechanisms

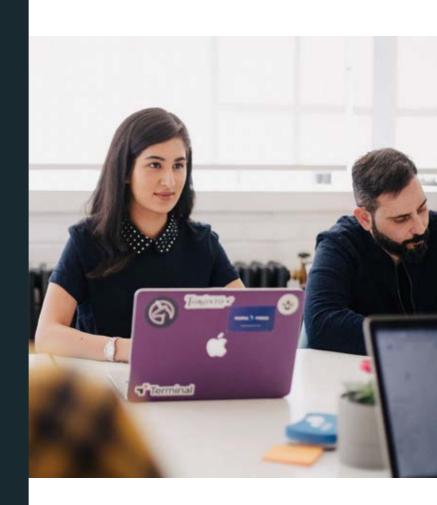
Structuring management to manage climate change dynamics

Progressive companies acknowledge that the climate programmes they are setting up to deliver on their targets need to accommodate a high degree of ambiguity, dynamism, and interdependence. Under these circumstances, close management and central coordination are necessary. Notwithstanding, firms do foster local ownership to generate buy-in and encourage decentralised experimentation, but this should not be at the expense of the speed, cross-business learning, and agility that a more centrally managed programme can deliver.

CSR is driven at the corporate level, but delivery is decentralised at operating unit level to address the specific needs of the environment in which they operate. Kuwait Petroleum International / Q8 (Energy, Resources & Utilities)

The work with climate action is largely cross-sectional and deployed in all areas of our business, where each department and its leaders have the responsibility to take our strategic goals and commitments towards climate action.

Sparebanken Vest (Financial Services)



Some progressive companies place great emphasis on each employee's personal commitment to climate action. Especially at start-ups, this can be reflected in hiring decisions that reinforce their existing climate-conscious culture.

Employees are deeply engaged in trying to be as sustainable as possible in everything they do. We only employ people who share our core values. Delphis Eco (Consumer Goods)

Climate action is embedded in our business. It underpins everything we do as we strive to build this young company slowly with the best sustainable practices in place from the start. POOL (Consumer Goods)

Bring employees into the programme

Respondents discussed three different approaches to tie employee behaviour to their culture:

- Informal pressure is particularly effective in smaller, more coherent organisations where there is a tacit expectation for all employees to participate in climate initiatives;
- Formal restrictions, e.g., on business travel and other emissions-intensive business practices, are reported across all business sizes;
- and education programmes at some organisations to raise awareness and nudge employees to adapt their behaviours.

How do we equip our employees with the skills and expertise they need? The Crown Estate (Construction & Real Estate)

If you want to embed climate across the organisation, the central climate team must educate the rest of the business.

NatWest Group (Financial Services)

Working with others

Addressing climate change at a company level often requires third party involvement. This may mean forming new alliances with competitors, customers, and suppliers to develop integrated solutions. 30% of companies called for greater collaboration to meet climate targets.

Even in a highly competitive sector, it is important that we identify those 'precompetitive' spaces, that will allow knowledge and bestpractice sharing, ensuring we maximise the sustainability, whilst minimising the cost and logistical challenges of finding new low-impact solutions. Formula One Group

(Telecommunications, Media & Technology)

We are pulling our competitors with us. Our leadership in the space has been important for a long time in terms of talking articulately with our clients and in public arenas. Our ability to signal the market as a progressive, responsible business is quite powerful. JLL (Construction & Real Estate)

High impact initiatives

There are material initiatives for all key areas of corporate emissions reduction. They now need to drive greater impact.



Overview

Respondents were asked: "What are the one to three key initiatives you have initiated that have had, or will have, the greatest impact on your climate transition?" For each initiative, they were also asked to provide a description.

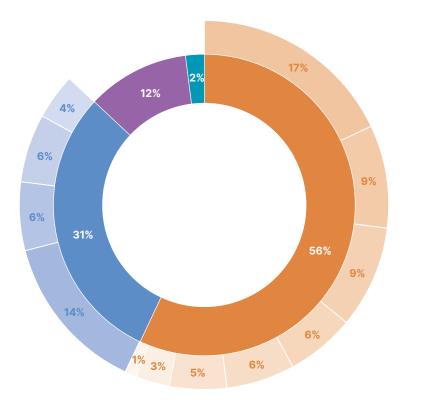
Contributors provided an average of 2.6 initiatives that they were pursuing. Responses can be grouped into three main categories:

- **Direct:** Those initiatives that directly work to reduce greenhouse gas emissions, capture or sequester carbon, or limit the severity of the impacts of climate change
- **Capability building:** Those initiatives that focus on strengthening the competencies of the business, or of others, to tackle climate change
- **Co-benefit:** Those initiatives for which reducing emissions or enhancing climate resilience is not the primary aim, but for which a significant climate impact is still an intentional consequence

For each of the initiatives described, respondents were asked which part of the value chain the initiative affected, as well as any climate-related and commercial impacts recorded.

Figure 1 Initiatives grouped by impact category

Initiatives (outer circle) were aggregated into broader, impact categories (inner circle), representing a percentage of total responses (i.e., 56% of initiatives have a direct impact, with 9% of these specifically from transportation related initiatives).



Directly targeting emissions reduction

- 17% Low-carbon energy generation and/or consumption
- 9% Energy efficiency in buildings
- 9% Transportation
- 6% Low-carbon materials and finished goods
- 6% Production efficiency
- 5% Offsetting and/or carbon capture
- 3% Low-carbon construction and infrastructure
- 1% Other direct emissions reduction

Capability building

- 14% Engagement, education and advisory
- 6% Measurement and reporting
- **6%** Strategy, governance and planning
- 4% Green financing

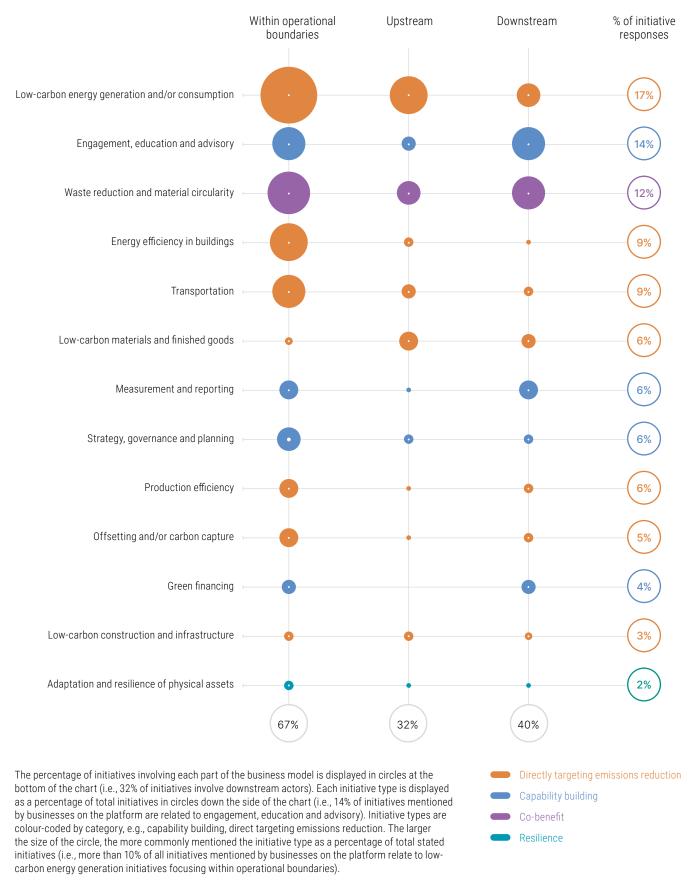
Co-benefit

12% Waste reduction and material circularity

Resilience

2% Adaptation and resilience of physical assets

Figure 2 Effect of initiatives on the value chain



Key messages

Almost 60% of the key initiatives provided by respondents directly target emissions or resilience, although few of these have quantifiable impacts. Businesses need to quickly leverage the capabilities they are building to develop portfolios of high impact initiatives, or risk falling short of their targets and stakeholder expectations.

Take actions, not pledges. Actions speak louder than words.

Peel L&P (Construction & Real Estate)

Initiatives directly targeting emissions or resilience are largely focused on energy, transport, and buildings. Innovation in the supply chain and shifts in the broader market make initiatives in these areas relatively straightforward to execute and commercially attractive.

We are incorporating sustainability into building design, aiming for all new property investments to be net-zero for at least 100% of their regulated energy usage. This initiative has resulted in both significant emissions reduction and increased resilience of physical and human assets as a result of preparing buildings for the climate tomorrow as well as today.

Bridges Fund Management Ltd. (Financial Services)

Just under a third of all key initiatives target capability building, both within the company and in the broader value chain. Initiatives include engagement and education; measurement and reporting; strategy, governance, and planning; and green financing. The investment in capability building points to both the challenges inherent in designing and executing an effective climate programme and the early stage of many of the programmes.

We launched a programme called 'Breaking the Plastic Habit' to reduce single-use plastics at Canary Wharf and create a culture of reuse rather than disposal. Through this programme, we engaged with tenants, customers, staff and local community members, providing education and collaboration opportunities to drive the circular economy.

Canary Wharf Group plc (Construction & Real Estate)

Around 10% of key initiatives aim to address other challenges but contribute to addressing climate mitigation as a significant and intentional co-benefit. Circular economy initiatives, which typically target waste reduction, can help enhance resilience against physical climate risks as well as reduce emissions. The linear economy has become unsustainable. We are working with businesses to embed the circular economy into their procurement practices by selling refurbished IT equipment at much lower prices than new models and collecting and reusing their old IT equipment.

RECONO.ME (Telecommunications, Media & Technology)

Two thirds of initiatives are contained within the operational boundaries of the business, but 40% include some downstream (customer, client or consumer) consideration, and considerably fewer involve the upstream supply chain. The lower frequency of supply chainfocused initiatives is an indicator of the challenges related to fragmentation and uneven influence, not the immateriality of emissions.

We think this initiative will influence the industry and its supply chain to change, and because of that we must take the financial risk. The market won't change until someone says it has to, and we feel that we have to raise the bar first, and pass it down the supply chain. We are encouraging other players to source steel responsibly too, in order to make more progress.

Lendlease (Construction & Real Estate)

While over 70% of direct initiatives are expected to deliver positive commercial outcomes, there is typically less certainty about the impact on emissions or resilience. Impact needs to be designed into initiatives with more specificity, and companies need to enhance their ability to track performance.

We will be locating all our new offices closer to public transport in town centres, adding electric vehicle charging points into new buildings and using more green energy in our buildings. Initially, there was push back from senior teams because the return on investment was too low, but we are going back to this because of the longerterm benefit.

CGI Inc. (General Services)

01 Direct impact initiatives

56% of the initiatives described as most impactful by businesses are aimed at directly reducing the emissions of the business. Initiatives classified as having a direct emissions impact include those focused on low-emission energy generation or consumption; transportation; energy efficiency in buildings; low-carbon materials and goods; production efficiency; offsetting or carbon capture; or low-carbon construction.

Many of these are among the first steps as organisations embark on their climate journeys, targeting those areas of emissions that are easier to identify and address. But for some these initiatives entail more radical action.



of initiatives are classified as directly contributing to resilience.



Low-emission energy

37% of businesses on the platform describe the usage, generation, or purchasing of renewable or low-emission energy as one of their top three key initiatives. Businesses typically see decarbonising the energy system as one of the essential steps in addressing climate change, and collectively these companies' efforts create strong demand-side pull for that transition.

ENEL has a variety of projects in place to increase the adoption of renewable energy and replace fossil fuels in end-use sectors, mainly through the electrification of the energy demand. Enel (Energy, Resources & Utilities)

Procurement and usage

Almost half (47%) of the initiatives in this category are focused on procurement and usage of renewable energy. Businesses detailed their efforts to shift energy purchasing towards renewables, noting it is often a relatively simple initiative to implement and manage as renewable energy is readily available in most of the geographies represented in this study.

For larger businesses, renewables are sometimes sourced through power purchase agreements (PPAs), if economically viable. This is a direct agreement with the supplier of the renewable energy and helps businesses to be confident that the energy they purchase has come from a renewable source, but it is likely to require a bespoke agreement.

The majority of renewable electricity will come from onor near-site generation and PPAs by 2030.

Retail, Wholesale & Distribution Company (Consumer Goods) Where PPAs are not seen as an option, businesses often elect for renewable energy tariffs, which are increasingly common in the geographies involved, or purchase renewable certificates.

While schemes that provide transparency into the source of electricity, such as the Renewable Energy Guarantees of Origin (REGO) programme, are wellrecognised and supported, some concern was expressed that these schemes may not encourage additional generation of renewable energy; instead, the purchaser is guaranteed a claim of the renewable portion of the existing energy mix, with the residual energy mix becoming comparatively less renewable. There was some suggestion that businesses should exercise caution over their use of certificates, limiting them to markets in which they are not able to make use of PPAs or highquality green tariffs.

We are supporting the development of local renewable energy markets, with 12.2% of our electricity supplied through corporate Power Purchase Agreements (PPAs) and the remainder from high-quality green tariffs. In a small number of markets, we use renewable certificates. BT Group plc (Telecommunications,

Media & Technology)

Businesses in shared offices, or using shared energy services, explain that they sometimes lack agency over their energy supply. Switching to renewable energy requires collaboration with landlords and other tenants, and influence over these stakeholders can be limited. Similarly, businesses who are reliant on shared infrastructure (such as district heating) are reliant on the provider's openness to change. This highlights the importance of collaboration in the energy transition.

As a small company sharing our building with other organisations, pursuing our goals is difficult as we need to include lots of different stakeholders in our decision making.

EQ Investors (Financial Services)

We need to explore the willingness of district heating suppliers in each of our locations to move to renewable energy. If they are unwilling, we need to consider whether to invest in other solutions, such as geothermal heating.

Kesko (Consumer Goods)

Generation

17% of the initiatives in this category relate to the generation or provision of low-emission energy. The energy producers interviewed are shifting their own business models, often discussing a transition away from fossil fuels and non-renewable fuel sources, and towards more-renewable fuel sources such as wind, solar, green hydrogen, and biomass. Some of these businesses discussed their initiatives with clear commercial rationale, related in large part to market growth.

More radical changes involve those that move the business away from non-renewable energy altogether, for instance capitalising on offshore-based capabilities to drive production of wind energy.

We are in the process of phasing out our coal fired plants. The decision to transition to 100% renewable energy was taken over two years ago by the Board and has grown from primarily offering offshore wind capabilities to significantly expanding our solar and storage portfolios. Ørsted (Energy, Resources & Utilities)

On-site generation and storage

23% of the initiatives in this category centre around onsite generation and storage capabilities. These are more often pursued by larger businesses and those with land or buildings under their control. Some opt to install photovoltaic panels or wind turbines, others geothermal energy or other sources of renewable energy directly at their facilities. While more capex intensive than purchasing renewable power from the grid, long run cost savings are often cited as a benefit, with a number expecting a positive return on investment. However, they also identify additional benefits: the ability to sell excess energy back to the grid; improved resilience and reduced power transmission losses; reduced complexity associated with sophisticated grid collections; and commercial benefits associated with a bolstered reputation.

We have commercially viable renewable energy generation at an increasing number of our sites. This benefits us as we can use the energy to reduce our operating costs and carbon footprint, and we avoid the power transmission losses associated with grid. Dŵr Cymru Welsh Water (Energy, Resources & Utilities) We are seen by clients as practicing our own ethos. As such, each installation has had an immediate financial impact, not only in terms of saved costs, but also increased business and revenue. SunGift Energy (Energy, Resources & Utilities)

Research & development

A number of initiatives related to low-carbon energy concern the pursuit of research and development, partnerships with other organisations and authorities, and other related services.

We are in the late stages of developing and piloting an electric induction burner. Greenbank Technology Limited (Industrial Products)

The fight against climate change is both a challenge and an opportunity for Eni. The energy transition is creating new value chains and markets for companies to innovate, with Eni at the centre of important opportunities such as those in BioFuels, CCS and Forestry. Eni (Energy, Resources & Utilities)

Transportation

Businesses have a pivotal role in decarbonising global transportation, and at one level it was encouraging to see 21% of businesses describe related actions as being one of their three key initiatives. On the other hand, for those with relatively modest fleets or transportation-related emissions, these initiatives may suggest a focus on easier-to-abate but ultimately less impactful areas of the business.

Transportation initiatives are generally focussed on the business' own fleet efficiency and replacement, or else on the travel and movements of its employees.



Fleet efficiency and replacement

A frequent area of focus for businesses with fleets is a programme to improve the efficiency of their vehicles or to replace them with less carbonintensive alternatives, efforts that generally address the business's Scope 1 emissions. 12% of businesses we spoke with describe these types of efforts as being one of their top three key initiatives, spanning those with large fleets to those with a single vehicle.

Our fleet emissions account for approximately 66% of BT Group's direct emissions, so we have set an aspiration to convert one third of our commercial fleet to electric vehicles by the mid-2020s, and to deliver a fully green fleet where possible by 2030. Openreach (Telecommunications, Media & Technology)

Our single biggest area of emissions is travel, so we have recently upgraded our old diesel car to an electric car. Sales: Untangled (General Services)

As with energy and process efficiency improvements, initiatives focussed on fleet efficiency often have expected commercial upsides through reduced operating costs.

In North America, we were able to improve efficiency of our vehicle movements and reduce idling, resulting in a 10% reduction of diesel fuel consumption and emissions. Harsco Environmental (Industrials) There are some indications that the decarbonisation of fleets is being facilitated by a maturing market for electric vehicles, with manufacturers increasingly committed to phase out the internal combustion engine (ICE) and offer additional electric options.

Some contributors describe their work to overcome challenges posed by decarbonising larger, heavier vehicles. Batteries required to power the largest of these are often too large or heavy to be commercially viable at present, prompting some to pursue development of alternative fuel sources such as hydrogen or synthetic fuels.

Our smaller vessels naturally lend themselves to electric solutions because their battery life limits them to shorter, more frequent routes. However, the batteries required to power big ships are currently too large to be commercially viable, so new vessels are predominantly fuelled by liquefied natural gas (LNG). These ships will need to have the option for us to upgrade their engines in future, with hydrogen solutions being most likely. David MacBrayne (Transport & Mobility)

Ideally, we would generate renewables at our sites to both power the treatment plants we operate and to charge small electric vehicles. Similarly, we would use the biomethane we produce to create hydrogen for fuelling larger tanker vehicles and to sell to other fleets. However, we are never going to be able to do this on our own - it requires government intervention and support to help set up hydrogen networks. In this way we can all work to a common set of standards and goals. Dŵr Cymru Welsh Water (Energy, Resources & Utilities)

Overcoming challenges related to charging infrastructure is another action that businesses are seeing as critical to successful decarbonisation of transport. Businesses describe concerns that an insufficient network of charge points makes it difficult to rely on electric vehicles.

One of the main challenges associated with electrifying our fleet is that there is currently no electric vehicle alternative for our large and specialised vehicles. We also need a wide spread of charging infrastructure. Openreach (Telecommunications, Media & Technology)

The biggest barrier to us implementing an electric fleet is the charging infrastructure. In response, we acquired PodPoint, a provider of EV charging infrastructure in the UK, and now have influence over how the infrastructure evolves.

EDF Energy (Energy, Resources & Utilities)





Employee mobility and travel

The COVID-19 pandemic imposed dramatic changes on the way people travel and work, and some respondents intend to adopt these changes on a permanent basis as a way of addressing their Scope 3 commuter emissions or updating travel policies to encourage a continuation of virtual meetings.

We want to use the global pandemic as a springboard to keep the brakes on flying in favour of video and audio conferencing. Havas Group (Telecommunications, Media & Technology) We are rapidly becoming a global business so could be travelling all around the world, but we don't feel that we need to. All of our staff are working from home due to the pandemic.

Made Open (Telecommunications, Media & Technology)

Some initiate schemes to encourage employees to travel in cleaner, greener ways in their own time. In some cases, this aims to reduce related Scope 3 commuter emissions for the business. In rare cases, these schemes go beyond the boundaries of the business, supporting employees with their personal travel choices. For employees who are entitled to a company car, we make it cheaper for them to opt for an electric car rather than a petrol car. For other employees, we offer the possibility for them to recharge their electric cars at our charging stations for free. Telecommunications Company (Telecommunications, Media & Technology)

If employees choose not to fly for their holidays and instead travel by train, if it takes one day longer for them to arrive at their destination, we will give them up to two extra days of holiday. WHEB (Financial Services)

Energy efficiency in buildings

Energy efficiency initiatives are common, representing 9% of initiatives discussed by businesses. Sharing an aim to reduce the quantity of energy used in the business's buildings, they concern the building of new, efficient buildings; retrofitting existing facilities; and introducing smart control systems. Many of these initiatives are perceived to have clear, tangible cost-saving benefits.

Improving energy efficiency will not only help us to reduce our energy usage but will also save us money.

AGS Airports (Transport & Mobility)

Opportunities to reduce emissions are identified through regular audits. Each opportunity is then considered on the basis of cost, operational savings and payback period.

Canary Wharf Group plc (Construction & Real Estate)

9%

Energy efficiency initiatives are common, representing 9% of initiatives discussed by businesses

Smart buildings

Several businesses discussed the use of digital control systems to optimise building performance and efficiencies. These systems might regulate humidity, automatically open and close windows to regulate temperature, or monitor energy consumption to identify areas where efficiency can be improved.

Sensors are placed in strategic locations throughout our buildings to enable accurate measurement and monitoring. The Building Management System (BMS) adapts automatically to ensure that maximum efficiency is achieved and maintained.

Havas London (Consumer Goods)

By introducing a new system of heating and airconditioning control within the office, we have avoided having heaters on in one section of the office with windows open in another, which creates a waste of energy.

