Towards TCFD compliance

Observations on reporting trends
May 2021

EY
Building a better working world

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1 Introduction

Regulatory and investor context

The UK has an ambition to be the first country in the world to make the Task Force on Climate-related Financial Disclosures'[1] (TCFD) aligned disclosures fully mandatory across the economy, with the majority of measures planned to be in force by 2023. In December 2020, the Financial Conduct Authority (FCA) issued a new Listing Rule[2] requiring that, for accounting periods beginning on or after 1 January 2021, companies with a premium listing include a statement in their annual report and accounts (ARA) setting out whether they have made disclosures consistent with the recommendations of the TCFD, or to explain why they have not done so.

Complementary to the FCA's new rule is the proposal issued by the Department for Business, Energy and Industrial Strategy (BEIS) in March 2021, to mandate climate-related financial disclosures beyond premium listed entities to other public interest entities, AIM companies, large private companies and Limited Liability Partnerships (LLPs) for accounting periods beginning on or after 6 April 2022.

The corporate governance research body, Institutional Voting Information Service (IVIS) of the **Investment Association** (IA), will give an 'Amber Top[3]' in its environmental, social and governance (ESG) report to all companies with year-ends on or after 31 December 2020 in sectors identified by the TCFD as 'potentially most affected by climate change' that do not address all four TCFD recommendations.

Momentum and activism from investor and environmental pressure groups is also on the rise. **ClientEarth**, an environmental advocacy group, concluded that the majority of FTSE 250 companies were not adequately reporting on climate change in the previous reporting cycle.[4] This is consistent with findings from EY's Global Climate Risk Disclosure Barometer survey over the last three years.

1 See Appendix 1 for a summary of the four TCFD recommendations and eleven recommended supporting disclosures.
2 See Appendix 2 for FCA's Listing Rule for premium-listed companies.
3 IVIS does not provide voting recommendations. Each report is **colour coded** to reflect any breaches of best practice or to highlight areas of concern. The colour showing the strongest concern is Red, followed by Amber, which shows a significant issue to be considered. A Blue Top indicates no areas of major concern, whilst a Green Top indicates an issue that has now been resolved.
4 **Accountability Emergency; A review of UK-listed companies' climate-change-related reporting (2019-20), ClientEarth**, February 2021.

The 'Say on Climate' initiative demands that listed companies publish a plan to reach net zero emissions, including specific short-term as well as long-term targets. According to **ShareAction**, the "13 most important ESG resolutions" to watch during the 2021 AGM season include resolutions on climate change at **Barclays** and **HSBC**. Since its launch in December 2020, more than 40 new asset managers signed up to the **Net Zero Asset Managers** initiative, pledging to make their portfolios net zero by 2050 or earlier. A coalition of large investors, which include **Amundi** and **Legal and General Investment Management**, have also called on global banks to defund carbon emitters, and activist investors are taking action on companies they feel are falling short on climate ambition by calling for the nomination of new non-executive directors more capable to manage the energy transition.

The Financial Reporting Council (FRC) has included climate-related reporting as an area of focus for its corporate reporting reviews in 2021.

Objectives

Given the context above, our objective is to help premium listed companies in the UK respond to mandatory reporting requirements and investor expectations in relation to TCFD recommendations and, where disclosures have already been made, assess their maturity.

We also hope that the publication will be helpful for other companies that will fall in scope for mandatory TCFD reporting in the future, as they develop their understanding of climate risks and opportunities, embed climate considerations into strategy and risk management processes, and communicate on progress.

In February 2021, we published a **short article** discussing what premium listed companies could consider disclosing initially under the four TCFD recommendations (also known as pillars), given the direction of travel. Since then, we have reviewed ARAs of December 2020 reporters, monitoring the progress made so far towards TCFD compliance. This publication builds on the themes of the article and supplements them with:

- Emerging observations and noteworthy examples from FTSE 100 and FTSE 250 companies with years ending on or after 31 December 2020 to provide insight into developing practice.
- Considerations for underpinning processes to support reporting against the TCFD recommendations.
- Tips for reporting, including in respect of the integration of information across the ARA.

As we have seen previously with new reporting requirements, it usually takes about three reporting cycles for leading practices to evolve. Companies should prepare their own meaningful disclosures based on the specific circumstances of the company and use the examples in this publication as a reference — not a template.

2 Emerging observations

Based on our assessment of over 100 ARAs of 31 December 2020 FTSE 100 and FTSE 250 reporters, we have summarised our emerging observations on TCFD reporting.

TCFD reporting

Below are our overall findings ahead of the implementation of the FCA's Listing Rule:

1

Around a quarter of companies have reported at a high level against the four TCFD pillars.

2

Around half of the companies reported against all (**Unilever** 2020 ARA) or most (see **Capital & Counties Properties** 2020 ARA (pp63-65)) of the 11 TCFD recommended disclosures in their ARA or a sustainability report, with the most common missing disclosures relating to the outcomes of climate scenario analysis.

3

Some companies limited their disclosure in the ARA to a table cross-referencing the majority of the recommended disclosures to supplementary information within a separate sustainability/ESG report, and/or Climate Disclosure Project (CDP) report. A few companies such as **Barclays**, **Standard Chartered**, **NatWest**, **EVRAZ** and **Rio Tinto**, issued a dedicated Climate Change/TCFD report.

4

A common approach was to include a dedicated 'TCFD section', within the ARA describing the impact of climate change on governance, strategy, risk management as well as metrics and targets (**NatWest** 2020 ARA, pp69-83).

5

Some companies, like **The Weir Group** 2020 ARA (p66), took a more integrated approach – a separate TCFD section cross-referencing other sections of the ARA that included newly added disclosures relating to TCFD. Companies that chose this approach most often referred to governance information included in sustainability committee reports and principal risk disclosures provided as part of the broader enterprise risk management (ERM) narrative.

6

A number of companies, such as **ITV** 2020 ARA (p63), included a TCFD roadmap or another form of progress reporting illustrating the actions taken and priorities over the next few years. Such roadmaps may be relevant to companies that will come into scope for TCFD compliance in the future.

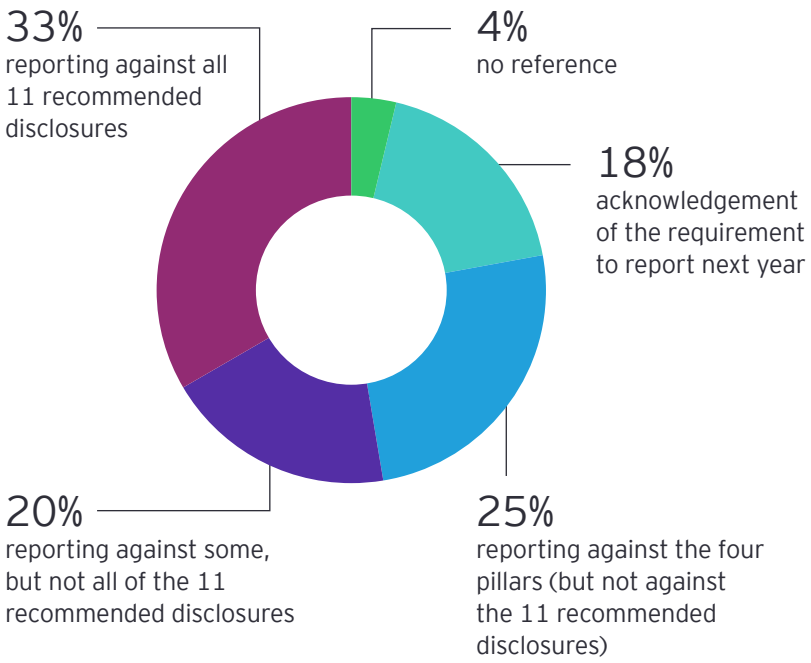
7

Some companies referenced climate change in their viability reporting, although this was not common practice (one example being **Rolls-Royce Holdings plc** 2020 ARA (p55)).

8

Very few companies translated climate risk analysis into financial reporting – the intent of TCFD. Almost no companies referenced it in their financial statements. Exceptions to this included **Anglo American** 2020 ARA (pp170-181) who referenced climate considerations in respect of their financial statements, and **Smith + Nephew** 2020 ARA (p88) which explicitly stated that there were no material impacts on their financial statements.

Figure 2.1
Coverage of TCFD reporting requirements



These statistics reflect the coverage of TCFD reporting requirements by the companies within our sample. Whilst we reference examples of leading practice, disclosures more broadly are still in their infancy. Later this year, EY will publish the 2021 EY Global Climate Risk Disclosure Barometer[5], assessing not just the coverage, but also the quality of climate risk reporting across a global company data set.

5 See the 2019 EY Global Climate Risk Disclosure Barometer based on a review of 2018/19 reporting from over 950 companies across a range of sectors in 34 markets.

EY's point of view

Whilst having the TCFD disclosures in a separate section in the ARA may make the information easier to find and compare across companies, we encourage a more integrated approach. Incorporating material TCFD disclosures within key sections of the ARA, such as strategy, s172 statement and governance reporting, helps demonstrate that a company's response to climate change is not a 'tick box' exercise, nor something separate to usual process, but something that is becoming embedded throughout the organisation. To help companies achieve this, we supplement our hallmarks of leading disclosures in this report with considerations on their integration across the ARA.

This approach requires a 'TCFD cross-reference index' containing a brief summary and/or specific page references to the relevant sections of the ARA and/or other publicly available reports to allow readers to find information relating to TCFD quickly and effectively.

We expect that as stakeholder demand for quality climate-related disclosures increases, more companies, especially those in high-risk sectors, will produce standalone TCFD reports (or have TCFD sections within sustainability reports). These will be used to provide more granular information to stakeholders, and specifically investors, on the assumptions within decarbonisation pathways, carbon budgets, scenarios, etc. For many reporters, including this level of detail in the ARA may not make it fair, balanced and understandable (FBU); but access to this information will become essential for investors to be able to consider the impact of climate change on their own portfolios.