Valpak Direct Marketing Systems, Inc. (Telecommunication, Media & Technology)

Retrofitting and new builds

Many pursued large-scale retrofitting. Retrofitting, the introduction of newer and more efficient materials or technologies into existing buildings, is seen by these businesses as an important tool to lower their energy consumption. Common retrofits include improved insulation, installing energyefficient LED lighting, and even using clingfilm on windows to act as an additional layer of glazing insulation.

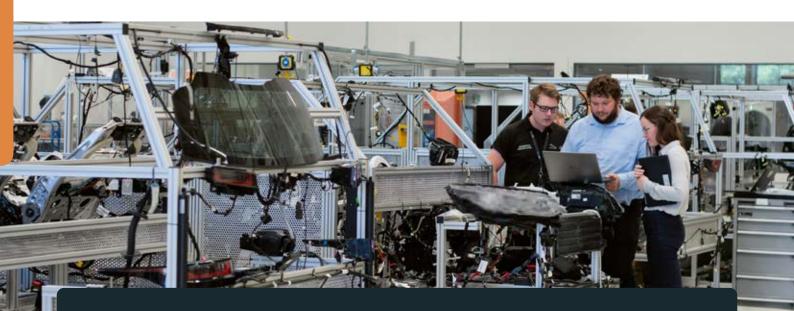
We replaced our single glazed windows with double glazing, put cling film on windows, installed radiator reflectors, changed our lightbulbs and purchased energy efficient equipment.

ARK coworking (Construction & Real Estate)

We have removed air conditioning systems from our sites and installed free cooling systems which use outdoor air for cooling.

Telecommunications Company (Telecommunications, Media & Technology) Businesses with large capex budgets and a business model allowing for construction or purchase of new buildings tell of building smarter and more efficient premises with advanced digital enablement. These could incorporate efficient heating/ cooling solutions, high-spec insulation, digital enablement, or other new technologies.

Our PowerHouses produce more renewable energy than they consume, so they introduce renewable energy to the Norwegian power grid and improve the energy mix. Consulting Company (Construction & Real Estate)



Production efficiency

6% of key initiatives that contributors discussed pertain to efficiency efforts related to production processes. Using less usually decreases operational costs, often winning broad support in many organisations due to the savings of time, money, and other resources. Reducing our gas usage presents an opportunity to cut costs. Pladis Global (Consumer Goods)

In a competitive world with finite resources, managing the environmental performance of our operations makes good business sense. The Weir Group plc (Energy, Resources & Utilities)

Reduce and re-use

Some describe their efforts to reduce or re-use waste products and energies in production processes. Doing so decreases the carbon-intensity of the processes, requiring fewer input resources. In some cases, the reduction of waste directly prevents GHGs through the capturing of fugitive emissions that would have otherwise leaked into the atmosphere. We produce craft beer from surplus fresh bread that would otherwise go to waste. Given food production represents 25-30% of global emissions, we are constantly striving towards reducing our environmental impact, in line with our business model and mission.

Toast Ale (Consumer Goods)

Mobile compression stations allow us to connect two pipe sections so the gas does not escape, but circulates inside the station. This technology reduced the volume of emissions by 8 million tons in 2020, and an expected 15 million tonnes in 2021. Gazprom (Energy, Resource & Utilities)

Cleaner processes

Other businesses discussed initiatives that centre around improved, cleaner processes. These businesses identify specific inefficiencies or carbon-intensive elements of their processes and seek to replace them with lower-carbon alternatives.

We have spent the last few years testing technologies to produce steel in a carbon neutral way and are pioneering two breakthrough carbon neutral technology routes.

Manufacturing Company (Industrials)



Low-carbon materials and finished goods

6% of initiatives described by businesses relate to lowcarbon materials and finished goods. These are most frequently pursued by consumer businesses, with a focus either on the resources used to create the products in question, the production of re-usable or recyclable products, or modifying the packaging used for these products. Some see opportunities to innovate and disrupt with their products, while others see the importance of supplier engagement to help them achieve their goals.

We have run product innovation workshops to identify opportunities for shifting to lower impact products, or products that focus on social impact. We consider innovations in product development with an eye towards a changing world - timely given the current government focus on retrofitting and climate proofing. Tyman plc (Industrials)

We are constantly challenging our suppliers on their packaging to reach our target of 100% recycled and recyclable packaging. Jernia (Consumer Goods)



Offsetting and carbon capture

5% of initiatives relate to carbon offsetting or carbon capture. Most of the offsets cited are related to so-called nature-based solutions, either preserving existing carbon sinks such as forests or creating new ones by, for example, planting trees.

We are planning on restoring 1000 hectares of peat by 2030.

United Utilities Group plc (Energy, Resources & Utilities)

We have committed with our partners to plant 100 million trees over the next 5 years. We believe that while this doesn't replace the need to reduce emissions, trees are the best and most cost-efficient technology for removing and storing significant amounts of carbon dioxide from the atmosphere. MasterCard Inc. (Financial Services) Several companies are actively working on the supply-side of the offset and carbon capture space, seeking to build and scale approaches that remove carbon.

Our regenerative farming practices will ultimately enable us to sequester carbon. Healthier soil and more conscientious farming practices help farmland capture more carbon from the air.

Seaview Farms (Agriculture & Land-Use)

Northern Lights is a joint effort with the Norwegian government and energy firms Equinor, Shell and Total which seeks to standardize and scale carbon capture and storage (CCS) across Europe. Microsoft Norge (Telecommunications, Media & Technology) Respondents typically do not see offsetting as a replacement for reduced emissions.

While we have future-proofed longer-term solutions in place, for example with respect to sustainable aviation fuel, there is an opportunity to compensate today through carbon offsetting. AMEX Global Business Travel (Financial Services)

Low-carbon construction and infrastructure

A small number (3%) of initiatives described by businesses relate to low-carbon construction and infrastructure, with most of these businesses operating in the Construction and Real Estate or Energy, Resources and Utilities sectors. These businesses speak of their efforts to reduce capital carbon or embodied carbon: the emissions released by commissioning, constructing, maintaining, and decommissioning buildings and infrastructure.

We are setting the bar very high in our target to achieve zero carbon projects. This commitment forces us to live up to our promises, as clients regularly ask us how we intend to achieve this goal. We create in-house sustainability standards for all our new buildings, which are significantly ahead of regulation.

Lendlease Group (Construction & Real Estate)

A common issue within the wind sector is the inability to recycle the turbine blades used in wind farms. Therefore, we are using thermo plastics for our turbines instead of conventional wind turbine blades as they are readily recyclable.

Orbital Marine Power Ltd (Energy, Resources & Utilities) As with efforts to incorporate low-carbon materials and finished goods, a number of businesses discussed their efforts to engage the supply chain to help them achieve their carbon-reduction targets given the size and complexity of the assets in question.

We are working with our capital delivery partners and supply chain contractors to reduce our embodied carbon emissions by 25%. Thames Water Utilities Ltd (Energy, Resources & Utilities)



Adaptation and resilience

Initiatives related to climate resilience and adaptation, related to physical risk, appear infrequently in our sample (2%). Relatively few businesses cite robust programs to adapt to climate change and create resilience as among their most impactful initiatives.

We believe that it is crucial to talk about adaptation to climate change as well as the steps taken to mitigate the impact of climate change. Anglian Water (Energy, Resources & Utilities)

Met Office

CASE STUDY

Climate adaptation and resilience: the poor cousin to the race to net-zero?

Introduction

The overwhelming majority of climate change initiatives identified by businesses are focussed on reducing emissions and meeting net-zero targets. Businesses also need to ensure that they adapt to remain resilient to the physical changes in the climate and associated weather hazards such as heatwaves, flooding and storms. However, only 13% of businesses surveyed, identify that physical risks associated with the increased severity of natural disasters is a priority driver for their organisation in addressing climate change. Even fewer, just 2%, identify specific climate adaptation focussed projects within their top-three initiatives to help them tackle climate change. So why aren't more businesses focusing on resilience and climate adaptation and does this matter?

Key messages

Climate adaptation is critical because we are already locked into some warming and the impacts on business are happening here and now.

Adaptation appears to be under prioritised, reflecting stakeholder pressure to focus on reducing emissions, the difficulty in quantifying progress on adaptation, and a perhaps a (unnecessary) perception that any return on investment in adaptation will only be realised beyond business planning horizons. Notwithstanding, there are some good examples of adaptation particularly in the utilities sector.

Finance companies, both capital markets and insurers, are key to driving companies to quantify and act on risk, and standardise how this is done. In many cases there is a sweet spot in identifying initiatives that both reduce carbon emissions and at the same time help an organisation to be more resilient and adapt to future climate change.

There may also be ways to increase the long-term climate resilience of a business whilst delivering near immediate benefits such as cost savings, or service improvements.

01 Why is climate adaptation important?

The IPCC 6th Assessment Report is the first to state that human influence on warming of the atmosphere, ocean and land is unequivocal. It records that global average temperatures have risen by approximately 1°C since pre-industrial times. Critically, the report also highlights that the gap between how prepared we are for changes in the climate and how prepared we need to be has increased over the five-year period, since the publication of the previous report.

The chances of global average temperatures temporarily exceeding 1.5°C over the next five years are approximately 40%, according to another recent scientific study. This is important as the target of limiting global average temperature rise to 1.5°C above pre-industrial levels, was set within the Paris Agreement in 2015 as a means of avoiding the worst impacts of climate change. Any actions that we take now to reduce emissions, or remove greenhouse gases from the atmosphere, will take decades to have a significant impact on global temperatures. Other studies following extreme weather events, such as heatwaves, floods and storms, also identify that the increased frequency and heightened intensity of these events can often be attributed to climate change.

Businesses are impacted by the physical changes to the climate in a number of ways. Firstly, their infrastructure and operations may be directly affected by more extreme weather. This could include flooding of warehouses, or heat stress risks resulting in reduced productivity from outdoor workers. Supply chains may also be impacted. For example, supply of specific crops from some parts of the world could become untenable due to drought or extreme heat. Businesses may also be impacted by changes to customer behaviour. Fashion retail is already extremely sensitive to weather shocks in the early parts of each season; and the attractiveness of tourist destinations may change with some becoming unbearably hot during the height of summer, with others becoming more pleasant.

The evidence is clear, we are already locked into some warming and changes to our climate, the effects of this we can already see now, both in terms of global average temperatures and also extreme weather events. Whilst reducing emissions is incredibly important, the need for adaptation is also urgent, to make sure that businesses remain sustainable through the transition period and resilient for the future climate.

02 How are businesses adapting to climate change?

Physical risks to infrastructure and business operations is identified by respondents as a critical area of focus for climate adaptation. The UK utilities sector has for many years considered adaptation and resilience to future climate conditions to be as important as carbon reduction activities. This is driven by the sensitivity of water and energy supply and demand to weather conditions; the vulnerability of large-scale assets to extreme weather events; as well as the regulatory framework within which the sector operates.

Climate change has been identified for a number of years as a key risk facing the business, which has driven engagement with climate change commitments and initiatives both internally and externally. We believe that it is crucial to talk about adaptation to climate change as well as the steps taken to mitigate the impact of climate change. As part of our contribution to this debate, we publish a climate change adaptation report every four years where we outline how we are embedding adaptation across the business.

Anglian Water (Energy, Resources & Utilities)

One key risk for companies such as Anglian Water who manage large infrastructure is flooding of assets. This requires new and innovative solutions for how storm water is managed, especially in urban areas. These are designed to enhance resilience of assets, and require a holistic and multidisciplinary approach to deliver solutions

We have a large team of hydrologists, geologists and environmentalists focusing on developing innovative holistic tools for forecasting and visualising data to understand local rainfall/runoff, water levels, flooding and flood diversion, erosion, landslide- and flood insurance in the urban landscape. Freshwater ecology and biodiversity are also considered.

Anglian Water (Energy, Resources & Utilities)

We support our customers to adapt their infrastructure to be more resilient to climate change. The company is participating in a Norwegian Government research funded programme, "Klima 2050", to reduce societal risks associated with climate change, increased flood risk and the built environment. Through this initiative, we're helping pull together academic, public sector and industry knowledge to solve challenges associated with increasing flood risk in urban environments.

Multiconsult (General Services)

Resilience of supply chains is also an important factor. Johnston's of Elgin manufacture cashmere clothing. Sustainability is at the heart of the company's values and 5-years ago they helped to set up the Sustainable Fibre Alliance. This aims to restore the Mongolian grasslands that are damaged from overgrazing and the impacts of climate change that are already being experienced. These include higher temperatures and changes to rainfall patterns. Already a semiarid environment, the grasslands are at risk from desertification. As well as restore the grasslands, the initiative also aims to ensure the well-being of the goats that are used to produce cashmere and secure herders' livelihoods.

Securing the long-term future of the grasslands by making them self-regenerative will have a positive impact on the Mongolian herder community, our supplychain and the wider ecosystem. Our customers include certain fashion brands who are looking for suppliers who can support them in delivering on their own sustainability pledges.

Johnstons of Elgin (Consumer Goods)

Changes to consumer behavior is another important consideration for businesses to incorporate into adaptation planning. For example, a report in the aviation sector highlights how the seasonal attractiveness of holiday destinations may change. Higher temperatures will likely contribute to the attractiveness of longer shoulder seasons for destinations across Europe. This presents an opportunity for the tourism sector to extend the season. Changes to climate are also expected to change patterns of demand for electricity, with a decrease in demand for winter heating and conversely an increase in demand for summer cooling. The extent to which this will be an impact on the resilience of the sector depends greatly on how the sector decarbonises.





03 What is the role of the finance sector?

The finance and insurance sector has an important role to play in incentivising businesses towards transition to a low carbon future. It is also important for investors that their investments remain resilient to weather hazards. Initiatives such as the Task Force on Climate Related Financial Disclosures (TCFD) are increasingly being adopted as a mechanism for businesses to report on climate-related risks as part of the annual financial reporting cycle. But whilst regulation and reporting requirements are important and create transparency they are not the primary catalysts for the way the finance sector has set targets and is designing transition.

Pressure starts with the recognition of risk to our book from climate change, risk to our stakeholders, and risk to society and whilst this is critical, there's also a strong belief that we can create shared value with our customers by addressing climate change.

NatWest Group (Financial Services)

Using all investment tools at our disposal – divestment, investment in solutions, and company engagement - we are able to: make investment decisions in line with scientific consensus; increase capital flows towards low-carbon, climate-resilient, and transition companies; avoid investments that contribute heavily to climate change; and, use our ownership position to stimulate ambitious climate practices at portfolio companies. We will do this this by performing climate risk assessments and monitoring, using ratings, research and adaptation metrics as a foundation for our investment rationale.

Storebrand (Financial Services)

04 Why aren't more businesses focusing on climate adaptation?

Businesses cite several reasons why adaptation hasn't received the impetus that carbon reduction has in recent years. Government, customer and investor pressure has driven a focus on reducing emissions to avoid the worst impacts of climate change. Thinking about adaptation at the same time takes focus away from this challenge, and may in extremis lead to businesses simply focusing on trying to protect themselves from a worst case scenario. At the same time, adaptation is less easy for businesses to measure than carbon reductions and there is no clear index that helps them to indicate that they have invested sufficiently in adaptation measures.

Utilities companies like Anglian Water are incentivised by regulation to think about these long-term issues, but this is usually not the case in most other sectors.

There is also sometimes a perception that the benefits of investing in adaptation may only be realised on timescales beyond normal business planning horizons. Broadly speaking businesses are responsive to financial drivers as well as customer and stakeholder pressure rather than proactive in tackling future risks head on.

Our overall driver is that there is a commercial and business need, rather than it just being a tick box exercise with respect to ESG. More specifically, the driver behind change is physical change: as soon as things translate into a commercial impact, action is taken in order to address the issue. For example, a number of factories had to be closed in America and Australia as a result of the extreme cold weather and the bushfires.

Associated British Foods (Consumer Goods)

This when linked to demandside influence and drivers, where customer pressure is growing to act on climate, this further complicates the need to focus and assign already competing resources towards adaptation versus net zero activity.

There is a sense of frustration within the industry that customer demand has not changed enough, and therefore, until the demand profile changes there is little incentive to invest merely out of the sense of doing the right thing.

Associated British Foods (Consumer Goods)

05 Finding the sweet spots

A 'sweet spot' can often be found in identifying initiatives that both reduce carbon emissions and at the same time help an organisation to be more resilient and adapt to future climate change.

Many participants in the Goal 13 Impact Platform highlight initiatives that are predominantly focused on reducing emissions, but at the same time also help to make them more resilient to future weather conditions. Nature Based Solutions are one way that businesses are able to hit this sweet spot. Initiatives such as tree planting, peat restoration or regenerative farming help to sequester carbon. At the same time these initiatives may also reduce flood risk, increase storage of water, or help to provide a cooler local environment during periods of heatwave, all ways that help to build resilience to weather extremes.

Food manufacturer Ecotone is one company that employs regenerative organic farming practices. Expert soil management results in higher levels of CO2 being taken up in the soil. At the same time, ensuring that the soil is in good health is increasing the longterm climate resilience of farming practices.

By 2025, we're looking to have built stronger, more sustainable supply chains from farm to customers for our top 4 organic raw materials (oat, almonds, tea and cocoa). By following regenerative farming practices, the land is more resilient and nutrient-rich, which yields a better crop and appeals to the more climate-conscious consumers.

Ecotone (Consumer Goods)

Similarly, many businesses are investing in renewable energy and storage. This helps them to reduce their carbon emissions and at the same time increase their resilience by reducing reliance on the energy grid.

There is another type of sweet spot where businesses are able to adopt strategies that will help to build long term resilience whilst at the same time delivering short term benefits such as cost savings, or service improvements. For example, Openreach identifies that replacement of copper cables with a full-fibre system gives their customers a muchimproved broadband service. At the same time, full fibre is much lower energy, so it reduces emissions and requires much less maintenance. In particular, it reduces vulnerability to localised flooding which often disrupts wired communications systems and is becoming more prolific as a result of climate change.

By incorporating consideration of climate adaptation and resilience into corporate strategy, risk assessment and procurement decision making businesses are able to build the adaptive capacity of their organisation whilst realising near immediate benefits. Companies need to embed climate change and sustainability issues into their internal enterprise risk assessment programmes and risk profiles. This is key in helping to bring sustainability risks and challenges to life for a business.

Coca-Cola European Partners (Consumer Goods)

There are many more opportunities for businesses to find these sweet spots and begin to address both sides of the climate challenge as they move forward on their transition and adaptation journeys.

Met Office

The Met Office is the UK's National Weather Service and is also an internationally recognised centre for climate change prediction. Underpinning our capabilities is a deep expertise of weather and climate science. Met Office model data and expertise feeds into global understanding on climate through processes such as the Intergovernmental Panel on Climate Change (IPCC). We also work closely with UK government to provide science and advice that informs adaptation and mitigation policy.

Our climate science is used by businesses to understand how the changing patterns of weather will impact their infrastructure, operations, supply chains and customers. We provide expert advice to help organisations to apply our data in the best possible ways to support risk assessment and adaptation planning. We also help customers to use day to day weather information to inform business decision making. This is another sweet spot: customers realise immediate benefits from optimising their decisions in response to today's weather conditions; and at the same time build their adaptive capacity and awareness of potential impacts of future climate change.

To find out more visit:

https://www.metoffice.gov.uk/services/research-consulting/weather-climate-consultancy

02 Building climate capability

Almost a third (31%) of the key initiatives cited by respondents are those that assist the business, or others, to build the competencies and capabilities required to address the challenges posed by climate change.

Many remarked that it can be difficult to know where to start in addressing climate change. There are indications that these capability-type initiatives are being used as the first steps for organisations embarking on their climate journeys.

14% of initiatives selected as the three most impactful by businesses involve some form of engagement and education programme



Engagement, education and advisory

14% of initiatives selected as the three most impactful by businesses involve some form of engagement and education programme, or advisory work. This reflects the continued, system-wide need for building awareness, knowledge, and collaboration both within and outside of the boundaries of an organisation. These programmes rarely have direct emissions reduction or financial outcomes attached to them, but are seen as critical components to making climate change considerations an integral part of doing business.

Initiatives can be categorised in terms of their objectives and their target audience. Objectives range from general education through to collaborative action. Target audiences consist of employees, customers, and suppliers, and sometimes the broader sector and other sets of stakeholders.

General education

41% of the initiatives in this category have the objective of general education and promoting a better understanding of climate change. Sometimes these are part of broader sustainability efforts but more often are climate specific, and frequently include some form of communication about the role the company is playing.

We deliver a bespoke training course on climate, linked to low carbon. There is an ongoing conversation between employees and management around what EDF stands for and the future of the firm so that we can align everyone around the company values.

EDF Energy (Energy, Resources & Utilities)

We are currently rolling out a new educational product line with messages around sustainable development goals. This initiative aims to educate the public around the impact of global climate change in a fun and social manner.

Toast Ale (Consumer Goods)

Valpak are involved in consulting with government on behalf of our customers and suppliers to help influence policies for the benefit of the environment. We also present the practicalities involved in the implementation of new strategies by our customers. Valpak Direct Marketing Systems, Inc. (Advertising, Marketing & Design)

This content tends to cover the basics of climate change: what it is, why it's happening, and what the potential impacts could be, along with how the company is addressing it.

Targeted knowledge transfer

20% of the initiatives in this category have more specific objectives around knowledge sharing and transfer, and in some instances the creation of that knowledge. These initiatives tend to emphasise the mechanisms and actions for delivering emissions reductions, such as educating internal energy efficiency champions or providing information to enable more climate-friendly choices.

We have a centre of excellence within each of our business areas to share expert knowledge. We plan to carry out sixty energy assessments across the group over the next few years, involving a team of experts and internal specialists, to review everything energy-related at each site.

Imerys (Energy, Resourcess & Utilties)

There are a broad range of opportunities to work with the market and our customers on more efficient housing. We are developing thought leadership on the social value of sustainable financing and have launched a "Go Green" hub for customers, creating a home for future announcements and initiatives.

NatWest Group (Financial Services)

As of July 2020, we have begun to help our suppliers develop carbon plans. This initiative does not involve giving targets to our suppliers, but instead encourages them to mobilise and be transparent around sustainability issues. The intention is to help our suppliers create solutions, rather than flagging problems. We are also looking at creating working groups for our suppliers to solve specific problems.

Barratt Developments plc (Construction & Real Estate)

Content and communications tend to be more specific, focused, and technical. They are typically targeted at those who can use it directly to create impact.

Collaborative activities

35% of the initiatives in this category go beyond communication and are some form of collaborative activity that emphasises engagement and is the pre-cursor for direct, impact-generating activity. This includes advising customers on their approach to net-zero, efforts to generate product and service opportunities, and working with suppliers on approaches to reduce their carbon footprints. We are working with several local authorities to help them implement their net-zero strategies, many of which are much more aggressive than net-zero by 2050.

Scottish Power (Energy, Resources & Utilities)

Our initiative aims to develop software and create technological solutions for our customers, not only to improve the efficiency of their operations but to also aid them indirectly in achieving carbon neutrality. VMWare, Inc. (Telecommunications,

Media & Technology)

Together with the Climate Group, BT and Openreach launched the UK Electric Fleets Coalition which now has over 30 member companies. The Coalition's ask for increased ambition was a significant influence on the UK Government's decision to phase out petrol and diesel vehicle sales by 2030 and we continue to advocate for accelerated roll-out of electric vehicles in the UK through, for example, deployment of nationwide charging infrastructure.

BT Group plc (Telecommunications, Media & Technology)

Such collaborative engagement can help lay the groundwork for the development and deployment of approaches to drive down emissions and have the potential to create ripple effects beyond the organisation itself.

Measurement and reporting

Despite businesses only being able to clearly quantify the impacts of a third of their emissions reduction initiatives, only 15% of respondents cite initiatives related to measurement and reporting as among their three most impactful. This covers both the measurement and reporting of a companies' own activity, as well as the creation of solutions to facilitate third party measurement and reporting. This is building capability either within the respondent organisation, or through them for third parties.



Measurement and reporting: Company specific

Initiatives focussing on a companies' own data includes exercises to create or enhance a corporate baseline of emissions. Sometimes this is an early stage activity, sometimes much more sophisticated including, e.g., the incorporation of scenarios and satellite data. A proper baseline is seen as critical to developing an effective programme of decarbonisation, tracking progress, and for external reporting.

Achieving the right measurement of output is critical to setting meaningful reduction targets. TLT LLP (General Services)

We are working closely with our partners to continuously improve on the quality of our reporting and reduce our impact. House of Baukjen (Consumer Goods)



A second type of initiative using company data focusses on establishing the carbon footprint of a particular product or service. This can be complex, often being a whole life cycle analysis requiring new data and approaches. The output can then be used in interactions with customers to help them differentiate between products or services on the basis of their carbon footprint. In some cases, the emissions element of the assessment is part of a broader sustainability profile.

We launched our Sustainable Innovation Calculator app in 2013 - a streamlined lifecycle assessment (LCA) tool that models the most significant environmental impacts of our products. Increased consumption of digital services is leading to an increase in the carbon footprint of the digital media sector. Complex and constantly shifting technological systems underpinning digital media delivery presents a barrier to effectively mapping and measuring carbon impact. Media content passes through content delivery networks, data centres, web infrastructure and user devices, with each element of the delivery chain having different owners. Therefore, our DIMPACT initiative seeks to measure the impact of digital downstream emissions. Schibsted Media Group

(Telecommunications, Media & Technology) Beyond emissions baselines and establishing a carbon footprint, others are looking to translate initial measurements into explicit targets for reducing emissions. Sometimes such targets are on a product-by-product basis or extended to the entire value chain.

The goal is to reduce the carbon footprint of every product in our portfolio over time. BASF (Energy, Resources & Utilities)

We are working with an external consultancy to baseline our metrics and set SBTi-aligned targets. Thoughtworks (Telecommunications, Media & Technology)

RB (Consumer Goods)

Measurement and reporting: Third party products and services

A broad range of companies across industries, including ICT, Financial Services, Packaging, and Food, are creating products or services to help third parties measure their company or product line footprints. These cover the provision of data and systems and span both commercial and non-commercial services.

Data is seen as particularly difficult to capture outside the boundaries of the organisation, and so the sharing of data by those who see more of the system is welcome and valuable.

We have created a database of packaging information, including an analysis of packaging composition. Customers can access this system to help manage and regulate their reporting requirements, and to also identify areas of potential savings or areas to target reduction initiatives. Valpak

Direct Marketing Systems, Inc. (Telecommunications, Media & Technology) We are working to implement a data platform which will make it easier for municipalities and cities to measure their progress against the KPIs of the UN initiative United for Smart Sustainable Cities (U4SSC). Media company

(Telecommunications, Media & Technology)

Most of the software providers interviewed cite their own applications to assist third parties to identify and report on their emissions as one of their most impactful initiatives. Other organisations, including in the Food sector, are also developing tools to help their business partners assess their own carbon footprint, particularly important where the supply chain is fragmented and less sophisticated.

We launched the Climate 21 programme to build analytical and transactional capabilities into SAP enterprise applications to help customers understand and minimize the greenhouse gas footprint of their products and operations along their entire value chain. SAP SE (Telecommunications, Media & Technology)

Our Smart Agriculture initiative is a collaboration between several actors in the agricultural sector. We have developed a climate calculator which calculates the total emissions released from each farm.

Tine (Consumer Goods)

Robust, reliable measurement and reporting, especially of the most critical metric, actual greenhouse gas emissions, is undoubtedly a key component of addressing climate change. But the relative frequency with which these efforts are cited among companies' most impactful initiatives suggests many remain early in their climate journeys. There are suggestions that while measurement can reveal impact and even prompt action, it should not be confused for actual action. Given the scale and urgency with which we need to slash emissions to avoid the most catastrophic effects of climate change, we hope more companies will emphasise initiatives that aim for impact, even as they continue to monitor progress.

Strategy, governance, and planning

15% of respondents identify some form of strategy, planning, or governance-related initiative as one of their three most impactful. Whilst these sorts of activities do not have a direct impact on emissions or resilience, they can be important to ensuring climate is properly positioned within the business and to strengthening the capability of the business to respond.

These initiatives can be categorised as: the integration of climate into purpose, mission, and/or corporate strategy; detailed planning; and integration into governance.

Integration of climate into purpose, mission, and/or corporate strategy

61% of businesses that cite strategy, governance, and planning initiatives describe an integration of climate considerations into their purpose, mission, and/or their corporate strategy. Companies across sectors are re-framing their corporate strategy to include their climate goals and ambition, and climate considerations influence their most important corporate decisions, such as investments and M&A.

We invest in partnerships and R&D to advance longterm, climate-related business opportunities and technologies that will decarbonise our operations. We also evaluate potential acquisitions against sustainability criteria. BASF (Energy, Resources & Utilities) We have made the climate one of 3 areas of focus underpinning our corporate purpose. This initiative has put climate change at the heart of every strategic and operational decision we make, as well as our governance – supported by executive remuneration. NatWest Group (Financial Services)

Some companies, typically smaller and those subscribing to some form of certification programme (e.g., B Corps) are bringing climate into their purpose or mission, sometimes incorporating it into a charter.

As a certified B Corp, we must ensure that we are meeting the highest standards of verified social and environmental performance, public transparency, and legal accountability, to balance profit and purpose. Ethical Angel (Telecommunications, Media & Technology) The process of obtaining B Corp certification has caused us to identify areas in our business that can be made more sustainable. SunFresh Foods Ltd (Consumer Goods)

We are strongly committed to financing the transition to a low carbon and more inclusive world economy by channelling funding to projects and activities with environmental and social benefits. We have established our Groupwide Sustainability Bond Framework, as a further key milestone that supports our business strategy alignment with the changing needs of our customers and the goals of society, as expressed by the United Nations Sustainable Development Goals and the Paris Climate Agreement.

UniCredit (Financial Services)



Detailed planning

Some respondents (26% of those describing strategy, governance, and planning initiatives) describe their detailed planning and efforts to incorporate climate change into their organisations. This spans emissions reduction, resilience, and opportunities and risks.

Our climate change and social responsibility plan is our pathway to net-zero which ties everything together. University of Strathclyde (Education)

We launched a five-year sustainability plan in August 2019 and all business units now report regularly on progress against this plan. Seven core sustainability principles are embedded across our business and underpin our dynamic response to climate change. Peel L&P (Construction & Real Estate)

Integration into governance

A smaller number of respondents (17% of those describing strategy, governance, and planning initiatives) cite some form of change to governance as one of their top initiatives. This includes modifying executive remuneration, creating accountability for climate-related goals, and the creation of new roles to ensure priority is given to climate change.

Responsibility for delivering against targets is pushed down into different departments, for them to consider the best approach with respect to their department. We feel that each function is best placed to set their own targets given their first-hand insights into day-today activities.

Thoughtworks (Telecommunications, Media & Technology) We have two CIOs – Investment and Impact. Both have the right to veto each other on all issues and both have to be in agreement to move forward on investment, so they hold us tightly to our mission.

Tribe Impact Capital (Financial Services)

Green finance

A small number (4%) of initiatives relate to green finance: financial products and services with a heightened consideration of environmental and climate change factors. Businesses describe the adoption of new investing frameworks for their own investments; providing greener products and services for customers; and using the power of their investments to fund green innovation and growth. These businesses are typically in the finance sector, although a small number of businesses with large portfolio investments speak to these initiatives too.

In 2015, we divested away from coal and tar sands and have committed to full divestment from all fossil fuels. University of Edinburgh (Education)

Our ESG tool and ratings are increasingly used to drive insights and make investment decisions. Fidelity International Ltd (Financial Services) Many employing green financing initiatives indicate an awareness of the influence their financing activities have, both on those using their products and services, and on those benefitting from the financing they provide.

Sustainable investment products are now the default option for Private Clients. It is game-changing in the market when we say sustainable investing is our standard offering, as we are the leading Private bank in the Netherlands. ABN AMRO Bank (Financial Services)

We are reducing the climate impact of our financing activity by stopping lending and underwriting to companies unless they have plans aligned to the 2015 Paris Agreement.

NatWest Group (Financial Services)

03 Initiatives with climate as a co-benefit

12% of initiatives focus on waste management or the pursuit of circular production, with plastic a particular point of emphasis. Whilst these initiatives typically have broader sustainability goals as their main focus, such as the reduction of plastics pollution, they often deliver a co-benefit in terms of both lower emissions and enhanced resilience.

We pioneered the ability to repurpose single-use plastic into second life packaging in the UK. Only 9% of the world's plastic is recycled so by proving that this plastic can be repurposed, we are not only redirecting items that would otherwise have gone into landfill (or more likely the ocean) but we are also encouraging others to recycle as well.

Delphis Eco (Consumer Goods)

Companies detail a number of challenges with reducing material usage or increased recycling, including educating and incentivising behavioural change among employees and customers and limits on required infrastructure in different geographies.

We worked with a client on innovative ways to respond to event-related waste, such as using digital technologies to scan people into events as opposed to physical wristbands.

Bemari (General Services)

We want to be a zero wasteto-landfill business, but this is currently not possible in some regions as the option to recycle is not available. There is a lot of work to be done in this area internationally. TT Electronics plc (Industrials)

There are some challenges associated with getting stakeholders on board with our initiatives. For example, employees may still wonder why they should take the time to recycle.

Electrocomponents plc (Industrials)

33% of initiatives related to waste reduction seek to avoid creating waste: either by embedding circular economy principles, which seek to break the linear, take-make-waste approach to production, or by moving to bespoke, on-demand business models that avoid excess inventory.

We truly believe in the positive impact actively managing the circular life of our batteries has on our environment, and to the communities that we re-distribute these batteries to, in areas with little to no electricity provision. Lifesaver Power Ltd

(Telecommunications, Media & Technology)

The linear economy has become unsustainable. We are working with businesses to embed the circular economy into their procurement practices by selling refurbished IT equipment at much lower prices than new models and collecting and reusing their old IT equipment. RECONO.ME (Telecommunications, Media & Technology)

04 Value chain

For each of the top one to three impactful initiatives businesses described, contributors were asked which part of the business model the initiative impacts. Initiatives either focus within the operational boundaries of the business or else emphasise upstream or downstream engagement.

Focus remains within operational boundaries

Initiatives are generally focused more on business' own operations (52% of stated initiatives) or other activities within the confines of the organisational boundary (33% of stated initiatives) than on the impact up and down the value chain. Addressing Scope 3 emissions is a growing focus of companies, even as many continue to acknowledge the challenges in measurement and tracking, with companies adopting a range of approaches from soft encouragement of suppliers to hard requirements, such as changing supplier, for specific commitments (e.g. alignment of the supply chain to SBTi). In the race to net-zero, businesses will need to address all emissions and work with customers and suppliers to catalyse systemic change.



Downstream

Businesses are increasingly recognising the opportunities presented by the transition to a lower-carbon economy, and 40% of the one to three key initiatives businesses told us about have an element of downstream impact.

We believe we can enable net-zero for our customers by shaping the next generation of smart, efficient and sustainable solutions with cutting-edge science and our tradition of innovation. The Weir Group plc (Energy,

Resources & Utilities)

We seek to galvanise action by supporting people in writing to their MP. The "Rise Up" campaign is about raising awareness of climate issues, the positive action being taken by responsible businesses and influencing policy change ahead of COP26.

Toast Ale (Consumer Goods)

These are described by both B2B businesses, which sometimes imply the existence of pressures to help their customers meet their Scope 3 targets, and B2C businesses, which tend to indicate that they are responding to market pressures.

We don't want to lose our relevance – we need to look at the way the younger generations are moving with regards to climate change. Nestlé (Consumer Goods)



Upstream: Explicit requirements

Other businesses take firmer stances, setting strict criteria and requirements that suppliers must meet.

We have initiated a supplier selection process based on ESG criteria, particularly with regard to the providers of chemicals used in our production processes. Gruppo Dani S.p.A. (Consumer Goods)

We require all suppliers to set short- and long-term emissions targets by 2025 and to commit to achieving climate neutrality by 2025. We are targeting a climate neutral value chain by 2030.

Storebrand (Financial Services)

Smaller businesses with limited power, or those with a shortage of alternative options, call out the challenges in implementing these types of initiatives. Some cite an inability to influence their suppliers, and others talk of the prohibitive expense they would face by choosing alternatives. Whilst not always seen as an option, there are exceptions, with some making choices to select impact over profit.

We have taken reformative measures to relocate and localise our supply chain, which is helping to reduce our transport-related emissions. Freestar (Consumer Goods)

Of course, we can find cheaper suppliers, but we would rather optimise our supply chain with environmental and climate action selection criteria. Ruter (Transport & Mobility)



Upstream: Encouragement of suppliers

Businesses raise several challenges related to addressing the emissions embedded in their products or services as a result of their suppliers, or else their wider upstream Scope 3 emissions. Those with complex, fragmented supply chains describe the difficulties associated with baselining and measuring impact outside of the direct operations of their business, while smaller businesses often explain the challenges presented by having insufficient power to influence suppliers.

Some businesses adopt approaches to engaging with their supply chains centred on education and encouragement. These often involve programmes to work collaboratively with suppliers, educate them, and encourage more ambitious action.

We have teamed up with other climate leaders to launch two major partnerships through the Exponential Roadmap Initiative – the 1.5°C Supply Chain Leaders initiative Supply Chain Leaders | Exponential Roadmap Initiative to inspire and drive climate action across global supply chains and the SME Climate Hub https:// smeclimatehub.org/ which provides tips, tools and best practices to help small and medium-sized enterprises in the journey to net zero. We are also supporting the UK Government in reaching out to UK small businesses to commit to net zero UK - SME Climate hub (businessclimatehub.org). BT Group plc (Telecommunications,

BT Group plc (Telecommunications, Media & Technology) We request an action plan from suppliers and perform regular check-ins against this plan, adopting a constructive approach of working together where possible. However, if no action plan is made, we may look to end our relationship with the supplier. Nestlé (Consumer Goods)

These approaches bring with them the added benefit of being able to educate and engage suppliers, working with them to improve their climate impact.

05 Outcomes

Businesses are only able to quantify the impact of 50% of direct high-impact initiatives and 38% of co-benefit high-impact initiatives, perhaps indicative of how early many companies are in their climate journey and the difficulty that some encounter when trying to put hard numbers to changes that may involve suppliers, customers, and nonfinancial metrics. Of those who can assess impact, the most frequently cited outcomes centre on emissions measures (absolute GHG emissions or emissions intensity) and financial and operational ones.

Direct emissions impacts

Businesses are able to estimate the emissions reductions associated with 31% of their high-impact initiatives directly targeting emission reduction. These vary in their level of granularity, ranging from an aggregate company-wide understanding down to the business unit, project, and asset/ product level (sometimes all within a single company).

Our external carbon metric is one of several annual bonus "gates". It made a huge difference when we introduced carbon as a metric and set annual, hotel-level reduction targets, helping us to drive carbon reduction even further.

InterContinental Hotels Group plc (General Services)

Commercial impact

Most companies we spoke with cite positive commercial impact from their initiatives, with 71% of initiatives described as having such effects. Not many describe a capex saving, but often talk of the opportunities presented from the strengthening of existing business and access to new market segments. There is suggestion from some that the transition to a low-emissions economy will offer ample avenues to create and capture new value; some companies are already waking to the opportunities.

We have developed a pricing model to measure the impact of our customers. We offer our marketing services to green, sustainable start-ups for a lower price (in some cases for free) to allow them to grow faster.

Ecoteers (Advertising, Marketing & Design)

50%

Businesses are only able to quantify the impact of 50% of direct high-impact initiatives and 38% of co-benefit high-impact initiatives

Recognising opportunity and the potential for high-impact outcomes

Some organisations stand out for solutions that, if successful and deployed at scale, could materially impact emissions far beyond their own footprint and tap into entire new markets. Examples range widely: employing the use of satellite technology to monitor supplier commitments; creating innovative new materials and products, such as lighter steel or vegan leather; and using 3D modelling to assist with prototyping in the fashion industry, thereby reducing waste in the design stage. Some companies see opportunities for differentiation and competitive advantage in addressing climate change.

We have developed a feed supplement which reduces methane emissions from cows by c.30%. This will save 1 tonne of carbon dioxide equivalent per cow every year.

Royal DSM (Life Sciences & Healthcare)

We promote promising, longerterm solutions which are not yet technologically or commercially mature in the current market through innovation or pilots. Ruter (Transport & Mobility)

Barriers to progress

Barriers to greater ambition and impact are well understood, but many challenges are systemic.



Overview

Participants were asked to describe the key barriers their organisations face as they develop their responses to climate change. These are split between internal barriers within the firm and external barriers across the broader enabling environment. Nearly all respondents (c. 97%) cite one or more barrier, with virtually all (c. 96%) including at least one external barrier, and three-quarters noting at least one internal barrier.

The most-cited barriers were:

- Company prioritisation and investment (52% of respondents; 21% of responses)
- Policy and regulation (43% of respondents; 27% of responses)
- Education and engagement of customers (32% of respondents; 17% of responses)
- Suppliers (24% of respondents; 13% of responses)

Figure 1 Distribution of total responses cited as barriers

Internal (green) and **external (blue)** barrier responses as a percentage of total responses (excl. others), ranging from most cited to least (i.e., 21% of barriers cited were attributed to company prioritisation and investment).

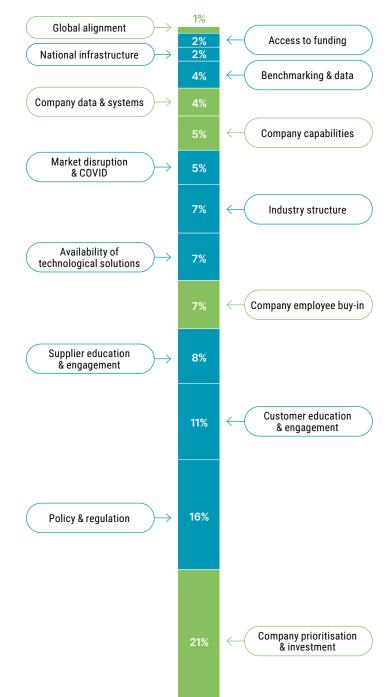


Figure 2 **Proportion of external barriers cited**

The distribution of external barrier categories (inner circle) and their subcategories (outer circle) expressed as a percentage of external responses cited (i.e., Policy & regulation represents 27% of external barriers cited).

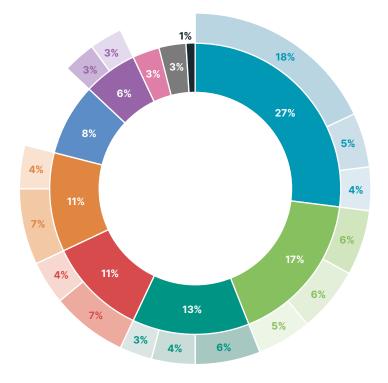
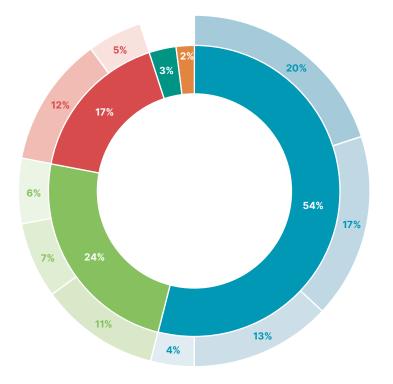


Figure 3

Proportion of internal barriers cited

The distribution of internal barrier categories (inner circle) and their subcategories (outer circle) expressed as a percentage of internal responses cited (i.e., Company prioritisation & investment represents 54% of internal barriers cited).