"Companies used to have a standalone Corporate Social Responsibility (CSR) report. For many, this then evolved into a separate CSR section in the ARA. Now, the majority of companies integrate stakeholder and sustainability reporting within the ARA — this is what will need to happen with TCFD reporting.

Maria Kępa, EY UK Corporate Governance Team

Practices and processes underpinning disclosures

Reporting can only ever be an outcome of the underpinning practices and processes adopted by a company. Analysing disclosures provides some insight into the progress that companies are making into embedding climate considerations across the organisation. In general, most companies are yet to comprehensively demonstrate how they are considering the range of physical climate risk and transition climate risk scenarios from a risk management and strategic perspective. However:

> “In most sectors, companies are not reducing emissions fast enough to hit their 2030 targets. In no sector are companies reducing emissions fast enough to meet their 2050 targets.
>
> **Transition Pathway Initiative State of Transition Report 2021**

1

Some companies, particularly those which are more obviously exposed to the transitional climate risks, have already integrated climate governance within their existing board committees such as Health, Safety and Environmental Committees or Sustainability Committees. Others have set up new committees or internal climate-related working groups. Some address this topic directly at the board level, without explicit committee support. However, there is a lack of detail on the selection process, training or skills of members of such bodies which could give rise to concerns about the competencies of boards around climate.

2

Although many companies have announced ambitions to achieve net zero by 2050 or sooner[6], it is unclear whether climate considerations have been given sufficient attention on board agendas. There is limited information on whether these ambitions are underpinned by a detailed strategy or capital allocation plans, nor whether their ambition for net zero includes their full value chain.

3

Climate change is often reported as a principal or emerging risk (see Figure 2.2); however, despite this, there remains limited quantification in terms of its financial impacts. This suggests there are gaps in capabilities, data and tools, especially in relation to scenario analysis. In order to take actions now, and over the next decade, companies need to understand and disclose the overall impact over the long-term horizon. This requires using scenario analysis, without which it is difficult to consider an appropriate strategic response to climate-related risk.

6 **The Climate Action100+ Net-Zero Company Benchmark** (March 2021) reveals 52% of companies assessed comprising the world’s largest corporate emitters have announced an ambition to achieve net zero by 2050 or sooner.

4

There remains confusion from companies as to the difference between their own net zero pathways (in line with science-based targets, for example) and the implications for the company in the context of a net zero transition. The difference is subtle but meaningful, in that some organisations themselves are low emitters, but form part of emissions-intensive supply chains that will be significantly disrupted by the transition. Once again, scenario analysis will be fundamental in establishing the full business model impacts across the organisation's value chain.

5

Once companies understand the wider impacts, including material scope 3 emissions (indirect emissions on which the organisation has an impact), they should engage with their supply chain to understand how they can support and enable them with emission reductions. More companies are now incorporating a supplier's approach to climate change as one of the requirements for working together.

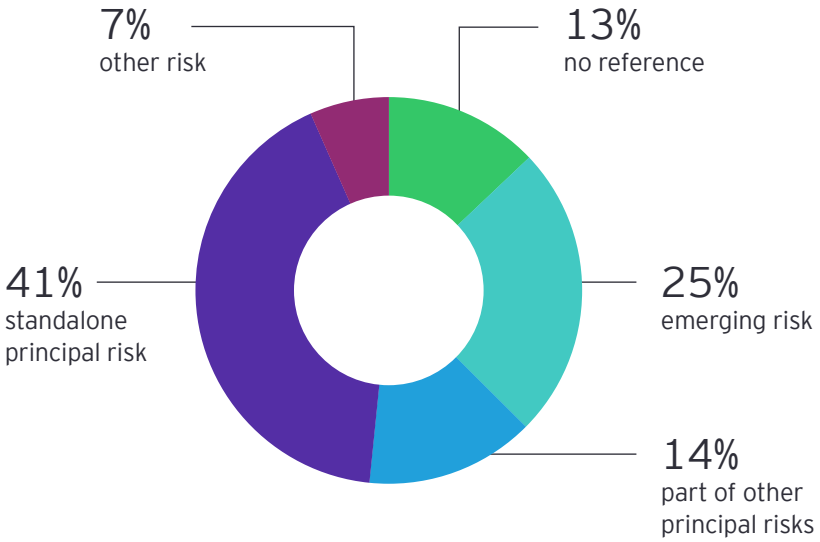
6

Despite the increasing focus on non-financial information and market expectations for this information to be robust and accurate, only a small number of companies voluntarily sought third-party assurance of their sustainability information. It is also difficult to understand, based on current disclosures, how robust the processes that underpin the collection of climate data actually are, as they are very seldom referred to in audit committees' internal control narrative.

7

In EY's analysis of the prevalence of ESG metrics in executive incentive plans for 2016 and 2019, environmental measures have seen the biggest proportionate increase in these plans – these are mainly concentrated across the extractive, consumer and financial industries.[7] When incorporating ESG metrics in pay, including those related to carbon, companies should be wary of the reliability of the data used to determine incentives, and the potential unintended consequences such as "hitting the target but missing the point". For example, an excessive focus on gender diversity targets, included in pay, at the expense of the broader development of a diverse talent pipeline which also considers non-gender diversity.