	 Policy & Regulation 18% Policy & Regulation 5% Government Strategy 4% Government Guidance & Investment
-	 Consumer Education & Engagement 6% Customer Behaviour 6% Public Perception & Understanding 5% Education & Engagement
-	 Supplier Education & Engagement 6% Influencing and Engaging 4% Alternatives and Supplier Maturity 3% Awareness and Data Access
-	 Availability of technological solutions 7% Availability 4% Infrastructure and Feasibility
-	Industry Structure7%Industry Landscape4%Other
	Market Disruption & COVID
-	Benchmarking & Data3% Availability and Robustness3% Benchmarking & Best Practice
	National Infrastructure
	Access to Funding
-	Other

*Numbers may not sum to 100% due to rounding.



*Numbers may not sum to 100% due to rounding.

Key messages

Businesses are facing challenges to developing their climate change programmes on many levels, spanning both internal factors and external influences. The large number and detailed nature of responses suggests these barriers to progress are constraining both ambition and action, despite the urgent need for transformative change.

There is a significant gap between goals and ambitions for our clients and being able to deliver on those targets. This is due to the significant internal and external barriers they face.

Multiconsult (General Services)

The lack of strategic prioritisation and employee buy-in remain significant barriers to faster progress.

We need to make this agenda mainstream and relevant for all 20,000 employees, while still accelerating and continuing to innovate the bank's approach.

ABN AMRO Bank (Financial Services)

The barriers that a company faces differ depending on the sector, industry structure, external landscape, and the extent of its reliance on policy and regulation.

We have seen many "net-zero" pledges but there are still many external challenges in reducing Scope 3 emissions from buildings, transport, energy, and from the various materials and resources used across industry. It is important that the scale of investment proposed by the UK government is sufficient enough to achieve the end goal of reaching net-zero by 2050.

Coca-Cola European Partners (Consumer Goods)

The mix of internal and external barriers faced shows how dynamic and complex the environment is; achieving alignment within organisations and across markets is challenging.

Global alignment can be difficult, particular in places such as North America where there is less societal pressure to change.

CGI Inc. (Telecommunications, Media & Technology)

The need to engage and educate customers and suppliers on climate action reflects the immaturity of the market and is seen as a major barrier to progress in many organisations.

As a nation, the UK is not quite where we would like it to be with regards to supply chain engagement, people, and skills to achieve our longterm targets, including climate science.

Burges Salmon LLP (General Services)

Lack of green skills and awareness at all grades across an organisation (including leadership, management, and technical staff) is hindering faster movement.

We also need knowledge and skills about the environment throughout all areas of the business. To be an environmentally sustainable business, all areas of the business need to be involved and engaged with environmental targets.

Housing Association Company (Construction & Real Estate)

01 Internal barriers to progress

Company prioritisation and investment, employee buy-in, and company capabilities were the most common internal barriers raised by respondents (52%, 21%, and 16%, respectively). Company prioritisation and investment is the most acute challenge, but bringing employees on board and ensuring firms have the right capabilities to deliver are also important. Overcoming these barriers often requires integrated and aligned action across the organization, from the board through to functional leadership, and ensuring programmes have the right level of investment and skills.

There is a risk that environmental issues are siloed and people don't have the time or commitment to make ambitious changes. In order to mitigate this risk, it is useful to try to align intentions across the organisation.

Bemari (General Services)



of respondents say climate is not sufficiently prioritized within their organisations



Company prioritisation and investment

Despite considerable climate activity within the private sector, 52% of respondents say climate is not sufficiently prioritized within their organisations. This lack of prioritisation is called out as manifesting in the critical management mechanisms of strategy and decisionmaking, investment, and resource allocation.

Strategy & decisionmaking

Strategy and decision-making represents over one-third of all internal barriers cited, impacting both the setting of targets and the ability of an organisation to deliver. Conflict between traditional revenue-generating activity and climate initiatives suggests there is limited integration of climate activity into the core business model. Climate action is often seen as a bolt-on or fringe activity, rather than a value creation opportunity.

Using a traditional view on profitability analyses, it is hard to justify investing in climate initiatives that in the long run could be profitable and/or reduce costs for us, but at the moment could only be justified in an environmental sense. The models do not incorporate or reflect any gains originating from sustainable investment decisions. Tine (Consumer Goods)

Investment

Climate programmes often face challenges to secure appropriate levels of investment. Responses suggest that this stems from a perception that 'green returns' are often (though not exclusively) perceived as long-term and/ or only indirectly linked to commercial value.

Most sustainability initiatives prove very economical over the long-term, but the perception of additional upfront cost or investment of time makes it challenging to secure investments. Canary Wharf Group plc (Construction & Real Estate)

It takes 30 years to realise some investments, and it takes guesswork to determine consumer preferences (travel, working style etc.) that far in advance. This creates a challenge in balancing longterm financial decisions. Lendlease Group (Construction & Real Estate) The lack of available internal funding for climate action is particularly acute for smaller businesses that typically have less access to capital, less opportunity and motivation to explore what may still be seen as discretionary, and were often hit hard by the pandemic.

As a start-up, our initial challenge has been to secure funding as an impact organisation. This required convincing investors into seeing sustainability as a thriving, long-term investment. Maanch (General Services)

Resource allocation

Inadequate internal resourcing and lack of prioritisation within teams and functional activities is another barrier described. Limited integration into the business model and lack of financial incentives among the key business functions mean appropriate resources, time, and funding are not always allocated to climate initiatives.

With goals where there is no financial incentive, extra internal lobbying is required. We need to have understanding and buy-in from all layers and functions of the organisation to the importance of action. Rockwool Group (Industrials)



of respondents cited company capabilities as the most common internal barrier



Employee buy-in

21% of respondents cited a lack of bottom-up employee buy-in as a barrier, even where top-down board-level strategy and direction is clear.

There was initially a lack of understanding and engagement in how the sustainability imperative matters to our core business. Significant time and effort have been dedicated to educating colleagues and assure buy-in from across the business to our climate activities.

Addleshaw Goddard LLP (General Services)

21%

of respondents cited a lack of bottom-up employee buy-in as a barrier There is also significant misinformation and some negative perceptions among employees around the perceived costs and implications of tackling climate change, including fear of job losses.

Being an energy company, we use a diverse range of natural resources to generate our services. There are certain specialisations within the firm which are perceived to be at risk, so there is fear around potential climate-related change.

Insurance Company (Financial Services)

We assess investments to be an external barrier that is relevant for our commitments and initiatives. Pushing products towards more sustainable solutions lead to increased capital expenditure. While we choose to make these investments, it is also expensive to actually make them.

Flokk (Consumer Goods)

Despite stretched resources for climate initiatives overall, organisations are having to divert significant investment, time, and effort to educate and engage middle management and leadership. Limited buy-in at these levels increases delivery risk and makes buy-in further down the organisation less likely.

We must convey to all employees that the sustainability journey is an innovation programme, with business opportunities. This is particularly true for leaders, who are required to balance financial goals and commitments with sustainability goals. SAP SE (Telecommunications, Media & Technology)

Company capabilities

16% of respondents cite a lack of capability in terms of skills and systems as barriers.

Availability of green skills

Businesses are struggling to acquire, develop, and deploy staff with the appropriate green skills to design and execute their climate programmes. The lack of green skills is seen across sectors.

There is a need for further investment in the training and education of the employees, as there might be challenges especially when it comes to climate-related decisionmaking of lower-level management. Media Company (Telecommunications, Media & Technology)

Knowledge gaps exist across grades within an organisation: from top-level leadership's understanding of the opportunities from climate action and risks posed by climate change, to middle-management expertise across the various types of activity required to deliver initiatives. Clients we speak to also say they have a lack of knowledge within the business. They feel overwhelmed. Setting a science-based target and improving without having a sustainability consultant is very difficult.

Climax Community (General Services)

A significant gap exists among technical staff for green skills, particularly those who manage the systems intrinsic to climate initiatives and the raw data inputs for compliance, monitoring, tracking, and reporting activities.

Access to technical staff especially with advanced IT skills has proven to be a challenge at times. This is vital for some of the projects that we are undertaking.

Good Energy (Energy, Resources & Utilities)

Company data and systems

Inadequate data and systems were also cited as a limiting factor by many respondents. Challenges range from data availability and collection to a lack of realtime monitoring and effective management information. This has implications for the setting of targets and plans as well as delivery, including performance management and progress reporting. Data standards and quality were cited as particular issues, in part because a significant amount of external data is typically required to support Scope 3 targets.

The quality of environmental data out there is questionable. More rigorous approaches are needed, but we are still relying on manual data entries and data extrapolation, which are unreliable.

InterContinental Hotels Group plc (General Services)



Operational alignment and integration

Where climate is not fully integrated into the business model, or where existing processes, operating capacities, systems, and resources do not include sustainability metrics, it is more difficult for organisations to accelerate activity. Even where strategic intent to act exists, lack of alignment and integration across key functions and operating processes means progress is often slow and iterative. The more established the organisation, and the more dispersed the organisation's operations, the more difficult cross-functional integration and alignment tends to become.

Integrating more ambitious climate targets into all of our operations requires process, systems, as well as internal capability development.

Nordea Bank Abp (Financial Services)

Decisions made at mill level have significant ramifications and can differ markedly between mills. They may all be excellent operators but may not have the same commitment and capability to drive efficiency and reduce emissions.

02 External barriers to progress

Policy and regulation, customer education and engagement, and supplier education and engagement represent the most common external barriers raised by respondents (27%, 17%, and 13%, respectively). The availability of technological solutions and industry structure (13% and 11%) were also raised as barriers limiting progress in a range of sectors.

These external factors may also impact and even amplify difficulties in achieving internal alignment of priorities. If policy and regulation are too restrictive or lack consistency and clarity, or no viable technology solutions exist, this makes it difficult for organisations to convince key functions such as the CFO and CTO to commit time, resources, and funding.

Today, the biggest barrier to transitioning to carbon-neutral steel, beyond the necessary technologies reaching commercial maturity, is the absence of the right policy and market conditions.

Manufacturing Company (Industrials)



Policy and regulation

Policy and regulation are cited as a barrier by 27% of respondents. Although most instances relate directly to core policy and regulation, there was also significant mention of the lack of sectoral strategies and government investment. Inconsistency of policy and regulation across geographical boundaries was also mentioned as a concern.

There is a divergence of national policy across countries. India is different to the UK, which is different to the USA. It is especially difficult when you operate across those territories with varying approaches to net-zero strategies, which include employees, customers, supply chains, policy makers and governments. Imerys (Energy, Resources & Utilities)

Core policy and regulation

Accounting for c. 11% respondents (or two-thirds of the total policy and regulation barrier responses), core policy and regulation impacts climate initiatives in two ways: through the lack of direction and guidance from governments, policy makers, and regulators, and through the presence of too much, or inadequate and inconsistent, policy and regulation. The vast majority of responses suggest that there is too little policy and regulation rather than too much.

Policy frameworks also pose a key external barrier. A crucial precondition of offshore wind deployment is an adequate regulatory framework for the connection of the offshore turbines to the onshore transmission grid. Ørsted (Energy, Resources & Utilities) Companies and corporations need policy that won't constantly change and some clarity. This will ensure businesses like Britvic are able to plan ahead to meet targets and commitments. Britvic (Consumer Goods)

The impact of this barrier is particularly acute for corporate investment. Companies are seeking a greater degree of certainty before making large investment decisions, especially those which involve new technologies.

Governments are not agile enough in their support for new technology. Somehow, licensing and regulation needs to be able to work more quickly to guarantee safety and environment protection, while enabling rapid roll out of new technologies to reduce energy and carbon. Anglo American (Energy, Resources & Utilities) Authorisation procedures for the construction of renewable energy plants and related infrastructure needs to be simplified and speed up, as their complexity acts as an obstacle to decarbonisation. Power & Utilities Company (Energy, Resources & Utilities)

Government strategy

Policy and regulation needs to be supported by sector level strategies, particularly in cases where new technological solutions are required and solutions transcend different policy areas.

Governments setting out clear strategies and market frameworks is important in helping to reduce risk and uncertainty. Uniper (Energy, Resources & Utilities)

Government investment

A lack of government investment in the wider infrastructure that facilitates uptake, delivery, and acceleration of climate initiatives is also seen as a barrier. Government investment is viewed as particularly important where technical solutions exist but intervention is required to create the right conditions to scale adoption.

Government investment in R&D in some sectors is focused on the longer term, such as sustainable aviation fuels and new aircraft, but we should not neglect high potential short-term improvements that also need R&D. A 10% increase in aviation operational efficiency now will have had a substantial multiplier impact by 2035.

Airspace Unlimited Scotland (Transport & Mobility) We are committed to transitioning our vehicle fleet to electric vehicles – but the EV charging network in the UK urgently needs to be scaled-up. There are too many different electric vehicle charging providers and the infrastructure is not developing fast enough in many markets (e.g. GB). Coca-Cola European Partners (Consumer Goods)

In addition to government capital investment, respondents also mentioned a lack of incentives for climate initiatives and incentives, e.g., through subsidies and grants.

We want to see more incentives and grants to enable the business to de-risk when investing in new technologies, as it can be difficult to access private capital at the initial development stage of the project. Scottish Leather Group Ltd (Consumer Goods)

Government incentives have grown and shrunk several times over the years, leading to (in some years) a 300% difference in revenue year-onyear.

SunGift Energy (Energy, Resources & Utilities)

These factors can combine to slow progress, with governments waiting for the market to present solutions, and companies waiting for governments to shape the enabling environment. This can result in climate programmes focusing on short term, easy to deliver initiatives, when longerterm and more complex change is required to meet the targets that have been set.

It can be difficult to make decisive long-term investments with the current policy. Our ability to advise clients on effective commercial structures, has been impaired due to a lack of clarity in current policy. Ecosphere+ (Financial Services)

Customer education and engagement

Customers, particularly consumers, but also business customers, are seen to be insufficiently educated and engaged. While climate may be part of their buying considerations, behavior is slow to change and there is limited indication that the market is prepared to pay to satisfy this consideration.

There is a sense of frustration that customer demand has not changed enough. Until the demand profile changes there is little incentive to invest merely out of the sense of doing the right thing. Associated British Foods (Consumer Goods)

One of the external barriers is the diversity of client drivers, and the short-term financial pressures created by paying more up front for longer term benefits. A lot is dependent on communicating the value of a sustainable approach effectively.

Buro Happold Engineering (General Services)

Weak demand signals are a product of both limited customer education and the quality of supply-side information.

Public perception towards nuclear projects means that a lot of education effort is required.

Doosan Babcock (Energy, Resources & Utilities)

Greenwashing is a significant barrier to true climate action. Clever Carbon (General Services) Taken together, organisations have to divert time, effort, and resources to educating and convincing their markets on the importance of addressing climate change, the role the company is playing, and how this manifests in products and services.

We have an important role to play in protecting our environment and convincing our consumers to as well. It is up to us to make the choices available and communicate them properly. Unilever plc (Consumer Goods)

Supplier action and engagement

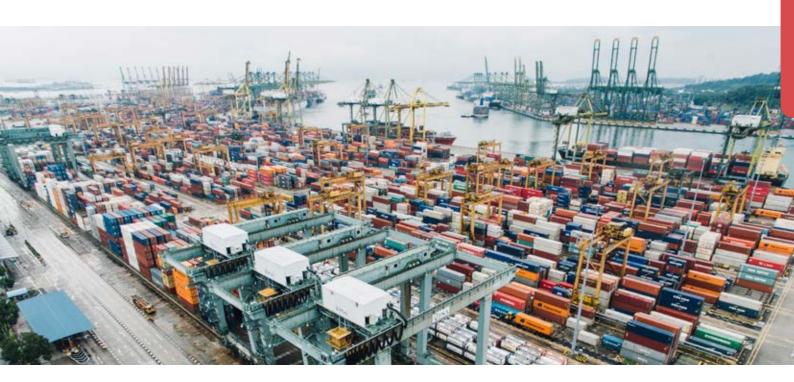
Supply chain (Scope 3) emissions can make up >90% of emissions for some business models. Achieving reductions in these emissions, however, requires considerable engagement, coordination, and collaboration. Barriers to transitioning to lower carbon supply chains were raised on both the company and the supplier side, with 24% of respondents calling this out.

Within the organisation

Companies may not be in a position to engage with their supply chain because of a lack of transparency and visibility of the total supply chain (especially in cases of sub-contracted services and products) and a corresponding lack of understanding of associated carbon footprints.

Influencing and engaging the supply chain will be a challenge, given the difficulty in obtaining accurate data, and how fragmented our supplier base is. Deloitte NSE LLP (General Services)





Within the supply chain

As organisations seek to engage with suppliers, barriers arise in the form of lack of influence, limited alternatives, geographical spread across jurisdictions, and a general lack of awareness and understanding of the importance of climate action.

Some aspects of the supply chain are essential with few or no alternatives.

ARK coworking (Construction & Real Estate)

Our supply chain is fragmented and supplier maturity in this domain can be limited. Barratt Developments plc (Construction & Real Estate) Even with some level of influence, it can be challenging for the supply chain to change. Some businesses, products, and services may require fundamental transformation, financial incentives may be absent or inadequate, or the industry structure may not be optimised to deliver change (e.g., local, national, or sectoral policy may not be supportive).

At the moment many of the low-carbon technologies needed to reduce the carbon in our supply chain are not currently cost-efficient or available at scale.

Ørsted (Energy, Resources & Utilities)

Farming is a very traditional way of working so there is strong resistance to change - we need more intelligence and investment from the government on this. Retail, Wholesale & Distribution Company (Consumer Goods)

The complexity of the agriculture supply chain is a barrier. For example, cocoa has many other issues in addition to climate change, and some suppliers operate in countries that aren't focused on climate change.

Pladis Global (Consumer Goods)



Availability of technological solutions

20% of respondents cited the availability of technological solutions as a barrier. Reponses suggest this can be because required solutions do not yet exist or are not yet ready to be commercially deployed or industry standards have yet to emerge, creating uncertainty around which solutions to choose.

Technology, in some sectors and operational processes, isn't quite there yet to support the ambitious targets that clients are looking to set, in order to transition to a low carbon future.

Weber Shandwick (General Services)

This was particularly acute among Energy, Resources & Utilities, and Consumer Goods sector respondents. These sectors have both evolving technology requirements and an environment where standards can be slow to change, in part due to safety and compliance considerations. There is what we perceive to be a first mover disadvantage - knowing which way to go with the technology. It is difficult to gauge and predict how technology will develop and which will be the best future option.

Cory Group (Energy, Resources & Utilities)

Using renewed and recycled water is proving more difficult to implement in areas across the globe, where technology is less developed or specific technologies are unavailable. L'Oréal Group (Consumer Goods)

Technological solutions may require many parts of the value chain to work together, increasing complexity, time to deliver, and possibly cost. Other forms of steel production exist, but neither are of scale nor cost to make them viable for the time being. Moving to lower carbon steel making requires a more informed and rounded debate involving all parts of the value chain.

Anglo American (Energy, Resources & Utilities)

The effects of this are amplified where the supply chain is geographically spread and where standards differ or are inconsistent.

Despite the aspiration to make change at all our sites, the local infrastructure in some regions is not set up to allow us to meet our ambition to the full. In certain parts of the world, conversion to green energy is just not possible or it is not commercially viable. TT Electronics plc (Industrials)

Industry structure

A third of respondents citing industry structure as a barrier were amongst the heaviest emitting sectors, including Industrials, Energy & Resources, Transportation, and Construction. Responses suggest a number of influencing factors, including international competitiveness concerns, complex value chains, nascent technology solutions, geographical spread, and entrenched existing systems, policies, and processes.

The heavy industrials sector is extremely risk adverse, old fashioned, traditional, and slow to embrace change. Some customers do not want to be the first company to try something new with us, but have no issue with being the second company to try it. Harsco Environmental (Industrials)

Another external barrier is inertia within our industry. The rules of the market are outdated.

Habitat Energy (Energy, Resources & Utilities)

Some respondents also identified the issue of a highly transactional link in the supply chain. For example, in commercial real estate, the agent function is often seen as highly focused on sales on the basis of traditional property metrics and may not be an effective conduit for communicating climate considerations up and down the value chain.



Market disruption and the pandemic

Businesses are operating within increasingly volatile environments. This includes extreme weather and specific, recent external shocks such as COVID-19 and, for the UK in particular, the end of the Brexit transition period. 17% of respondents cited one or more of these disruptions as a barrier to progress on their climate programmes. These disruptions typically call for immediate responses that divert resources and attention from other activities including climate change programmes. Due to economic repercussions of COVID-19, clients have reprioritised projects which often means they do not prioritise environmental impact. However, we have seen some instances where clients are now keen to reuse materials and consider other measures that save costs and have a positive impact. Double Retail Ltd (Construction & Real Estate)





Lessons learned

Developing foundational capabilities, Building momentum, Collaboration, & Communication represent the core principles for lessons learned.

Overview

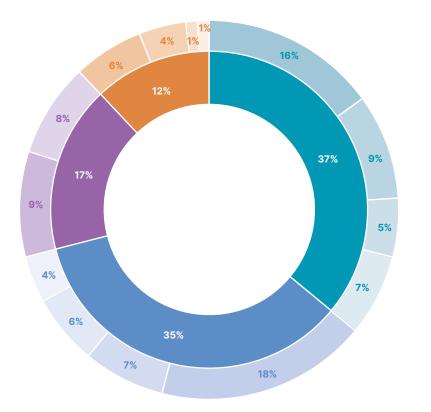
Participating organisations were asked to describe the key lessons they have learned as they have set up and begun to implement their climate transitions. Around (c.92%) of participants provided at least one lesson. Collectively, these lessons form a set of principles for developing a corporate climate transition and have been grouped under the following categories:

- Foundational capabilities (c. 37% of responses, c.56% of respondents)
- Building momentum (c. 35% of responses, c.50% of respondents)
- Collaboration (c. 17% of responses, c. 30% of respondents)
- Communication (c. 12% of responses, 21% of respondents)

Figure 1

Distribution of cited learnings

Percentage of responses in each category and sub-category for learnings cited (i.e., 37% of responses referred to foundational capabilities, of which 16% were related to setting goals, planning and embedding climate change action). [Note: Numbers are rounded]



Foundational Capabilities

- 16% Setting Goals, Planning & Embedding
- **9%** Effective resourcing & organisation
- 5% Innovation & Creativity
- 7% Data & systems & Investment

Consumer Education & Engagement

- 18% Hearts & Minds
- 7% Acknowledging External Changes
- 6% Taking Action
- **4%** Demonstrating Outcomes

Collaboration

- 9% The Case for Collaboration
- 8% Stakeholder Collaboration

Communication

- 6% Informing
- 4% Educating
- 1% Listening & Humility
- 1% Avoiding Greenwashing

*Numbers may not sum to 100% due to rounding.

Figure 2

Lessons learnt by company size

The percentage of respondents for the learning categories by company size (i.e., 67% of companies with 0-9 employees cited lessons in the foundational capabilities category).

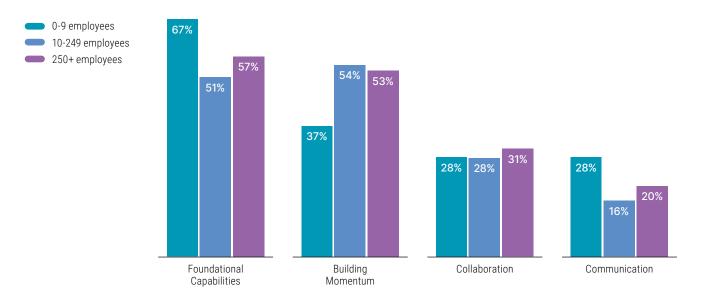
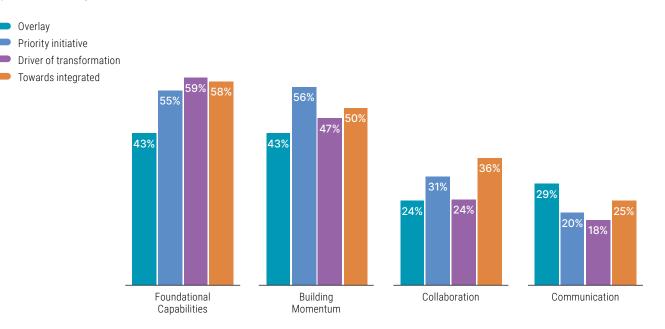


Figure 3

Lessons learnt by organisational maturity

The percentage of respondents for the various learning categories by organisational maturity (i.e., 59% of companies in the 'driver of transformation' category cited lessons relating to foundational capability). [Note: See the 'Organising for change' section for more detail on organisational maturity]



Key messages

Setting ambitious goals, developing associated plans, and embedding these into the heart of the organisation (c. 28% of respondents) are key foundations for a successful climate programme, providing clarity to all stakeholders about both the ambition and the delivery mechanisms.

Embedding sustainability at the core of our strategy from the outset has proven to be the right decision for our business. The Weir Group plc (Energy, Resources & Utilities)

Leadership and pervasive employee buy-in (c. 28% of respondents) are both seen as important to building momentum, creating a sense of agency and driving action.

We have seen momentum build by sharing ownership amongst the group and not just having it sit with one area and making it a part of everyone's roles. With the efforts taken and the resources committed, we have seen momentum carry through the organisation by creating awareness and more buy-in. Virgin Money UK (Financial Services) Collaboration (c. 30% of respondents) with a wide range of stakeholders is seen to bring multiple benefits, and in many cases is recognised as being a pre-condition for success given the systemic nature of the challenges that many sectors face in their bids to decarbonise and enhance resilience.

Trust, collaboration, and value creation. You can have the best strategy in the world, but it's the execution that matter. This requires awareness, understanding and commitment by all stakeholders. Trust and collaboration (internal and/or external) are key.

InterContinental Hotels Group plc (General Services)

Communication (c. 21% of respondents) is highly prized, both in terms of informing and educating stakeholders. This reflects the dynamic external environment, the high expectations from stakeholders, and the early stage of many climate transition programmes.

Communication is vital. We can always communicate more from both an internal and external perspective. You need to make sure your internal team really understand what you are doing and why you are doing it.

Good Energy (Energy, Resources & Utilities)

01 Foundational capabilities

Participants called out a set of foundational capabilities that they feel need to be in place to establish a sustained programme of change. Whilst broadly applicable, they have a particular resonance for climate action. These capabilities can be grouped into the following categories:

- Setting goals, planning, and embedding (c.28% of respondents), emphasising the clarity this provides both internally and for stakeholders, and the organisation wide benefits from the process
- Effective organisation and resourcing (c.16% of respondents), covering internal coordination, securing necessary talent and human resources, and appropriate levels of funding
- Innovation and creativity (c.9% of respondents), including both technical and process change
- Data and systems (c. 12% of respondents), calling out the benefits of robust data-led processes, challenges to securing the necessary data, and systemisation



Setting goals, planning, and embedding

Top level, ambitious goals need to be set to emphasise the level of change and urgency, and to stimulate innovation. These need to be paired with interim goals, KPIs, and plans to ensure the ambition is balanced with the ability to deliver. This pairing is important for establishing credibility both internally and externally; ambitious long-term goals alone are insufficient.

On balancing ambition and the ability to deliver, some climate commitments have to be on the edge of the unknown. They are not sufficiently ambitious if they seem immediately achievable. NatWest Group (Financial Services)

We need to focus on credibility. For all companies, but particularly one like ours, it is important to define an ambitious, yet credible strategy.

Formula One Group (Telecommunications, Media and Technology) Embedding climate into the heart of the business model and strategy is critical to avoid a trade-off mentality and to ensure sustained focus. This is particularly necessary given the upfront investment many climate initiatives incur. This in turn requires foresight into how the expectations of key stakeholders and critical facets of the external environment will evolve, including regulation, carbon pricing, and the physical impact of changing weather patterns.

Embedding sustainability at the core of our strategy from the outset has proven to be the right decision for our business. Our fastest progress is catalsysed when we have a clear business case linked to customer and investor priorities.

The Weir Group (Energy, Resources & Utilities)

Make sustainability clientfocused and business driven. That's where the impact is. ABN AMRO Bank (Financial Services) The process has been called out as complex and lengthy, requiring new data and understanding (e.g., of the supply chain), plenty of internal and external engagement, and plenty of judgement about key external dependencies, e.g., the ability of the local grid to supply renewable agency and carbon pricing.

Developing the sustainable banking strategy has been a journey of internal and external stakeholder dialogue, and of working across the business to formulate targets. This took one year... to ensure that the targets are aligned. Nordea Bank Abp (Financial Services)

The dialogue with local stakeholders is strengthened with a structured and inclusive approach, so as to adequately listen to the requests of the user/ citizen, which are placed at the centre of strategic action.

A2A (Energy, Resources & Utilities)

We also emphasise the importance of a thorough process, with impact, stakeholder, and materiality analysis, to determine what to prioritise and how to anchor material matters in corporate strategy.

Schibsted Media Group (Telecommunications, Media & Technology)

Effective organisation and resourcing

An effective way of organising and resourcing needs to be in place to support the delivery of goals and plans. Areas called out by participants included internal coordination, skills/knowledge/capability, and programme funding.

Internal coordination

Internal coordination is particularly important, with many suggesting that the climate programme shouldn't be the responsibility of one department or a small group of people, but should involve many, if not all, employees. Whilst the sustainability function (if one exists) has typically been front and centre, this is giving way to broader involvement as the programme becomes embedded and integrated.

It is important to have everyone in the business own the agenda. It's like HR - if you have a divisional set up and an owner, people assume it's happening somewhere else and not with them, and you won't do as well. MasterCard Inc. (Financial Services)

Those involved in the climate transition shouldn't be segmented into a hub. Although it is important to have a team of experts to coordinate across the firm, it should also be embedded across the business. Insurance Company (Financial

Insurance Company (Financial Services)

Clearly defined roles and responsibilities, linking back to goals and plans, help make a more distributed engagement model work.

We have clear structures, processes, and accountabilities in place to ensure we can both deliver against these ambitious goals and measure and disclose our progress.

The Weir group (Energy, Resources & Utilities)

Make sure net-zero is embedded across the company and investors/ owners, with a clear definition of everyone's role and commitment to it. Ecosphere+ (Financial Services) Given the rapidly changing environment, organisations' lack of experience running climate programmes, and the apparent preference for comprehensive involvement, teamwork and good communication between teams is critical. This is easier if goals and plans are specific and facilitated by the goodwill that working on climate-related activities typically generates.

It is very important that all areas of the business work together towards climate targets, by leveraging off each other's strengths. With proactive communication and teamwork, it is possible to achieve synergies. Housing Association Company (Construction & Real Estate)

Communication between people across all business functions results in much quicker progress. Addleshaw Goddard LLP (General Services)

Skills, knowledge, and capability

Participants cite the significant gap in skills, knowledge, and capability between the current business and what is required to deliver on their climate goals.

We need to upskill competency in whole life carbon. Network Rail Limited (Transport & Mobility)

There will be a large skills impact to get to net-zero. Cadent Gas (Energy, Resources & Utilities)

We have started to be more flexible and open-minded with the skills we need going forward. We're looking for more skills in digital and strategic thinking, for example.

Mott Macdonald (General Services)

This gap is being closed through education and training, hiring, and the use of third party providers. The interest that both existing employees and the labour market show in working on climate programmes and for organisations that are serious about climate facilitates both upskilling and recruitment.

Attracting talent is easy because people from all age ranges and experiences want to be involved in making an impact. Our organisation will continuously hire and attract amazing talent as we grow. Maanch (Financial Services)

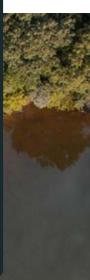
Programme funding

Re-designing the business model to incorporate climate should shift the traditional paradigm of seeing sustainability as non-core and therefore a cost. Nevertheless, participants recognise the importance of a properly funded programme as a key part of the foundation of success.

It is important to invest in sustainability now, for later. Britvic (Consumer Goods)

We need to know that there are resources to help achieve our goals.

Vista Caballo (General Services)







Innovation and creativity

Addressing climate change will require technical and process innovation and creativity. Challenges are often systemic and complex and may involve new partners and alliances. Solutions and pathways are continually being created, but more needs to be done, with designs and approaches tested at scale.

The next 10 years will throw up so many new climate challenges and opportunities. They will change the availability and feasibility of new solutions; we need to stay abreast of innovation and latest thinking.

InterContinental Hotels Group plc (General Services) We need to challenge and deviate from standards and standard methods. This is required to innovate and force positive changes to laws and regulations, ensuring the transition to a low carbon economy.

Consulting Company (Construction & Real Estate)

Whilst this adds additional challenge, participants provide optimistic feedback about the ability to innovate, facilitated by the enthusiasm that climate related initiatives typically engender.

Great ideas can come from many parts of the organisation. People can and should be encouraged to get involved from different areas in the organisation. Industrial Company (Industrials) The key to successful initiatives lies in looking at the current operations and changing how they work, which are often outdated or not best practice. Look to change these, before spending money on elaborate initiatives.

Ecotone (Consumer Goods)

We have been surprised how much creativity and engagement there is in the business when you open the space to tackling what appears to be huge intractable challenges. We have come a very long way, very quickly. Anglo American (Energy, Resources & Utilities)

Data and systems

Data and empirical evidence are often called out as a critical underpinning to setting goals, crafting plans, and delivering a successful programme of change. They help secure buyin from internal and external stakeholders, enhance the integrity of communications, are a pre-condition for meeting the expectations of the capital markets, and inform decision making.

Investment grade data is critical. It is important to have credible data that can stand up to scrutiny. Stora Enso (Industrials)

Reporting on and measuring carbon emissions is a powerful driver for positive change. We require the data needed to make informed decisions, to show incremental change each year, to bring to life the changes made and motivate people to continue to take steps. Guardian News & Media (Telecommunications, Media & Technology)

Despite its importance, acquiring and processing the needed data can be difficult. Scope 3 targets require information from suppliers that can be challenging to acquire, particularly if the supply chain is high volume, fragmented across locations, and comprised of smaller businesses. Standards are called out as insufficient, e.g., for assessing offsetting or determining Scope 3 requirements, which can make identifying the needed data and knowing how to process and present it more complex.

Gathering the right data is tough and could greatly affect the size of your footprint as a company and subsequent investment decisions. Nestlé (Consumer Goods)

It's hard to calculate our overall carbon impact and there aren't the measures in place to provide an accurate Scope 3 measurement right through our supply chain. The industry needs to continue to look at easier tools for business to work with and help them with this task. Pala Eyewear (Consumer Goods)

These challenges are faced by all, and while data plays an important role, it should not stand in the way of moving forward.

We should not let perfection on measurement stop us from trying. It is important to challenge the industry of counting and assess whether it has helped.

Marks & Spencer Group plc (Consumer Goods) Ensuring that data is high quality and provided to the right people in the organisation in a timely way requires systemisation. Enterprise resource planning (ERP) and other legacy company systems typically hold some of the data required but have rarely been designed to support climate transformation. As a result, building enduring, supporting systems is seen as another critical foundation.

Good systems and data a prerequisite for setting appropriate targets and designing the right interventions. British America Tobacco (Consumer

Goods)

Setting up a single platform for collating all sustainability related data is essential to continuous monitoring of performance. This must be in place before any high-level targets have been set to ensure that process can be monitored and communicated to key stakeholders. SNC-Lavalin Group Inc. (Construction & Real Estate)

02 Building momentum

Participants recognise the urgency required to address climate change and meet the rapidly evolving expectations of their stakeholders. This requires decisive action rather than simply setting goals and developing plans. At the same time, the scale of change is significant, the level of uncertainty high, and getting programmes initiated, let alone scaled, is hard. As such, participants provided insight into the lessons they have learned that speak to gaining traction. These lessons can be categorised as:

- Acknowledging external change (c. 13% of respondents), internalising the external shift in attitudes and expectations
- Hearts and minds (c. 28% of response response
- **Taking action** (c. 11% of respondents), taking the first steps despite the challenges and uncertainty
- **Demonstrating outcomes** (c. 8% of responsents), documenting and communicating outcomes achieved



Acknowledging external change

Monitoring the external environment, and specifically the changing expectations of stakeholders, provides the necessary context and business rationale for an organisation. Several respondents referenced insight gained on aspects of their external environment as their key organisational learning and an important input to shaping their climate programme and gaining leadership attention.

The external environment has helped significantly. People are waking up to climate change and there is a broad acceptance of its importance. British American Tobacco (Consumer Goods)

We have realised there are a lot more people onboard with the climate transition than we expected. There is a changing culture and people are supporting the movement. Bristol Airport Limited (Transport & Mobility)

Significant engagement across the sector was achieved only after the government mandated diesel trains be phased out by 2040. This statement has transformed senior leadership's view on this, resulting in the sector making significant investment decisions as a response. Avanti West Coast (Transport & Mobility) As part of the broader change in context, stakeholders are now seen as significantly more engaged in an organisation's climate programme than in the past. This is of particular interest to those incorporating some dimension of their climate approach into their customer proposition.

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. Firms need to embrace the growing enthusiasm for sustainability. Imerys (Energy, Resources & Utilities)

It is much easier to achieve a desired climate outcome now than some years ago. The world is changing, and we are contributing to the positive change.

Fjordkraft (Energy, Resources & Utilities)





Hearts and minds

C. 20% of all responses described lessons involving leadership or employee buy-in, with lessons relating to the latter more frequently cited than the former. Buy-in is often cited as a relatively early stage requirement to help build the necessary momentum for the transformation to come.

Leadership buy-in

Participants seem in general agreement that leading from the top is key to building momentum. "The top" includes broad reference to company leadership and the board, but most responses specifically cite the CEO. Buy-in at that level is typically seen as a prerequisite or essential, although some responses are more equivocal. The scale of required change, the public interest, and the need to involve the whole organisation all contribute to the need for CEO leadership.

Having a credible and passionate CEO is important for driving change across the organisation, given the ambition and the complexity. NatWest Group (Financial Services)

Leadership buy-in is integral. If the Board aren't engaged, then we will struggle to push our planned initiatives through.

Anglian Water (Energy, Resources & Utilities) Whilst buy-in often seems to start with the CEO, it can be institutionalised through incentives and shaped through the team on the front line within the business.

Our CEO has 40% of their pay variable on performance including a strong focus on ESG. Wipro Limited (General Services)

The board has been taken through the company's carbon neutrality roadmap, ensuring that they understand what the company is trying to do and are fully behind it. Stora Enso (Industrials)



Employee engagement and culture

Widespread employee engagement and the incorporation of climate into culture is seen as critical to building and sustaining momentum.

Employee engagement has really enabled progress. The feedback from staff is really positive, every employee is proud, they are happy investment process changing and there is a lot of enthusiasm.

Securing organisation-wide buy-in behind the actions you are planning is vitally important to the success, especially when led by local teams.

Lovat Parks Limited (General Services)

Culture is more important than strategy in any business. Similarly, involving the correct internal stakeholders is critical.

Canary Wharf Group plc (Construction and & Estate)

Beyond the general association with a successful climate programme, some participants cite more specific benefits, including enhanced innovation, faster delivery, and the knock-on effect of engagement with other stakeholders such as suppliers and customers.

Through the buy-in of our employees, commitment and enthusiasm has spread to our leadership, customers, owners, and external stakeholders. This highlights the importance of embedding climate action within the corporate culture.

We have learnt that empowering your employees to be part of the process is imperative. It allows your employees to help the business innovate, help them feel part of the change and has helped identify areas where improvements can be made. Harsco Environmental (Industrials)



Several of the lessons provided by the participants mention mechanisms for achieving employee buy-in, including through education programmes and communication, with an emphasis on making it pragmatic and linking it to commercial outcomes.

We would need to approach different parts of the business and convince people to own and be responsible for these initiatives, instead of just going in with a carbon strategy. It needs to be tailored for the audience. Retail, Wholesale and Distributions Company (Consumer Goods)

We have had success in projects and internal conversations regarding how to address climate change risks and opportunities... This has enabled us to create consensus for people who are engaging clients. Mott Macdonald (General Services) Employee appetite to engage is typically seen as strong, particularly with younger generations. This both facilitates a broader programme of involvement but also creates pressure and expectations that need to be managed to a positive outcome.

Employee buy-in has been easy. It's a nice string to the bow to be able to talk about as it is inherently linked to tackling climate change. Pala Eyewear (Consumer Goods)

The power of the many employees need to be brought in. The younger generation wants to be part of it and they have strong opinions. Climax Community (General Services)



Taking action

5% of responses focussed on building momentum through initiating action and not getting stuck or delayed by the complexity of the challenges faced or the inability to deal with uncertainty.

Don't overthink it! Start. Start small if you need to. This is the first step to creating momentum and collaboration across the business.

HH Global (Telecommunications, Media & Technology)

Even small actions matter. It's not about being perfect, but trying to do better.

Personal Goods Company (Consumer Goods)

Taking action early is also seen to benefit the organisation by helping build engagement with employees and leadership and facilitating learning.

You learn by doing and that will allow you to evolve your intellectual capital. RB (Consumer Goods)

Demonstrating outcomes

Whilst taking action is important, demonstrating positive outcomes is additionally cited as important to building momentum. Most of the commentary provided suggests that this is mostly for an internal audience, but some cite communication of outcomes to external stakeholders too. The outcomes referred to were typically financial outcomes, suggesting that direct financial contribution is still critical to getting the organisation on board. Finding low hanging fruit early on led to greater ambition. Northumbrian Water Ltd (Energy, Resources & Utilities)

The LED project worked really well. It was simple, tangible, and easy to understand, with a clear financial benefit. People know what it means and it's easy to refer to. Burger King (Consumer Goods)

03 Collaboration

Some form of collaboration is cited as a key lesson learned by c. 30% of respondents. The systemic nature of climate change together with the underlying ethos of collective action elevates collaboration as an approach to tackle the uncertainties organisations face. The responses can be categorised into:

- The case for collaboration (c. 17% of respondents): The reasons given for collaboration being amongst the key lessons learned as organisations set up their climate programmes
- **Stakeholder collaboration** [c. 15% of respondents]: Examples across the range of stakeholders of collaborative approaches

30% of respondents

cited some form of collaboration as a key lesson learned

The case for collaboration

Participants provide multiple reasons for the importance of collaboration. These reasons can be grouped into:

- Driving system level change: a recognition of the enormity of the challenges faced and the inability to address them alone
- Acquiring knowledge and sharing practices: the benefits of collaboration as a way to acquire and share knowledge
- Efficacy, efficiency, and pace: collaboration as a direct catalyst for the successful development and implementation of in-house climate programmes

Driving system level change

Participants recognise that they cannot deliver on their climate goals on their own. Solutions often require sector-wide or cross-sector solutions which may cross national market boundaries. The emphasis in these responses is less on a lack of capability or knowledge, and more on the interdependence with other parts of the sector or market that play different roles, e.g., energy suppliers or providers of new heating solutions.