Figure 2.2
How companies categorise climate change within their risk disclosures



7 ESG metrics in executive incentive plans, EY, March 2021.

3 Governance

Most companies include information on climate governance. Some companies had independent advisory committees, comprising external experts to act as a sounding board. Many reported that climate risks are the responsibility of the whole board, whilst a few named a director or the relevant committee responsible for climate-related issues. There were a number of approaches between companies at management level, such as the establishment of climate-related internal task forces or working groups. The role of management is generally articulated less clearly than the role of those charged with governance.

Hallmarks of leading practice

- Build in the oversight of the broader climate agenda and TCFD implementation into board activities, for instance, making this a standing item of meeting agendas.
- Identify the directors or committees that are responsible for the oversight and management of the company's response to climate change (**BP**, see Figure 3.3).[8]

TCFD recommended disclosures

Describe the board's oversight of climate-related risks and opportunities.

Describe management's role in assessing and managing climate-related risks and opportunities.

8 As noted by the Investment Association's **Shareholder Priorities for 2021**, Whilst investors maintain that climate change is an issue for the whole board, naming individual board members or committees with responsibility provides essential accountability and leadership on this critically important issue.

- Identify climate-competence gaps at board and management level and develop a structured training plan, including consideration of access to third-party experts. **Lloyds Banking Group** 2020 ARA (p86) states that during 2021, the Group will be reviewing its skills matrix to explicitly consider environmental and climate change skills and experience.
- Include the management of climate issues as part of the board evaluation process.
- Consider putting the company's climate transition plan to a shareholder vote, as done by a number of companies such as **Unilever**, **London Stock Exchange** and **National Grid**.[9]
- Engage with key stakeholders, including employees, customers and suppliers, to understand the potential positive and negative impacts from transitioning to a low-carbon economy.
- Clarify specifically who within management e.g., Chief Sustainability Officer (CSO)[10] and/or working groups are responsible for assessing and managing climate-related risk and for supporting the board in their monitoring activities.
- Ensure involvement from the relevant functions and/or divisions across the organisation when setting up an internal climate change task force or working group – include investment, commercial and operational representation – to enable holistic considerations of climate-related issues.
- Ensure succession planning at board and senior management levels considers the necessary skills and experience required to advance the company's climate strategy.

42%

of companies (49% excluding companies in financial services) have a board committee with specific responsibilities regarding sustainability.

Hallmarks of leading disclosure

- The reports of the relevant board committees should set out how they exercised oversight over climate change related disclosures. Furthermore, for high-risk sectors, climate-related reporting should be considered as part of the board's assessment of whether the ARA, as a whole, is FBU. We found a few companies, like **Smith + Nephew** 2020 ARA (p86), **Shell** 2020 ARA (p150) and **Anglo American** 2020 ARA (p119), which reference the audit committee's consideration of climate-related matters relating to the financial statements. We did not identify any companies that provided explicit reference to climate-related matters in the wider narrative about FBU relating to the ARA as a whole.
- Explain the overall process and plan, in relation to progress towards full TCFD alignment and broader climate change targets with reference to a timeline (**ITV**, see Figure 3.1).

Even when companies already report against all 11 recommended disclosures, we expect that they will need to evolve and enhance those disclosures over time.

- Ensure that stakeholder engagement reporting reflects all key climate-related matters discussed with shareholders and other significant stakeholders, and the impact this had on board decision making and discussions. **HSBC** explains how it considers stakeholder expectations in reviewing and approving a new climate ambition (see Figure 3.7).
- Where a resolution on climate change has been passed in the year, explain the voting results and the views received from shareholders, as well as any actions taken and/or proposed by the company. In relation to a special resolution requisitioned by Climate Action 100+ on climate change disclosures, **BP** 2020 ARA (p27) explains the voting results, key elements of the resolution and how the company had addressed them.
- Explain how addressing climate considerations is integrated into the board structure and committees; how the board has oversight of climate change; and management's process for considering climate-related issues, including key responsibilities and the cadence of reporting (**EVRAZ** 2020 Climate Change Report (p9)).
- Disclose a board skills matrix which includes climate competence (**Severn Trent**, see Figure 3.2).
- Where climate-related working groups or committees are set up, disclose the selection process for the climate expert or group, the expertise, skills and/or any relevant training members received.

9 The **Investor Forum** has called on the Government to introduce a mandatory non-binding shareholder 'Say on Climate' on TCFD aligned disclosure obligation.

10 The importance of the CSO role has been recognised by the creation of the S30 forum, which brings together leading CSOs to accelerate business action on sustainability. CSOs help to explain how profit and purpose can be complementary, demonstrating that environmentally-conscious organisations protect their finances as well as the planet (**Why CSOs are key to value-led sustainability**, Steve Varley (EY Global Vice Chair – Sustainability), February 2021).