None of this can be achieved without collaboration. This could be from collaborating on purchase power agreements with energy generators, to working with local communities to implement renewable energy sources. Network Rail Limited (Transport & Mobility) You cannot achieve things on your own. It's about finding the right partners beyond just our company - it's all about collaboration and finding allies.

Robert Bosch GmbH (Industrials)

Acquiring knowledge and sharing practices

The need to learn quickly underpins a number of the responses from participants that call out the knowledge sharing benefits of collaboration. This also suggests that company climate programmes are typically not seen in the same competitive light as other transformational programmes, e.g., digital transformation or enterprise-wide cost reduction.

Collaboration is crucial. We have learnt the importance of collaborating with other B Corporations and different players in the investment space. We learn from each other and share key practices. EQ Investors (Financial Services)

Collaboration and mutually beneficial partnerships with academic institutions, innovative SMEs, customers, and suppliers is crucial. Doosan Babcock (Energy, Resources & Utilities) Some of the participants subscribe to certification schemes, e.g., B Corps, which appear to assist this knowledge acquisition.

There was incredible value in going through the B-Corp process. You learn about areas that you are not that good at and how to improve. You hold onto that momentum to keep innovating and improving.

Lifesaver Power Ltd (Telecommunications, Media & Technology)

Efficacy, efficiency, and pace

Collaboration is also seen as a way to deliver to more effect, more quickly, and with less risk and less cost.

The key challenge is that actions are rarely of sufficient scale and scope to support the ambitious commitments being made in the market. This is difficult if not impossible to do in isolation. Collaboration is key. RB (Consumer Goods)

The spirit of partnership between charities, business, regulators and government seen during the CV-19 pandemic is something we can learn from, as we've been able to achieve great things over a short period of time. Retail, Wholesale and Distribution Company (Consumer Goods)

Collective action is cheaper and can provide larger value. Marks & Spencer Group plc (Consumer Goods)

Stakeholder collaboration

Cross-stakeholder

Participants cite examples of cross-stakeholder collaboration as a key lesson learned, implying a level of homogeneity in the challenges faced and the solutions required to address them, as well as broad interdependence. Trade associations and other member organisations are natural facilitators for this type of exchange, providing their convening power and acting as a channel to capture and promote good practise.

Scottish Enterprise, Scotland's national economic development agency, has provided very practical support and has been generous in making global connections. Airspace Unlimited Scotland

(Industrials)

You need to surround yourself with people who are as resilient as you, who believe in you, and who you can engage with credibly. This has taken time, but the CBI has helped us achieve this.

Gupta Smart Energy (Energy, Resources & Utilities)

Customers

Collaborating with customers is important to better understand their evolving needs and relative priorities. A transactional approach to customers works where needs are clearly defined and product or service attributes can deliver against these needs. Customers, whether they be B2B or consumers, are still familiarising themselves with climate considerations. While they want change, they may be unable to communicate their needs effectively, and providers may be unable to deliver. Collaboration can help the market develop and align expectations. One important aspect of collaborating with customers is the exchange of data, e.g., how a product or service is used and the attendant emissions footprint. This can be found across the spectrum, from drinks manufacturers to the car industry to buildings.

In short, sharing knowledge is important. When we talk about it, people want to come on board.

Media Company (Telecommunications, Media & Technology)

Customers care about the environment and on many occasions have picked the business for its sustainability. A sustainable mind-set leads to better partnerships. Electrocomponents plc (Industrials)

Suppliers

Many companies have a significant proportion, sometimes a majority, of their emissions footprint in their supply chain. The supply chain can also hold the most critical resilience challenges. Participants highlight the importance of supplier collaboration and data exchange. The supply chain is also seen as a source of learning and inspiration.

There is a huge opportunity for collaboration and learning through our supply base. Food & Beverage Company (Consumer Goods)

We work very closely with suppliers on developing new technologies and so forth, which is good for the business case.

Retail, Wholesale and Distributions Company (Consumer Goods)



Peers

Many of the challenges to decarbonisation are shared across a sector, and some require a reshaping of the sector itself, e.g., home insulation or life cycle emissions in the real estate sector. Participants note the greater receptiveness to collaborate in this domain compared to business as usual.

It is very helpful to have discussions with other professional services firms and the wider business community, via various forums, as it lets companies share knowledge and ideas. TLT LLP (General Service)

Ensuring that climate issues are addressed at a precompetitive stage is important in driving change and it is hugely refreshing to see collaboration across the industry.

HH Global (Telecommunications, Media & Technology)

There must be collaboration across all levels, including staff, leadership, suppliers, clients, other agencies, industry.

Havas Group (Telecommunications, Media & Technology)

Government and policy makers

Government as a buyer, rule setter, and funder plays a critical role in every sector. Changes needed to drive down the emissions in a sector and to increase resilience are often significant. Policy can be required to secure the goal and reduce uncertainty. Participants cite the importance of collaborating with government on developing these policies given their significance, complexity, and lack of precedent.

Collective action on policy is key - we only have a limited amount of influence and we need to work with others in the political arena to get things moving. Nestlé (Consumer Goods)

Collaboration between businesses and policymakers on climate issues is key because we need shared solutions. BT Group plc (Telecommunications, Media & Technology)

04 Communication

Communication has been mentioned as a key lesson learned by c. 21% of all respondents. Communication themes include: the importance of informing stakeholders of your approach and progress; educating stakeholders and the broader market; ensuring two-way communication done in the right spirit and with the right tone; and concerns about greenwashing.



Informing

Stakeholder expectations are rising, but often the change demanded will take time to deliver and is challenging. Progress may be difficult to achieve or evidence and setbacks will occur, but there is a general insistence on transparent communication to explain what an organisation is doing and why. This transparency is linked to trust and is particularly important in the climate domain. Open communication can also stimulate others to action.

Despite a lack of transparency in the industry globally, we continue to work and communicate our learnings transparently. We do this so that others can start to contribute towards a net-zero future earlier. Hattiers Rum (Consumer Goods)

Transparency is needed by businesses and organisations on their progress. Meeting these targets and commitments is not easy and therefore setbacks and challenges need to be addressed in a transparent manner. Britvic (Consumer Goods)

21%

of respondents cited communication as a key lesson learned

Educating

A general lack of understanding of the science, climate impacts, transitional risks, and opportunities across markets results in organisations having to play the role of educator, helping explain the broader shifts and challenges and the implications for the organisation and the particular stakeholder. This includes both business partners and end consumers.

Don't underestimate the importance of education within the business and with business partners.

Barratt Developments plc (Construction & Real Estate)

Companies shouldn't underestimate the power of public opinion. They need to have more grown up conversations with the public so that things aren't demonised without them understanding full picture. Retail, Wholesale and Distribution Company (Consumer Goods)

It is incredibly valuable to deal directly with the public and your consumers. Time invested in providing them with education about what you are trying to achieve is time well spent.

Seaview Farms (Agriculture & Land Use)

Listening and humility

Participants emphasise that communication needs to be two-way. It is an opportunity to learn and must be carried out with humility: no organisation has come to the end of their journey on climate change.

We have to be humble in recognising where we need to improve, whilst being proud and willing to talk about those achievements we have successfully delivered. Formula One Group (Telecommunications, Media & Technology)

It is important to the consumer, specifically under the current circumstances. Weber Shandwick (General Services)

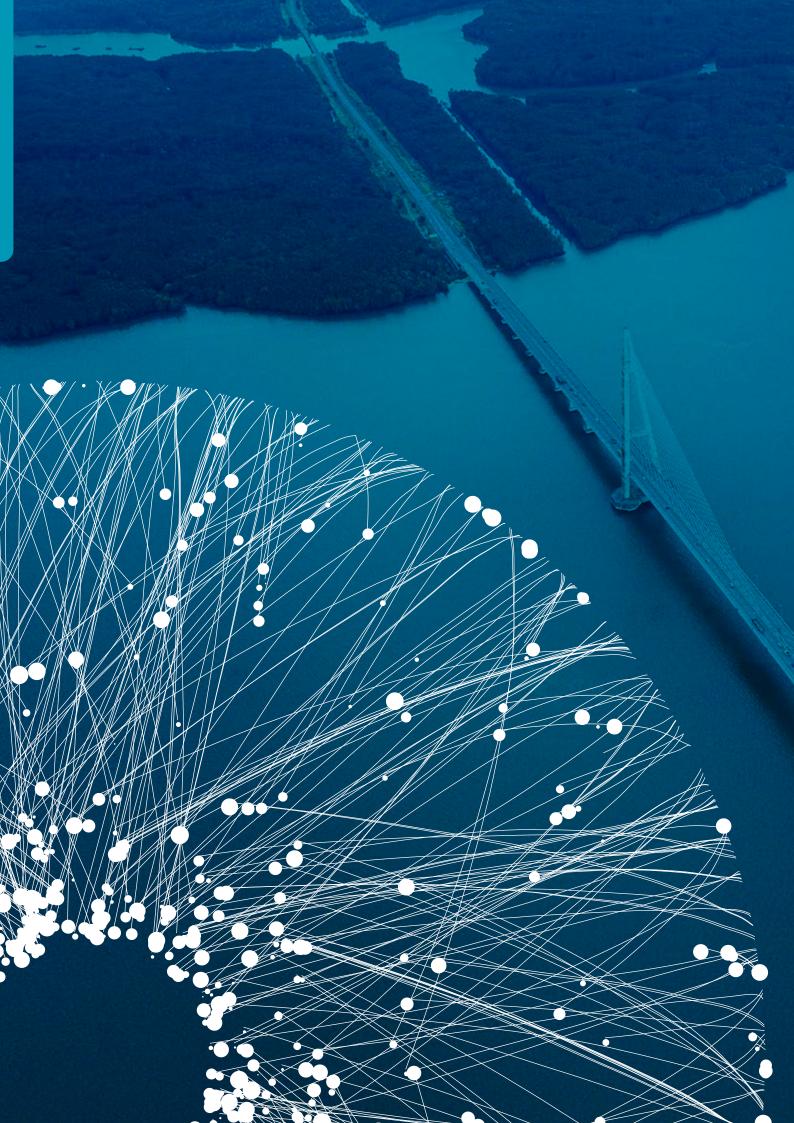
Avoiding greenwashing

Greenwashing is a major concern across all stakeholder groups and creates a significant risk for organisations. This can be avoided through transparency of plans, actions, successes, and failures.

We want to showcase the technology and progress we're making, even if it is not finished yet. This is fundamentally changing what we do, not greenwashing, and hope we will not be perceived as such.

Anglo American (Energy, Resources & Utilities)

Be judicious about announcements that are made - don't try and fake it, as this can cause longer term damage and can delay progress. Don't be afraid of not being vocal, it's better to get things right first. Insurance Company (Financial Services)



Country profiles

The climate crisis: a global challenge. Decisive, collective action now, will ensure our goal remains within reach.



Finland

Introduction

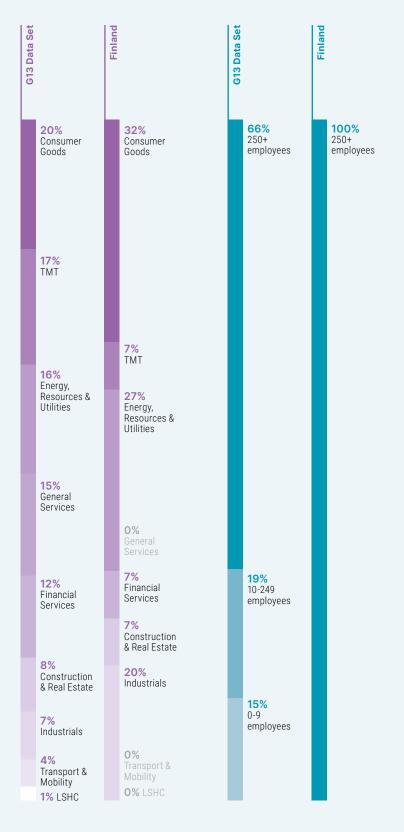
There is a long tradition of climate action in Finland. The government prepared the first National Energy and Climate Strategy twenty years ago. Since then, Finland's GHG emissions have decreased by 32%. In 2019, the Finnish Government adopted a target of climate neutrality by 2035 and has since been working to select suitable measures for implementation. At the same time, targets for climate neutrality by 2050 and a 55% reduction of net GHG emissions by 2030 have been enshrined in the European Climate Law. Detailed EU-level legislation to meet these targets is currently under negotiation.

Researchers warn that Finnish companies will likely suffer negative supply chain shocks and reduced availability of resources, financial capital, and skills as a result of climate change¹. This has prompted the private sector to play an increasingly active role in mitigating climate change, with voluntary energy efficiency agreements between the Government and private companies (Finland's primary measure for promoting energy efficiency) in use since the 1990s. Between 2019 and 2020, associations representing thirteen Finnish industries prepared their individual lowcarbon roadmaps. The roadmaps show that a climate neutral Finland by 2035 can be achieved with existing and/or nearhorizon technologies (assuming favourable conditions for investment). Many associations have since continued to work on follow-up measures, with businesses now focusing on mitigation. The 13 Finnish companies interviewed provides a glimpse into climate action taken by Finnish business.

¹ Confederation of Finnish Industries (EK) commissioned report – <u>https://www2.deloitte.com/fi/fi/pages/risk/articles/ilmastonmuutos-vaikuttaa-yritysten-toimintaan.html</u> (Finnish); <u>https://www2.deloitte.com/fi/fi/pages/risk/articles/climate-change-has-a-significant-impact-on-finnish-businesses.html</u> (English)

Figure 1 Comparison of the Finnish Data Set to the G13 Data Set

Comparison of the distribution of firm size and sector between the Finnish data set and the wider G13 data set (i.e., 100% of companies are large firms with more than 250 employees, compared to 66% in the wider G13 data set).



Finland 187

Key messages

The main drivers of climate action are 1) Customers, clients and consumers, 2) regulation and policy changes and 3) executive motivation. Only c.17% of respondents saw physical risks such as increased severity of natural disasters as a key driver.

Significant climate targets are being set across all sectors, and 100% of the interviewed companies have at least one significant headline carbon reduction target. C.75% of respondent companies have a net-zero or carbon neutrality target by 2050, and c.50% of respondents have an absolute carbon reduction target.

Climate action amongst respondents is strongly focused on mitigation. Of the high impact initiatives discussed by the interviewed organisations, c.91% directly targeted emissions, including reducing or preventing greenhouse gas emissions. Around c.41% of companies focus their initiatives on capabilities, which include enhancing awareness and education.



01 Targets and commitments

Significant climate targets are being set across all sectors, and 100% of the interviewed companies have at least one significant headline carbon reduction target. C.75% of companies have a net-zero or carbon neutrality target by 2050, and c.50% of respondents have an absolute carbon reduction target.

The overall target is a carbon neutral Kesko (own operations and transport). The final target is to be carbon neutral by 2030 without any carbon offsets. Kesko (Consumer Goods)

Science Based Target (SBT) are not well represented with only c.42% of the respondents having SBTi committed targets. Responses suggest this is due to the complexities of compliance and reporting requirements, and a lack of general awareness of SBTi and its significance.

Carbon intensity targets have been adopted by c.8% of

respondents compared to **c.50% with absolute reduction targets.** C.8% had energy intensity targets with c.33% of companies having energy use targets. The low numbers of absolute energy reduction targets reflects a reluctance of boardroom to constrain growth in the short term due to the high initial capital costs from mitigating GHG emissions. They are however willing to invest if they can sustain business activity.

Coverage of carbon targets varies significantly between companies. Whilst 100% of companies have carbon targets covering only Scope 1 and 2 emissions, only c.67% has targets covering Scope 3 emissions.

The Group commits that 67% of its suppliers by spend covering purchased goods and services will set science-based targets by 2023. SOK (Consumer Goods) In addition to reducing carbon footprint, c.72% of respondents have quantitative targets for increasing the positive climate impact from the use of products or services. This "carbon handprint" is a growing feature with the Finnish climate debate and seen as an important component of transition.

The aim is to increase carbon handprint through increased production of renewable products. Neste is targeting to help customers reduce their emissions by 20 M tons of CO2equivalent by 2030 compared to using fossil alternatives. Target is based on estimated sales of renewable products to customers in 2030. Neste (Industrials).

02 Drivers for change

The main drivers for respondents are: 1) Regulation and/ or policy changes (c.67% of respondents); 2) Customers, clients or consumers (100% of respondents); 3) Executive motivation (c.50% of respondents).

More than half of respondents cite broader societal shifts or implications for brand and reputation as drivers. Almost all respondents indicated two or more drivers for change. Only c.17% of companies saw physical risks, such as increased severity of natural disasters, as a main driver. Some respondents did also cite physical risks resulting from climate change, in relation to the supply chain, and the availability of raw materials.

Clients and investors: Kesko (Consumer Goods)

There are two main drivers for Kesko's climate commitments and sustainability targets: 1) clients, customers and consumers, and; 2) investors. In many of Kesko's operating countries, customers (B2C: end-customers visiting the stores), assume sustainability and social responsibility as a given from purchased products. Kesko is working hard to fulfil this assumption and demand, or risk losing market share to competitors. On the technical trade side, 80% is B2B, have similar demands of their supply chains. Kesko needs to ensure that everything in their own supply chain is managed to required targets.

Investors are more and more interested in climate change mitigation work because it is part of their risk management, as it is safer to invest to more sustainable company than to invest to a non-sustainable company.

Kesko (Consumer Goods)

Societal drivers: Nordea (Financial Services)

A broad range of societal drivers underpin climate commitments and initiatives. The drivers can be found from the sustainability report, as well as the KPIs applied. There is an ongoing shift in society stemming from the increased understanding of climate. This is creating both risk and opportunity, driving the need for action to mitigate and adapt to climate change, as well as other ESG related risks such as biodiversity risk. Regulatory change in this area is now accelerating providing a framework for action. There is also increasing interest and engagement from investors, customers, as well as company employees.

Within the greening of society also lies business opportunities that further support the change to a low carbon and sustainable society.

Nordea (Financial Services)



03 Organising for change

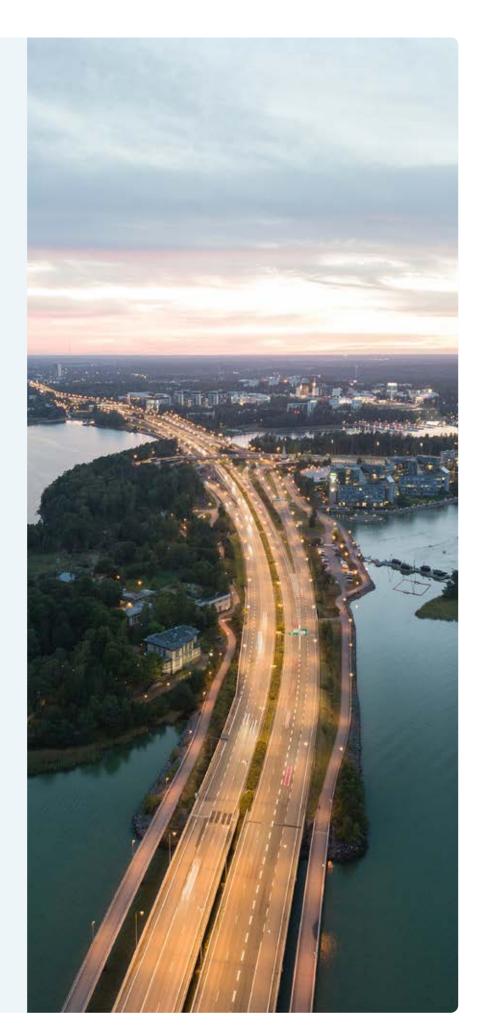
Responses show that key climate initiatives are typically integrated in the company strategy and approved by the leadership team. Most respondents (c.92%) say that their climate commitments affect their investment decisions. Mostly the climate commitments are a part of the normal cost and investment planning.

We want to meet the targets and that means that we integrate climate initiatives in the strategy and annual cost & investments planning. Paulig (Consumer goods)

The extent to which climate is integrated within the broader business model varies between companies. Only c.17% of respondents have their climate change agenda towards integration with the broader business model. This is indicative of the developing maturity within Finnish businesses of the climate agenda.



say that their climate commitments affect their investment decisions



04 High impact initiatives

Climate action amongst respondents is strongly focused on mitigation. Of the high impact initiatives discussed by the respondents, c.91% had the main impact resulting from directly targeting emissions reduction, including reducing or preventing greenhouse gas emissions. Around c.41% of companies focus their initiatives on capabilities, which include enhancing awareness and education. On the other hand, no initiatives in our sample saw the main impact coming from capturing emissions, resilience of physical assets or resilience of human assets.

Espoo clean heat / Fortum (Energy, Resources & Utilities)

We are running a joint initiative with the city of Espoo, Finland, to phase out coal as a heating solution within the district and to fully decarbonise the district heating within the 2020s. Currently 40% of the city's energy is carbon neutral, but we expect to increase this to 95% by 2025. The final 5% will be harder as fossil fuel production is planned to run until the beginning of 2030s. The final decision on carbon offsetting has not yet been made, since technical solutions may still be found to eliminate the final 5% mentioned above.

The initiative will reduce roughly 50% of Espoo's CO2 emissions.

There are a number of solutions that can be used to decarbonise the district heating system: waste heat solutions, heat pumps with renewable electricity, bioenergy and geothermal energy utilisation. Fortum (Energy, Resources & Utilities)

Climate awareness: Sanoma (TMT)

Sanoma's target is to increase climate awareness through their own media brands. For example, the Helsingin Sanomat newspaper has been very active on climate reporting. They have several small initiatives constituting to what could be called a "HS climate program", including one assigned journalist to solely report on climate change, and considerable resource and efforts to customer engagement and communication. Perhaps the most known singular actions are assigning a climate correspondent and giving out climate pens to world leaders to draw attention to climate change.

Sanoma (Telecommunications, Media & technology)





Italy

Overview

Italy's GHG emissions per capita are slightly below the G20 average and have decreased at the rate of 8.6% between 2012 and 2017, versus a G20 average of 2.3%. However, its total GHG emissions (excluding agriculture and land-use) have only decreased by 19.4% between 1990 and 2019, with fossil fuels still accounting for 79% of Italy's total energy supply¹.

Electricity production from renewables account for 41.4% of the electricity mix – mainly hydroelectricity (16.7%), biomass (7.4%) and onshore wind (7%). However, the rate of growth of renewables has shrunk in the last few years, likely due to regulatory red tape and slow authorisation processes. Natural gas remains the most prevalent power source for electricity generation at 48%. The shares of coal and oil have decreased (11% combined), given plans to phase out coal by 2025. As a member of the European Union, Italy's path towards sustainability closely follows the EU strategy, and is based on five main pillars: decarbonisation and renewables, energy efficiency, energy security, a fully integrated energy market, and research, innovation and competitiveness. As of August 2021, Italy's commitment now aligns to the EU target to cut net GHG emissions by at least 55% from 1990 levels by 2030. They have also pledged to achieve net-zero carbon emissions by 2050. Additionally,

the Italian National Recovery and Resilience Plan (NRRP) devotes 37% of total funds to measures that support climate objectives².

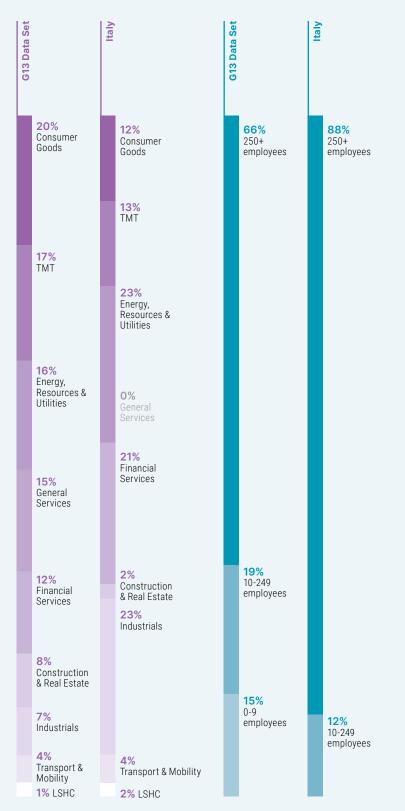
This national context is exemplified within the Italian companies interviewed. More than forty Italian businesses were interviewed, most with more than 250 employees and a turnover of over 50 million Euros. This sample covered approximately fifteen industries, including Oil & Gas, Mining & Metals, Financial Services, and Energy, Resources & Utilities.

¹ IEA. 2021. Italy Profile. [online] Available at: <<u>https://www.iea.org/countries/italy</u>> [Accessed 30 September 2021].

² Climate Transparency. 2020. *Italy*. Climate Transparency Report 2020: Comparing G20 Climate Action and Responses to the COVID-19 Crisis. [online] Available at: <<u>https://www.climate-transparency.org/wp-content/uploads/2020/11/Italy-CT-2020-WEB.pdf</u>> [Accessed 30 September 2021].

Figure 1 Comparison of the Italian Data Set to the G13 Data Set

Comparison of the distribution of firm size and sector between the Italian data set and the wider G13 data set (i.e., 88% of Italian companies are large firms with more than 250 employees, compared to 66% in the wider G13 data set).



Key messages

Climate change is becoming a priority for Italian businesses. The need to respond, and be seen to respond, to climate change is gaining traction among Italian businesses and in their boardrooms. This is driven by external stakeholder expectations and internal factors, and is evidenced by target setting and the growing maturity of corporate climate programmes.

The Italian companies identified several key drivers behind their climate ambitions and action. In particular, they highlighted the need to meet both customer and investor expectations, and to respond to the increasing pressure from regulators and standard setters.

The respondents have typically set ambitious targets (mainly for 2030) against climate change and are building supporting strategies and action plans. Responses show a strong focus on renewable energy and energy efficiency.

Despite increasing commitments to climate action, businesses still face significant internal and external barriers to transitioning towards a net-zero economy. Respondents frequently cited challenges related to policy and regulation, and technology.

To overcome these barriers, Italian companies recognise the need to drive change across all stakeholders. Tackling stakeholder perceptions of the relevance of climate action, involving the whole value chain in solutions, and creating an enhanced internal and external sustainability culture are called out as key priorities.



01 Drivers of change

Respondents cited an average of five drivers behind their climate ambitions. Pressure from markets, investors and institutions, and regulation have been mentioned frequently for driving company strategy and organisational change.

Most respondents identified investor expectations (73%), customers, clients or consumers (70%), and executive motivation (70%) as key drivers. This is reflected in the market, with growing demand for new green products, and a desire to reduce the impact of existing products and processes. Investor interest in ESG performance, and particularly climate, is high and rising, and significantly higher for the Italian companies interviewed than found in the total data set. Together, these drivers are increasing the importance of climate change programmes within companies and increasing investment in related projects and initiatives.

In recent years, the increasingly stringent requirements of customers (such as the automotive sector) have prompted top management to rationalise what the company was already doing and set climate objectives for the future. Acciaierie Venete (Industrials)

In recent years, investor expectations around ESG issues have grown, prompting us to work harder, and invest more in sustainability and the way we communicate these projects externally.

ERG (Energy, Resources & Utilities)

A desire for brand and reputational improvements (65%), and regulation and policy (62%), were also cited by most respondents as drivers of change. The effect of regulation and policy was particularly acute within the Financial Services sector, with all but one Banking and Investment Management company interviewed citing this as a driver. We are driven both by a push from above and from operational functions. Top management is convinced that the company of tomorrow will not be able to exist in the market without considering climate variables. This generates a tangible impact for the entire Group. Panariagroup Industrie Ceramiche (Industrials)

Climate change among Italian companies is viewed both as a challenge in terms of a risk to manage, but increasingly also as an opportunity. More than twice as many companies cited climate-related business opportunities as a driver of change than those who cited risk.

02 Targets and commitments

The respondents have typically set ambitious targets (mainly for 2030) against climate change.

Most targets are related to absolute carbon emissions reduction, carbon neutrality, carbon intensity reduction and energy use, but only 16% are SBTi-aligned. Although multiple initiatives are related to low-carbon energy use and generation, only one target mentioned is RE100-aligned. This is far lower than the total population of responses, which show 21% of renewable energy targets being aligned to the RE100 initiative.

Fastweb joined the Science Based Targets initiative in 2020 and at the same time presented its own reduction targets for 2030. The commitment is to reduce Scope 1 emissions by 62%, continue to purchase 100% of its electricity from renewable sources, reduce Scope 3 emissions by 15%. Fastweb is also committed to becoming Net Zero Carbon by 2030 by offsetting all the emissions that cannot be eliminated.

Fastweb (Telecommunications, Media & Technology)

We are committed to reducing emissions (Scopes 1, 2 and 3 from electricity and gas sales downstream) to 37% by 2030 compared to 2019 levels, using a SBTi-aligned method. Gruppo Hera (Energy, Resources & Utilities)

This year 32% of our energy consumption came from renewable sources. By 2022, we plan for 100% of our energy to be renewable. Cellnex Italia (Telecommunications, Media & Technology)

Only 17% of targets are related to Scope 3, highlighting the difficulties businesses face in setting climate targets across the value chain.

Other targets and commitments are related to waste management and the circular economy, and energy and natural resources consumption.

Carbon Neutral (scope 1 and 2) by 2040. A target for scope 3 is also being defined, through a carbon assessment project encompassing the Group's upstream and downstream chain.

Atlantia (Construction & Real Estate)



195

21%

of renewable energy targets being aligned to the RE100 initiative

03 High impact initiatives

In recent years, Italian businesses have increased their efforts to reduce their environmental impact, with a focus on renewable energy and energy efficiency.

Responses show that most corporate climate initiatives focus on reducing emissions related to Scopes 1 and 2. The most frequently cited initiatives are those related to low-carbon energy generation and consumption (54% of respondents mentioned), followed by energy efficiency in buildings (38%) and transportation (30%).. Over 30% of companies setting initiatives related to low-carbon energy generation and consumption have opted to supply their electricity needs solely from renewable sources, with some even deciding to invest in their own renewable plants, for example building photovoltaic plants at their sites.

24% of respondents, predominantly from the Industrials and Energy, Resources & Utilities sectors, have also introduced production efficiency measures. These initiatives often involve the adoption of innovative technologies which promote the optimisation of natural resources, energy and emissions throughout the production process. We aim to reduce our Scopes 1 and 2 footprints through extensive methane reduction measures across our pipelines, the use of new technologies, and reduction of our combustion emissions.

Snam (Energy, Resources & Utilities)

We have adopted an energy efficiency strategy that encompasses all our production and post-production processes, improving the efficiency of compressors, refrigerators, energy-intensive motors, and vacuum pumps. Bayer (Life Sciences & Healthcare)³

Waste reduction and material circularity across the whole value chain can be a powerful driver of reduced Scope 3 emissions. Although initiatives in this area are often early-stage, a push to further improve material recycling techniques has been noted.

Companies are facing challenges in involving customers and suppliers in their climate objectives. In response, some companies are investing in educational projects for both suppliers (including those overseas) and end users.

All free-market customers can request free activation of the Consumption Diary – a digital service through which they can receive personalised reports which compare their consumption against that of a previous year and against similar customers. Gruppo Hera (Energy, Resources & Utilities) Improving energy efficiency in buildings and offices is another common measure, and often represents a quick win in reducing emissions.

Most companies report increased operating expenses (76%) and capital expenses (73%) as the main types of investment area for their climate initiatives, while others reported a reduction in costs as a result of these initiatives. For 59% of initiatives, respondents reported an expected payback within 5 years.

Mapei and one of Italy's most important multi-utility companies have signed an agreement that foresees the use of thermoplastic polymers, coming from innovative recycling processes, for the creation of more durable and sustainable road surfaces. Mapei (Industrials)

04 Barriers to change

Despite their increasing commitments to climate action, Italian companies still face significant internal and external barriers as they transition towards a net-zero economy, with the most commonly cited barriers relating to regulation and technology.

All companies identified at least one barrier to change, with external barriers cited by all respondents and internal barriers cited less frequently (58%).

External barriers

The most frequently reported external barriers include policy and regulation (42% of respondents), and the availability of technological solutions (42%), followed by supplier engagement and education (25%), customer education and engagement (22%), and industry structure (17%).

The lack of availability of technological solutions and barriers associated with policy and regulation appear to be particularly acute in the Italian market. These include the lack of, or high cost of, new technology, long authorisation processes, a lack of clear and adequate national plans, regulatory uncertainty and complexity, and taxation. More than 90% of companies identifying policy and regulation, and the availability of technological solutions, belong to the mature, strongly regulated sectors which have a mediumhigh impact on emissions (such as Industrials, Energy, Resources & Utilities, and Consumer Goods), followed by other regulated sectors such as Financial Services.

Responses suggest Italian companies have been working to involve suppliers and customers in their climate programmes. However, customer perceptions of value remain a difficult and important issue to manage. The involvement of the supply chain is also challenging, given it is typically composed of many SMEs.

Market disruption and the pandemic

The COVID-19 pandemic, in addition to the barriers mentioned above, has deeply impacted the climate commitments made by Italian companies, particularly with regard to new investments. Economic turmoil and uncertainty, particularly in the early stages of the pandemic, required some companies to make hard choices to safeguard their financial stability and business continuity. This often meant putting climate-related commitments and activities on hold or slowing them down. Some sectors also suffered from the strong volatility in energy prices, which impaired businesses' ability to forecast payback periods and rates of return for climate initiatives and investments.

Internal barriers

The most cited internal barriers include company prioritisation and investment (31% of respondents), company employee buy-in (22%) and company capabilities, including data and green skills (19%).

This lack of internal prioritisation is linked to the external barriers – particularly regulation and the lack of strong demand signals from the market, which are central in holding back company investment.

Without adequate 'immaterial' infrastructure related to R&D and innovation, it will not be possible to achieve the vision of zero-carbon mobility. It is essential to accelerate the adaptation of the workforce to a digitally mobile, net-zero economy by putting in place an up-skilling or re-skilling framework which maximises industry competitiveness and job retention but does not neglect the training of new generations. **CNH Industrial N.V. (Industrials)**

Country Profile



Overview

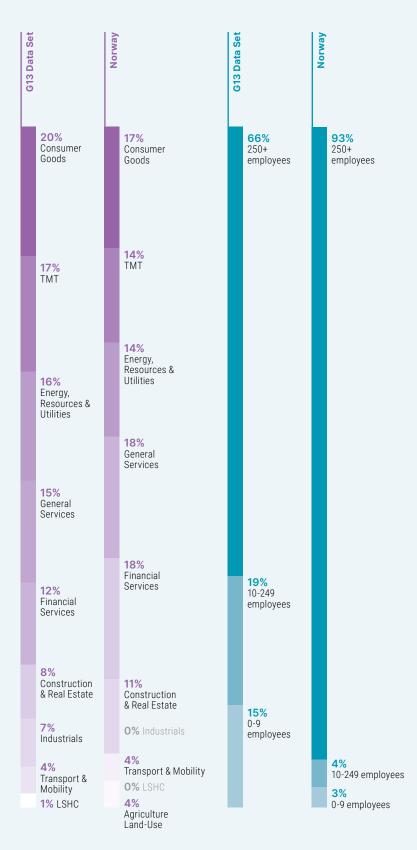
The climate, and climate action, is fast becoming a top priority within Norwegian politics. In February 2020, Norway submitted its enhanced Paris Agreement target (NDC), which sets a target of reducing emissions by at least 50% and towards 55% below 1990 levels by 2030.

However, the Norwegian economy is still heavily reliant on fossil fuels. Approximately 6% of the total workforce are directly or indirectly working in the oil and gas industry. Net exports of oil and gas constitute one third of total exports, and 14% of GDP originates from fossil fuel industries. Despite this, it is becoming increasingly clear that new opportunities will arise from climate action, and the Norwegian economy is well positioned to seize these opportunities.

These aspects are explored in interviews with 28 Norwegian companies, representing a range of sectors and business sizes: from four to more than 30,000 employees, including local ferries in the Norwegian fjords, to one of the world's largest energy companies. They all agree that climate action is urgent and that they can offer solutions to catalyse the transition to a netzero economy.

Comparison of the Norwegian Data Set to the G13 Data Set

Comparison of the distribution of firm size and sector between the Norwegian data set and the wider G13 data set (i.e., 93% of Norwegian companies are large firms with more than 250 employees, compared to 66% in the wider G13 data set).



Key messages

Ambitious targets and commitments are being made across industries. However, most companies restrict these targets to focus solely on reducing Scope 1 and 2 emissions, with targets which address Scope 3 emissions largely confined to larger, well-established organisations.

83% of respondents identify pressures stemming from within their organisation as a driver to address climate change, such as employee expectations and executive motivation, while 79% of respondents identify demandside pressure from customers, clients and consumers.

We believe in the importance of "the tone of at the top". Both the top-down and bottom-up attitudes towards sustainability contribute to the climate change agenda.

Sweco Norge (General Services)

65% of initiatives are focused on directly delivering carbon emissions reduction. These initiatives typically reflect companies' broad ambitions to grow their business in a more sustainable manner, or engage in focused initiatives with specific targets, such as the circular economy.

The lack of consistent policy and regulation is a commonly cited barrier to progress. Companies refer to the complexities and friction involved in trying to integrate EU mandates into Norwegian policy, as well as the slow pace of regulatory bodies in catching up with technological advances. Both slow progress despite the strong corporate motivation to act.

01 Targets and commitments

Norwegian companies are largely focused on decarbonisation targets which address their own operations. They are less active in setting targets which cover suppliers or customers.

We aim to reduce both energy intensity per unit [kWh/unit] and energy intensity per revenue [kWh/MNOK] by 40% by 2030 versus 2015 levels. These targets affect our Scope 1 and 2 emissions and are an integral part of our climate strategy. Flokk (Consumer Goods)

There is a broad spread across sectors in the type of targets set, with no one type of target being dominant in any specific sector. However, the types of target set by an organisation are correlated to the level of maturity of their climate action programme. For example, businesses that primarily seek to reduce their own internal footprint do not necessarily have climate action as an integral, or integrated, part of their business model. In contrast, businesses with clear Scope 3 emissions targets tend to have climate integrated into their strategy and operating model.

The small proportion of businesses stating Scope 3 emission targets tend to come from mature, well-established companies, where targets typically include climate neutrality for suppliers and supply chains. The presence of Scope 3 targets appears, at least in part, to stem from the higher bargaining power of these organisations and their enhanced measurement capability.

We have several sustainability requirements for our suppliers, and weight sustainability at a minimum of 20% in our tender processes. We map all suppliers against annual metrics, including the integration of sustainability into their organisational structure and culture, their environmental performance over time, their targets, and whether they have environmental quality management systems in place. We also actively engage with suppliers and business partners to influence improvement. Storebrand (Financial Services)

Having been climate neutral since 2007, we have now extended our target to our supply chain by limiting Scope 3 emissions. If suppliers do not meet our climate neutrality requirement, we exercise our market power to look for alternative suppliers. Our aim is to unleash a climate neutral supply chain domino effect. Fjordkraft (Energy, Resources & Utilities) The predominant focus on Scope 1 and 2 emissions by most Norwegian businesses reflects the challenging nature of trying to persuade external actors to commit to climate targets, especially when the business has low bargaining power over its suppliers.

We seek to be carbon neutral across all our office facilities and operations by 2030. As a consultancy firm providing services to clients in the infrastructure, construction, property and real estate sectors, our own carbon footprint is limited relative to the carbon footprint of our clients. However, we seek to clean up our own house as soon as possible.

Multiconsult (Construction & Real Estate)

Other types of carbon reduction targets and commitments (outside of the commonly recognised categories, such as SBTs or RE100), stand out as the most dominant category for Norwegian businesses. These targets generally reflect company ambitions to create market opportunities from climate action, and to grow their business in a more sustainable manner.

We aim to grow faster in service areas that have a more positive climate impact, with relevant KPIs measuring growth. Consulting Company (Construction & Real Estate)



02 Drivers of change

Nearly 80% of respondents identify commercial opportunity through changes in customer, client and consumer expectations as a main driver of change. Norwegian businesses see a clear corporate climate agenda as a way of differentiating themselves from competitors, and as commercially viable – if not additive.

To stay relevant with our customers, we need to understand their thoughts and perspectives on climate change. Having climate change high on our agenda will reassure our customers that we understand the risks we are facing. Gjensidige (Financial Services)

75% of respondents see the goal of retaining existing employees and attracting relevant talent as a key driver of the pressure to change. Employees are become increasingly conscious of climate change and are expecting company plans to be both clear and ambitious. Our potential and current employees are all pushing us towards a net-zero future, where we exceed our global ambition of a 50% reduction of GHG gases by 2030. Potential employees are questioning us on our climate commitments during interviews – challenging our ambitions and climate strategy. We need to stay one step ahead to remain relevant. Sweco Norge (General Services)

58% of respondents list investor expectations as a primary driver, reflecting a growing interest among Norwegian investors in business' climate credential. However, few entities call out investor expectations and funding requirements as a primary driver of change (only 8% of respondents).

The broader societal shifts following climate change have acted as both an important external and internal driver. From an external point of view, we have experienced a change in investor expectations around our climate agenda in the recent years, which in turn has affected reporting requirements (e.g. CDP, TCFD). Sparebanken Vest (Financial Services)

Only 25% of respondents list brand and reputational improvement as a main driver of change. This may indicate that the drivers of change which face businesses in this comparatively mature market are more specific, or that brand remains primarily influenced by other factors.

We are experiencing current and future employees constantly pushing on climate change, with several initiatives launched by both recently hired and senior employees. We are also seeing the brand effect of our innovation initiatives, both for commercial opportunities and talent recruitment. BKK (Energy, Resources & Utilities)

03 High impact initiatives

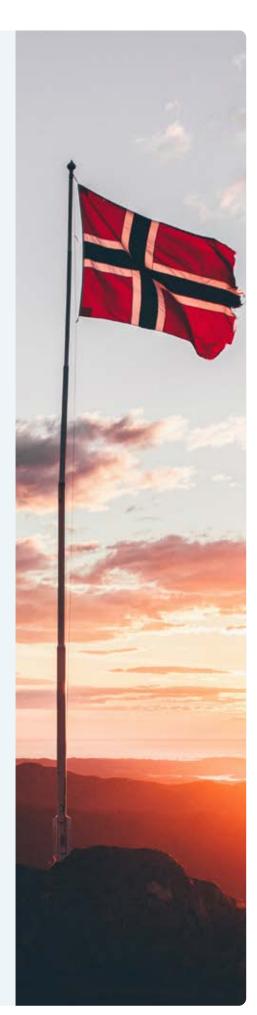
Initiatives contributing to climate awareness, climate mitigation, and reducing, preventing or capturing emissions are by far the most numerous among Norwegian respondents (92% of target responses). This is consistent with the predominance of Scope 1 and 2 targets among all targets set by respondents.