- Provide examples of specific climate-related topics discussed by relevant bodies (board and senior management levels), the potential consequences of those issues on the business, and the rationale underpinning any related decisions.

Integration across the ARA

- Include principal decisions made in relation to climate within the s172 statement (**Aggreko**, see Figure 3.4 and **Rotork**, see Figure 3.6).
- Demonstrate the consideration of climate change in governance reporting, for example, if the accountability for climate risks and opportunities was considered during evaluations of the board and its committees, the evaluation narrative should report on the findings (**Capital & Counties Properties** (see Figure 3.5)).

Figure 3.1 continued

TCFD progress roadmap	2019	2020	2021
We have made significant progress in improving how we manage our environmental targets and climate-related risks and opportunities. However, we recognise that we can build on these priorities further, to continue enhancing our approach and strengthen the quality of our reporting.	• Launched ITV's Social Purpose strategy • Identified Group CFO as owner for climate-related risks • Set baseline for targets, including SBTs • Carbon neutral across Scope 1, 2 and 3 (for business travel only) • Updated ITV's global emissions data collection process • Launched the Green Team Steering Group • Established Environmental Governance	• Updated Environmental Governance structure • Created Climate Change Delivery Group chaired by Group CFO • Launched ITV's environmental 2030 targets, including SBTs and 100% renewable electricity target by 2025 • Set a Net Zero target by 2030 • Achieved a B rating for Climate Change for our responses in the Carbon Disclosure Project program • Started climate scenario analysis and identified key risks and opportunities with stakeholders • Developed a climate risk register	• Obtain verification for SBT from the SBT initiative • Complete climate scenario analysis quantification of climate-related risks • Finalise emissions reduction roadmaps for all business areas • Launched new global environmental data platform for emissions and waste • Establish business area environmental key performance indicators

Figure 3.1
ITV 2020 ARA (pp62-66) provides a helpful TCFD progress roadmap and explanation of its environmental governance structure.