These initiatives primarily relate to internal emissions reduction strategies, such as rolling out fossil fuel-free car fleets, increasing energy efficiency in buildings, switching to renewable energy sources, and compensating or offsetting emissions. Organisations that manage to engage their whole value chain are more effective in GHG emissions reduction.

Our PowerHouses produce more renewable energy than they consume, so they introduce renewable energy to the Norwegian power grid and improve the energy mix. Consulting Company (Construction & Real Estate) Our marketplaces facilitate the reselling and reusing of items rather than scrapping or throwing them away, contributing to reduced GHG emissions as fewer items are manufactured, and thus fewer natural resources are consumed.

Schibsted Media Group (Telecommunications, Media & Technology)

Only a small share of Norwegian respondents focus on initiatives related to climate resilience. While average temperatures are increasing and extreme weather events are becoming more frequent in Norway, the acute physical effects from this climate change are still perceived as insignificant.



04 Barriers to change

46% of respondents cite policy and regulation as the primary external barrier to successfully implementing climate initiatives and internal prioritisation, particularly with respect to investment decision-making and the allocation of funds for initiatives, as the most frequently cited internal barrier.

External barriers

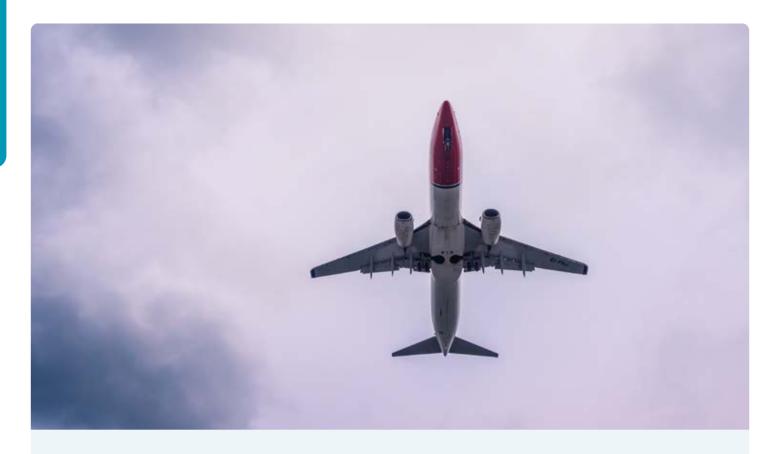
Several businesses in the Norway sample highlight challenges in interpreting the EU taxonomy, as not all definitions are equally applicable to Norwegian entities, nor are they easy to reconcile with existing Norwegian standards and certifications. This is barrier especially evident among businesses in the Construction & Real Estate sector, where EU requirements are seldom applicable or relevant to the Norwegian market given its different seasonal variations and temperatures relative to continental European countries. This makes compliance challenging.

There are economic, developmental, and geographical differences between the different countries in which we operate. In the construction and real estate sector, there are large differences between Norway and other countries in terms of what classifies as an energyefficient building. Sparebanken Vest (Financial Services) Several respondents emphasise the importance of adapting regulation to incentivise repairs, maintenance and recycling, rather than the production of new products. It is still typically cheaper to treat used materials as waste than process them for reuse. This suggests that value chains, taxation and regulation are still largely based on a linear economy and are not adapted for the circular economy.

Policy and regulations currently rely on a linear economy. It is cheaper to dismantle a building and rebuild it rather than transform the building or reuse its materials. As an example, VAT exemption does not apply to re-used items. Moreover, there are no fees for the disposal of construction waste and old materials. Schibsted Media Group (Telecommunications, Media & Technology) New technology is hard to integrate because of slow regulatory change. Current regulations are dated and are too inflexible for the current and emerging market environment. This slows the development of new technologies, as well as the implementation and use of innovative and low-emission solutions.

Slow development of relevant regulations for technology and design is hindering innovative and sustainable solutions. Available technology is far ahead of current regulation, with lobbying for change being both time and resource consuming.

Brim Explorer (General Services)



Respondents also refer to a lack of relevant incentives from the Norwegian government for sustainable initiatives. Fossil fuel consumption and the use of non-renewable resources are currently cheaper options than renewable alternatives. This clearly reduces business incentives to transition to a more sustainable energy mix.

We would encourage authorities to increase the carbon tax, as it is currently too cheap to burn carbon materials. A new taxation scheme incentivising companies to recycle rather than destroy materials is needed to change production and product consumption. It must be expensive to produce and consume pollutive and emitting products relative to recycling old materials. Jernia (Consumer Goods)

Businesses also mention difficulties in persuading customers that embedding sustainability does not necessarily imply an increase in price or a compromise in the quality of products or services. While these perspectives are largely based on misconceptions, educating consumers takes a considerable amount of time and energy. Client and customer needs vary greatly based on individual profitability, as well as geographic locations, but sustainability and climate-related preferences are still muted.

Our business model relies on customer preferences. We need to nudge customers to understand that material circularity does not compromise quality, and that while our products may bear signs of being made from recycled material, this is also a matter of taste.

Flokk (Consumer Goods)

Internal barriers

Expectations of short-term profitability act as a barrier to launching the most ambitious initiatives, due to a perceived trade-off between sustainability and profitability. Business responses implied that climate action is still not a top priority in investment decision-making or day-to-day operations. The trade-off between investing in more expensive technology and solutions that contribute to limiting climate change versus investing in relatively inexpensive solutions which don't take into account climate considerations still lands in favour of more inexpensive solutions.

We often find that there are many initiatives we would like to invest money and time in, so we need to prioritise and choose between some solutions that could be more beneficial to the environment. However, perceived return on these solutions is assumed to be smaller versus projects that will not necessarily improve climate action.

NorgesGruppen (Consumer Goods)

Several respondents are concerned by the lack of relevant green skills found within their talent pool and the wider labour market (21%), with these capabilities concentrated in the hands of a select few specialists. Organisations cite both a capability gap in the expertise of technical staff with regards to specific sustainability topics, as well as a capability gap in the general awareness and engagement of employees and management with the topic of climate change. Relevant knowledge and skills related to climate change are crucial in making sustainability a competitive advantage within a business.

Knowledge, expertise, and interest in climate change within our organisation is currently below desired levels. We need to increase our own knowledge about climate change, and the knowledge of our business partners, to increase revenue. This journey begins with key account managers and sales personnel.

Microsoft Norge (Telecommunications, Media & Technology)

We lack knowledge and expertise on climate change at an executive level; the person responsible for spearheading initiatives does not have any relevant sustainability experience. In addition, none of our employees possess the relevant knowledge or skills either. We see a need for improvement across the organisation.

Service Company (General Services)

Poor data quality, and inconsistent measurement and reporting to baseline for both emissions and resilience, are cited as a barrier to progress by 8% of respondents. The required data might not be available and, if it is, is fundamentally challenging to understand. This frustration relates to both internal systems and the collection of external data, and was mainly concentrated among larger organisations who face stronger commercial pressure to gather, consolidate, and process data on their climate performance. These frustrations are compounded by their large reporting remit, spanning the entire value chain, and a lack of sufficient methodologies.

We have spent substantial time and effort collecting relevant data on our carbon accounting and our environmental figures, but actually understanding the quality of the data in order to say something meaningful is more demanding.

NorgesGruppen (Consumer Goods)



🛑 Russia

Overview

Russia is the world's fifth largest source of GHG emissions and the second highest per capita emitter; the country accounts for 4% of global emissions. Russia's GHG emissions are similar to the global distribution by sector and have remained relatively stable over recent decades. In 2018, 89% of GHG emissions were generated by the energy sector, with 5% generated by waste management, 4% by agriculture and 2% by industry¹.

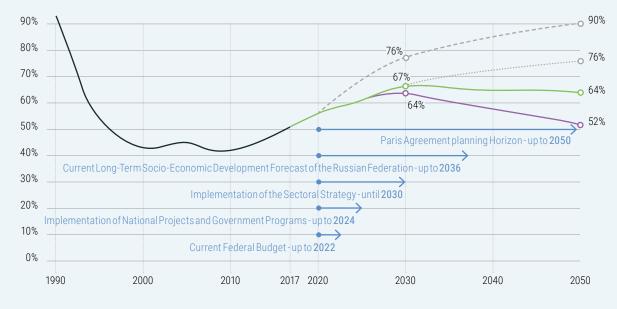
Russia's draft 2050 Longterm Low GHG Emission Development Strategy explores three decarbonisation scenarios for the Russian economy, including the energy sector. GHG emissions are expected to fall by 48% under the most optimistic scenario, while the most pessimistic scenario would only achieve a 10% reduction by 2050 (compared to 1990 levels). However, analysis of Russian strategic documents do not suggest that the country will increase its ambitions in the medium term.

Although specific long-term decarbonisation measures and mechanisms are yet to be determined or approved, there have been some regulatory advances, particularly within financial reporting and methods of calculating emissions absorption. This, alongside other factors, is influencing private sector awareness of climate action. We surveyed 20 companies from various sectors, including steel, mining, energy, telecommunications, retail, industrials, and manufacturing, to discover what action they are taking. Respondents included both international companies with a footprint in the Russian market and Russian-owned businesses. These were all large organisations and corporates, where the climate agenda is most acute and developing faster than other Russian companies.

¹ Climatewatchdata.org. 2021. Historical Greenhouse Gas (GHG) Emissions | Climate Watch. [online] Available at: <<u>https://www.climatewatchdata.</u> org/ghg-emissions?end_year=2018&source=CAIT&start_year=1990> [Accessed 30 September 2021].

Figure 1 Long-term Development Scenarios for Russia

Long-term development scenarios for Russia based on the draft 2050 Long-term Low GHG Emission Development Strategy released in 2020².



- National Cadastre, 2019
- ---- "Businss-As-Usual" scenario
- ----- Intensive scenario
- "No Government Incentives" scenario
- Baseline scenario

Key messages

Large organisations and corporates are actively developing their climate activities, despite limited regulation. The maturity of climate commitments and public reporting among these organisations corresponds to international best practices.

The main drivers of the transition towards a low-carbon economy were investor demands and emerging climate regulations in export markets. The low maturity of Russia's climate regulation and the lack of a transparent regulatory framework were the most frequently cited barriers.

80% of respondents set goals related to GHG emissions reduction, although some companies have currently only set energy efficiency goals which indirectly influence GHG emissions. 45% of the companies surveyed had relatively shortterm goals (targeting up to and including 2025). Although these short-term goals make organisational strategy simpler and outcomes easier to achieve, this strategy is not conducive to achieving global targets and a net-zero future. More ambitious climate targets and wider uptake of action are required to deliver necessary results.

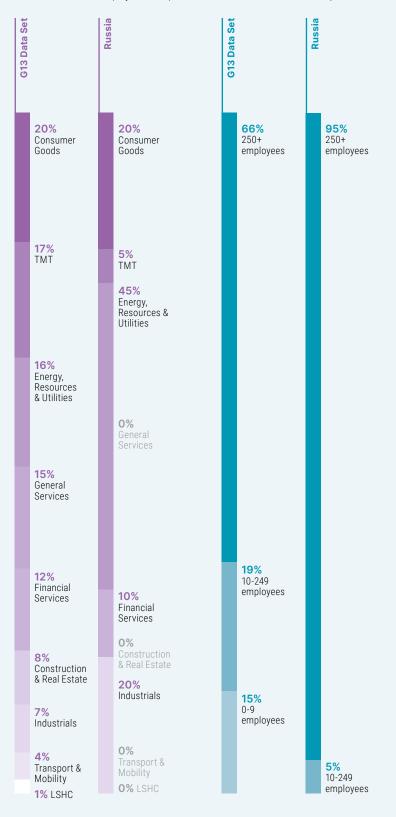
80%

of respondents set goals related to GHG emissions reduction

² The Ministry of Energy of the Russian Federation, 2020. Draft Long-term Development Strategy with Low Greenhouse Gas Emissions to 2050. Moscow. [Note: The draft Strategy is set to be updated by the end of 2021].

Figure 2 Comparison of the Russian Data Set to the G13 Data Set

Comparison of the distribution of firm size and sector between the Russian data set and the wider G13 data set (i.e., 95% of Russian companies are large firms with more than 250 employees, compared to 66% in the wider G13 data set).



Key facts:

45% of respondents said that they had set climate targets for 2025, while only 10% had set long-term strategic goals for 2030 and beyond.

One in four respondents have SBTi targets. Most other companies stated that this initiative was difficult to apply to their sector.

None of the respondents have joined the RE100 initiative at the time of the survey.

80% of respondents set targets related to reducing GHG emissions, including energy efficiency targets.

80% of respondents cited brand and reputational improvements, and **75%** cited stakeholder expectations as the main drivers for implementing climate change initiatives.

17 out of 20 companies cited the inadequacy or immaturity of the Russian regulatory environment as one of the main barriers to change.

01 Targets and commitments

80% of businesses set targets to reduce direct or indirect emissions, but only five set goals in accordance with SBTi. None of the respondents joined the RE100 initiative and or had committed to 100% renewable electricity. Three-quarters of companies that participated in the survey had an approved a climate strategy. However, many had not yet drafted a detailed roadmap to achieve strategic objectives.

Global corporates in Russia tend to set sustainability goals faster than national corporates, particularly in relation to the climate change agenda. One reason for this is that global organisations are subject to cross-geographical climate requirements and pressures, which are then cascaded to their Russian subsidiaries. Subsequently, the respondent Russian subsidiaries of international organisations have already set carbon neutrality and alternative energy targets, aligning with their global corporate strategy.

Our strategy applies to all countries where the business operates, with specifics varying from country to country depending on local legislation, climatic conditions, and the overall national sustainable development agenda. To achieve carbon neutrality, we are implementing initiatives to reduce GHG emissions and improve the energy efficiency of production processes. Baltika Brewery (Consumer Goods) However, this approach has its challenges. Imposing and applying corporate, crossgeographical targets do not consider the specific structure of the Russian market or climate considerations. Developing local strategies and operational targets for the Russian subsidiary would deliver more effective results. Nonetheless, clear, precise targets set at the corporate level help Russian subsidiaries adopt more ambitious and comprehensive decarbonisation targets. One respondent stated they were intensifying their efforts to set climate goals and implement climate strategies because of this.

More than half of the organisations interviewed had relatively short-term goals (targeting up to and including 2025). Although this makes organisational strategy simpler and outcomes easier to achieve, this strategy is not conducive to achieving global targets and a net-zero future. More ambitious climate targets and wider uptake of action are required to deliver necessary results.

65% of respondents had set gross GHG reduction targets or targets that aim at reducing emissions intensity. For example, steelmakers are primarily targeting specific GHG emissions, driven by the anticipated introduction of the Carbon Border Adjustment Mechanism (CBAM) and EU carbon intensity benchmarks. The EU's active pursuit of CBAM has already had a profound impact on the GHG initiatives of Russian businesses. A proactive approach is the only winning strategy to ensure that the heavy industry sector can remain competitive amid tightening regulations on imports and exports of carbon intensive products. Respondents in these sectors stated that they had specifically decided against setting targets in line with the widely adopted frameworks of the Science-Based Targets initiative (SBTi) as these are not always applicable to their sector.

The solutions set forth by the SBTi do not properly account for certain opportunities available to steel producers. For this reason, we joined the Net-Zero Steel Pathway Methodology project, which is developing realistic approaches to decarbonisation, specific to the iron and steel industries, and their wider ecosystems. NLMK (Energy, Resources & Utilities)

Rather than set SBTs, Russian businesses prefer to develop their own decarbonisation strategies, despite acknowledgement of the importance of SBTs. Threeguarters of companies surveyed have already approved a climate strategy but are still working on a roadmap with detailed steps on how to achieve their strategic goals. A clear understanding of the difference between netzero and carbon neutrality is still taking shape, and many respondents found it difficult to answer whether their goals met certain criteria.

A decisive factor for successfully pursuing decarbonisation is the proactive engagement of senior

02 Drivers of change

The organisations surveyed identified a wide range of drivers to develop climate strategies. More than 80% of respondents cited investor expectations, and 75% cited brand reputation development as key drivers. Major societal changes were also an important driver for over 70% of respondents.

More than half of respondents said that their actions are driven by regulatory developments, TCFD, CDP reporting requirements, strong commitment from the C-suite, management. Most respondents said that their Boards were directly involved in the corporate climate strategy. This accelerated the approval process for internal strategies and acted as a measure for the business' climate action maturity.

Although most investment decisions are made with no reference to ESG considerations, some Russian companies are already deploying specific sustainability metrics to assess the investment attractiveness of projects. Some are even abandoning economically viable projects with 'low' sustainability ratings in favour of projects with an optimal mix of financial and ESG indicators. The most cited tools include investment analysis of shadow carbon pricing and estimating the cost of decarbonising an existing enterprise.

We have become the first petrochemical company in Russia to sign a loan agreement whose rate is tied to ESG performance. The loan rate fluctuates depending on the company's results against its Sustainable Development Strategy. Targets include reducing greenhouse gas emissions according to specific indicators (tonne of CO₂ per tonne of produced/ sold products) in two company segments.

PJSC SIBUR (Industrials)

and emerging business opportunities. A minority mentioned pressures from stakeholders, such as their customers, suppliers, and employees, as well as physical risks like the increasing intensity of natural disasters.

A significant increase in pressure for change has occurred over the last few years due to societal shifts and transitional risks, such as increasing ESG-related investor inquires, and policy and regulation. Accurately calculating GHG emissions is critical for our carbon neutrality ambitions and targets, as we are able to develop more effective climate strategies.

X5 Group (Consumer Goods)

By deploying Yandex's routing platform, we can optimise our transportation routes and reduce the amount of fuel consumed, thus lowering both GHG emissions and fuel costs. Although this initiative did not have a significant impact on our financial performance, it delivered a noticeable decrease in direct GHG emissions from road transport.

Baltika Brewery (Consumer Goods)

03 High impact initiatives

Over half of respondents are implementing more than one initiative to combat climate change. Almost all were undertaking baselining and analytics, had already conducted climate risk assessments, and were proceeding to develop climate targets and strategies based on the results. This is indicative of the relative nascent maturity of the Russian market.

The key goal of our recycling initiative is to sort all waste and recycle as much as possible in stores and warehouses. To achieve this, we aim to optimise the packaging of certain goods (use less corrugated cardboard and plastic, no paper labels, and fewer wooden pallets), install waste sorting bins in stores, and set up collection points for used batteries and light bulbs. Leroy Merlin (Consumer Goods)³ Key trends among companies included transitioning to renewable energy through bilateral agreements with energy providers, purchasing I-REC certificates, and improving energy efficiency. These developments help reduce direct and indirect energy emissions, and contribute to the overall reduction of GHG emissions in Russia.

Notable company initiatives include increasing low-carbon energy use (namely solar and wind energy) and signing direct contracts with renewable energy suppliers. We also introduced conveyor transport systems, converting the mining equipment fleet to electric. Polymetal International plc (Energy, Resources & Utilities) Mobile compression stations allow us to connect two pipe sections, so the gas does not escape, but circulates inside the station. This technology reduced the volume of emissions by 8 million tons in 2020, and an expected 15 million tonnes in 2021. Gazprom (Energy, Resources & Utilities)

Projects like these are not always perceived to bring tangible economic benefits, so their discussion and implementation require a significant amount of effort from within an organisation to justify the considerable investments.

04 Barriers to change

Companies face major external barriers when developing climate agendas and realising their targets. Almost all respondents cited the lack of maturity in policy and regulation, and the lack of transparent frameworks as barriers. For example, respondents often said that the low-cost effectiveness of potential projects is not balanced by sufficient regulation to mitigate risk or incentivise action. This amplified perceived risk from climate activities. In addition, the lack of awareness concerning the urgency of the climate crisis among Russian customers means that demand for low-carbon products is lacking. Therefore, pioneer companies are burdened with the additional costs of promoting low-carbon products on the local market.

There are also constraints in market infrastructure. Insufficient renewable energy supply (less than 1% of electricity production comes from sun and wind power⁴) was named as the key barrier to decreasing Scope 2 emissions. In a highly regulated and rigid electricity market, many companies find it laborious to negotiate contracts for supplying low-carbon energy, which makes energy from nuclear and hydroelectric power plants practically unobtainable. This problem is most acute for businesses that deal in fastmoving consumer goods, such as retailers.

³ Leroy Merlin is a French company but was interviewed by Deloitte Russia.

The Ministry of Energy of the Russian Federation. 2019. Main Characteristics of the Russian Electric Power Industry. [online] Available at: <<u>https://minenergo.gov.ru/node/532</u>> [Accessed 30 September 2021].

Appendix

Goal 13 Impact Platform - Interview questions

Climate Targets & Commitments

 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 For each of these initiatives:

Who is involved in this initiative:

- Which functions are involved in the management or delivery of this initiative? What is the role of Finance in planning & execution?
- 4b What impact has this initiative had (or is it expected to have) on your climate transition:
 - 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 What commercial impact has this initiative had (or is it expected to have):
 - 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 this 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

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Acknowledgements

Special thanks to James Williams, Tonio Gaida, Josh Brown, Derek Pankratz, Ben Combes, Tom Thackray, Tom Butcher, Emily Auckland, Page Motes, John Pflueger, Lucy Williams, Narisa Phinichkusolchit and Honor Shelton.

We would also like to thank all the 400+ contributing companies and partners who participated in the research, as well as the 150+ volunteers across Deloitte UK who led interviews and contributed to this report.

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More information

If you would like further information on the platform, please contact the G13 team at **goal13impactplatform@deloitte.co.uk**

Access the platform: www.goal13impact.com



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