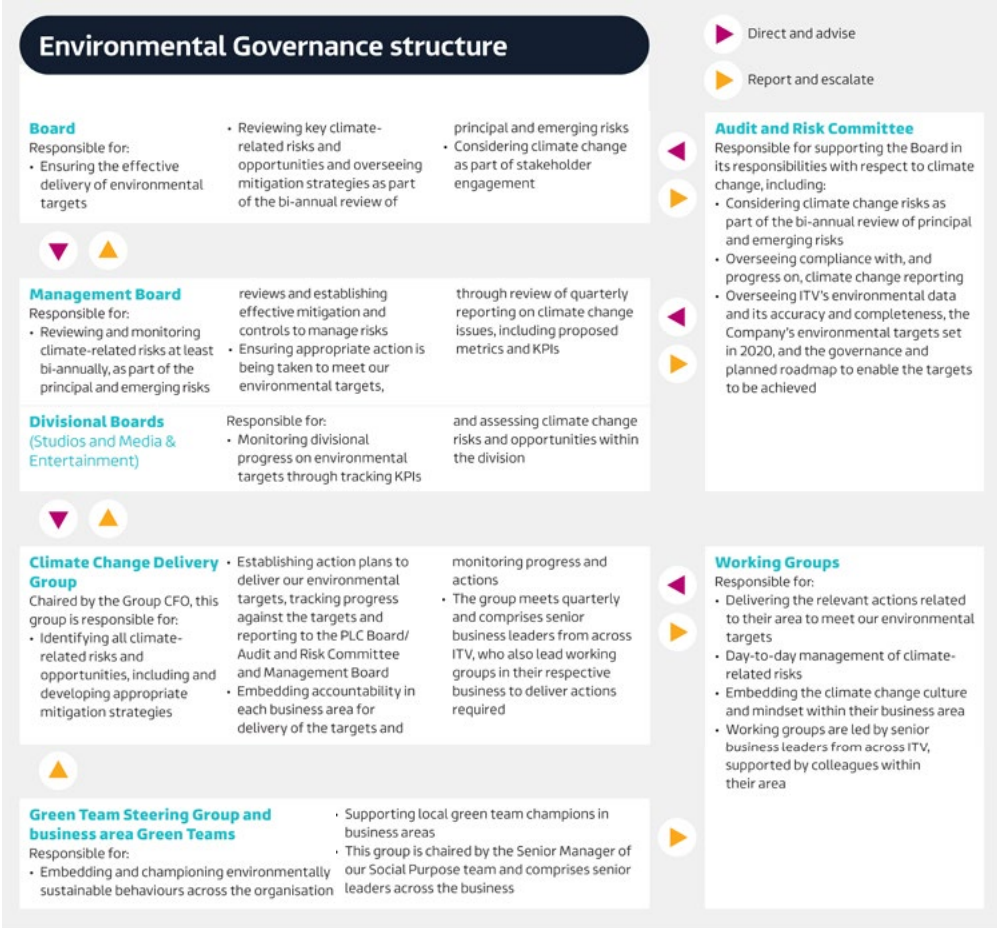
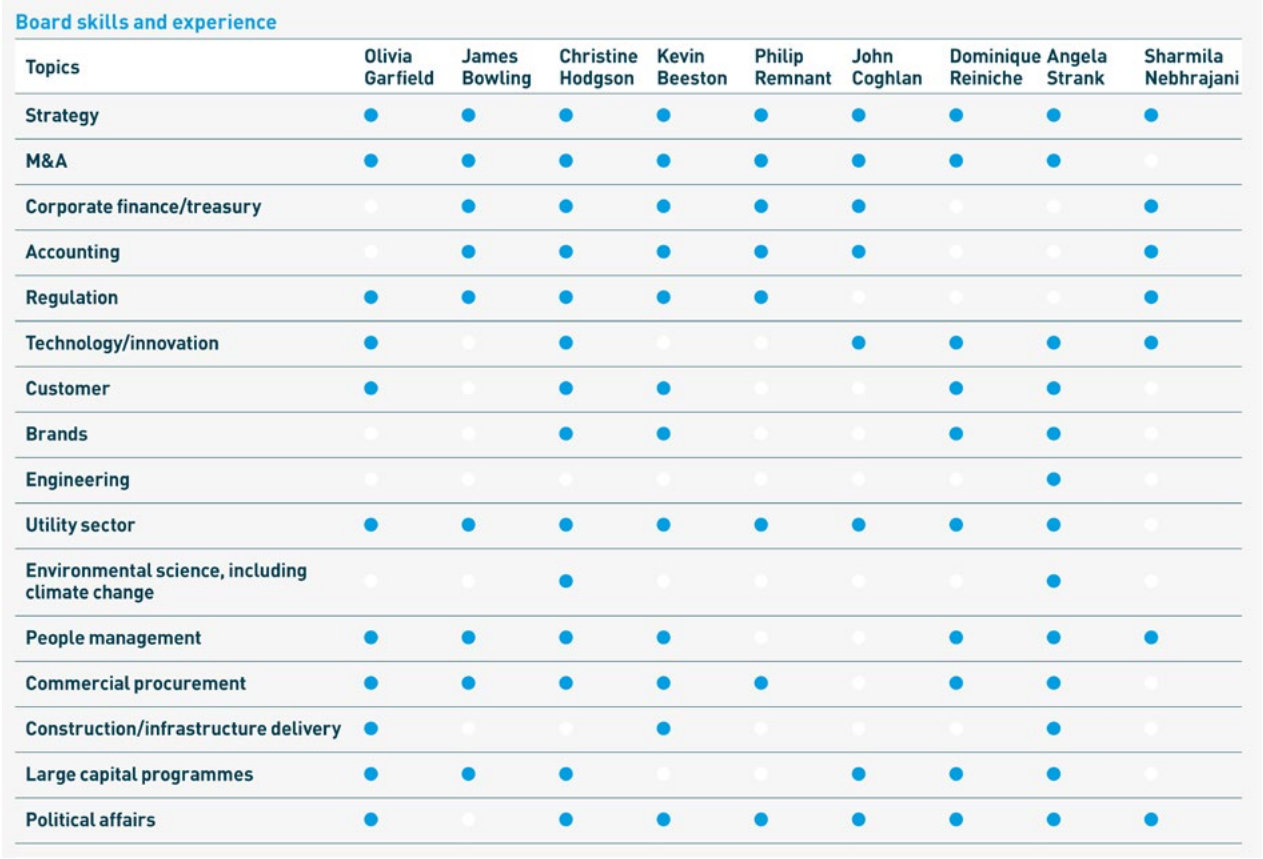


Figure 3.2
Severn Trent 2020 ARA (p83) shows a board skills matrix which includes climate competence.



Board skills and experience

Topics	Olivia Garfield	James Bowling	Christine Hodgson	Kevin Beeston	Philip Remnant	John Coghlan	Dominique Reiniche	Angela Strank	Sharmila Nebhrajani
Strategy	●	●	●	●	●	●	●	●	●
M&A	●	●	●	●	●	●	●	●	
Corporate finance/treasury		●	●	●	●	●			●
Accounting		●	●	●	●	●			●
Regulation	●	●	●	●	●				●
Technology/innovation	●		●			●	●	●	●
Customer	●		●	●			●	●	
Brands			●	●			●	●	
Engineering								●	
Utility sector	●	●	●	●	●	●	●	●	
Environmental science, including climate change			●					●	
People management	●	●	●	●			●	●	●
Commercial procurement	●	●	●	●	●		●	●	
Construction/infrastructure delivery	●			●				●	
Large capital programmes	●	●	●			●	●	●	
Political affairs	●		●	●	●	●	●	●	●

Figure 3.3
BP 2020 ARA (p52) describes the role and interaction of each committee in respect of climate-related matters.

During 2020, climate matters were included on the agenda at every board meeting. Agendas are now structured along four distinct pillars: strategy, performance, people and governance.

- The safety and sustainability committee's remit was extended from the beginning of 2020 to provide oversight of the effectiveness of the implementation of bp's sustainability frame. This includes reviewing that appropriate progress is being made against our net zero, people and planet aims. The committee will continue to cover existing sustainability-related activities, including the oversight of operational sustainability risks.
- The role of the audit committee is to monitor the effectiveness of bp's financial reporting, systems of internal control and risk management, and the integrity of bp's external and internal audit processes. In fulfilling this purpose, the committee has oversight of financial disclosure, including TCFD reporting.
- The role of the remuneration committee is to recommend to the board the remuneration policy for executive directors and the leadership team. It also reviews workforce remuneration and monitors related policies, satisfying itself that incentives and rewards are aligned to bp's strategy, culture and long-term sustainable success. This includes climate-related matters.
- The role of the people and governance committee (formerly the nomination and governance committee) is to oversee a diverse succession pipeline and to review workforce policies and practices, monitoring their consistency with bp's purpose, strategy and values. This helps ensure that we have the right people to deliver our strategy and net zero ambition.

BP 2020 ARA (p53) explains the organisational structure by which management is informed about climate-related issues.

Recommended disclosure:
b. Describe management's role in assessing and managing climate-related risks and opportunities.

The assessment and management of climate-related matters is embedded across bp at various levels and delegated authority flows down from the board, see page 29.

From 1 January 2021, a new executive level governance forum, the group sustainability committee, will provide internal oversight of bp's progress against the aims and objectives in the sustainability frame, including net zero.

This group is chaired by the EVP strategy & sustainability (S&S) and comprises members of the bp leadership team. The group sustainability committee plans to meet on a quarterly basis to review progress within entities against the sustainability frame and decide on critical strategic positions related to sustainability that present risks or opportunities to delivery. The EVP S&S will report to the main board and committees as required.

The group operational risk committee will continue to provide oversight of safety and operational risk management performance for the group, where appropriate, which includes sustainability-related risks such as modern slavery and severe weather.

Climate-related matters were discussed at each of the leadership team meetings in 2020, including the development of bp's net zero ambition and aims ahead of discussion with the board.

The leadership team is supported by bp's senior-level leadership and their respective teams, with dedicated business and functional expertise focused on climate-related matters. This includes our health, safety, environment and carbon, strategy and sustainability and group policy and economics teams.

Alignment between group, business and functional leaders is fostered through cross-functional bodies.

Climate governance: management of climate-related matters
As at 1 January 2021

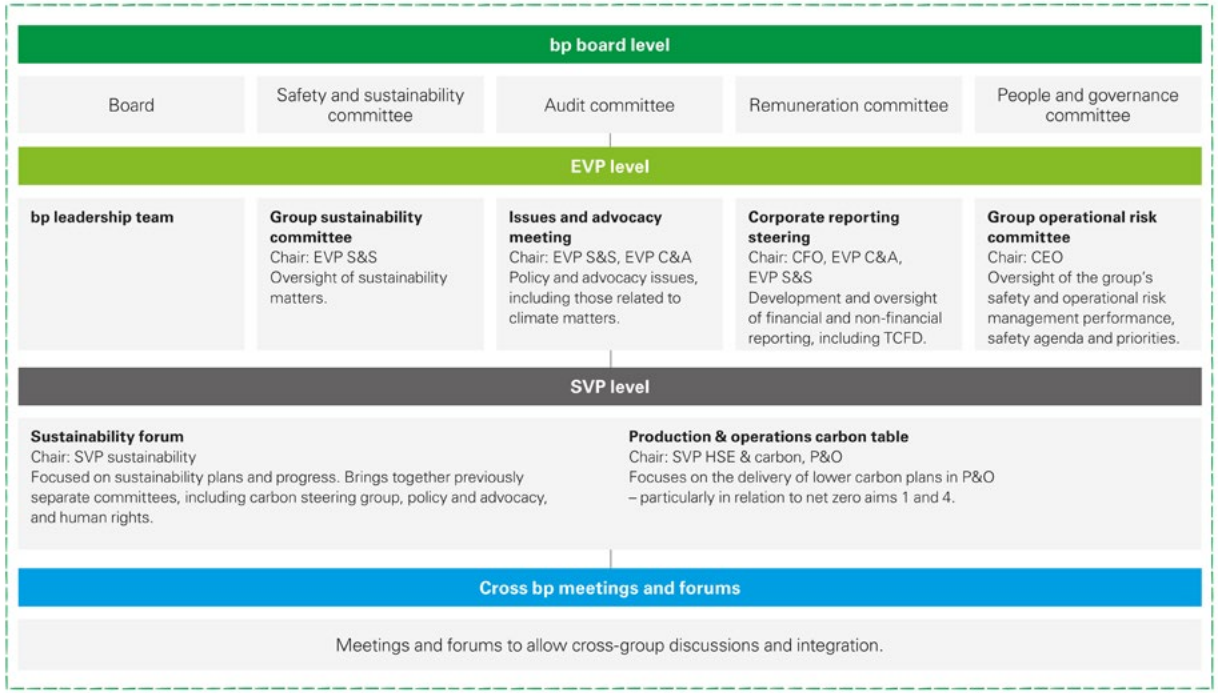


Figure 3.4
Aggreko 2020 ARA (p50) explains its commitment to be net zero by 2050 as part of its principal decision reporting in the s172 statement.

Aggreko plc Annual Report and Accounts 2020

Committing to net-zero by 2050

Four statements setting out our environmental commitments

How we engaged
Increased demand for clean technology has come from governments, institutional investors and customers. Government policies and regulation are driving market economics, with over 180 countries joining the Paris Agreement and net-zero becoming the new standard across the EU. Governments are also creating incentives and regulations to influence the evolution of the energy market. Sustainable financing is also on the rise, with institutional investors leading the way and development finance organisations driving sustainability requirements in emerging economies. Customers are responding at their own pace to these challenges, with many setting their own net-zero ambitions and long-term targets. We engaged with our customers, looking at the impact of the energy transition by sector on their activities, holding a number of working groups to assess what solutions they need now and in the future.

Assessing the potential
Committing to net-zero targets, investing in new technology and developing new solutions are challenging, time-consuming and expensive, but meeting the needs of our customers and investors, reducing emissions and clearly setting our own environmental targets is key for the long-term sustainability of Aggreko. Setting environmental targets are also important in retaining current and attracting future employees. We undertook a review of existing and emerging technologies, availability and pricing of fuels and potential combinations of technology and fuel to enable our customers during the energy transition. This gave us the confidence in our long-term ambitions and strategy.

Long-term implications
We already have a strong track record of responding to low-carbon demands: our investments in low-carbon technologies, partnerships and developing commercial systems within our Global Products and Technology division. This provides important momentum for Aggreko to take the lead in the energy transition. We have refreshed our strategic priorities for the transition to help us to drive growth and address environmental concerns, while optimising our existing assets to deliver efficiencies and improve returns.

Read the four statements setting out our environmental commitments on **page 07**

Read more about our sustainability strategy and engaging with stakeholders to develop our materiality matrix on **page 42**

Figure 3.5
Capital & Counties Properties 2020 ARA (pp63 and 81) established a new Board Environment, Sustainability and Community Committee with oversight of environmental, sustainability and community matters in response to the prior year board evaluation findings.

2020 BOARD EVALUATION

The Company had previously committed to undertaking an externally facilitated evaluation in 2020

The Chairman and Company Secretary considered the approach to be taken and recommended that NJMD be engaged to undertake the evaluation

The Nomination Committee approved the appointment of NJMD

Each Director completed a questionnaire and structured interview with NJMD

A report was prepared by NJMD and provided to the Board for consideration

A NUMBER OF ACTIONS WERE AGREED

ACTIONS FOR 2020	○ Ensure Board papers reflect increased focus on Covent Garden	○ Review reporting of environmental, sustainability and governance matters to the Board
PROGRESS	○ The balance of Board reporting reflects the Company's portfolio	○ New Board ESC Committee established with oversight of environmental, sustainability and community matters
ACTIONS FOR 2021	○ Review succession plans for both the Board and the Senior Management Team	○ Keep culture and values under review to ensure that they reflect and remain consistent with the Company's strategy ○ Ensure effectiveness of workforce engagement mechanisms

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES ("TCFD")

In 2019, we committed to seeking to better understand climate-related risk to Capco's business and prepare a response in alignment with the Task Force for Climate-related Financial Disclosures ("TCFD"). Our first disclosure is set out on the following pages.

Our work to explore climate-related risks and opportunities to the business will continue under the direction of the Company's ESC Committees.

GOVERNANCE

Describe the Board's oversight of climate-related risks and opportunities	The Board has established a Board Environment, Sustainability and Community Committee ("ESC"), chaired by Non-executive Director Charlotte Boyle, and including the Chairman, Chief Executive and Non-executive Directors, which oversees ESC activities on its behalf. The Board retains overall responsibility for the management of climate-related risks and opportunities. The Board monitors climate-related risk via the Executive Risk Committee, and has determined that climate-related risk is now a principal risk in its own right. More information on the Board ESC Committee and the Executive Risk Committee, including the frequency of their meetings, can be found on pages 24, 78 and 79.
Describe management's role in assessing and managing climate-related risks and opportunities	The Chief Executive, Ian Hawksworth, is responsible for ESC matters and chairs the ESC Executive Committee. This committee has been established to support the Board ESC Committee in assessing, monitoring and mitigating climate-related risks and acting upon climate-related opportunities. The committee includes Charlotte Boyle, the Company Secretary, the Group Legal Director, the Head of HR, the Director of Sustainability and Technology and representatives from the Business, and is attended by our retained sustainability adviser. Climate-related risks are separately considered by the Executive Risk Committee, as part of the risk management process based on assessments submitted by the Business units and the Director of Sustainability and Technology.

Figure 3.6
Rotork 2020 ARA (p94) explains establishing an ESG committee as a principal decision in the s172 statement.

Board Decision	Section 172 Factor	Impact on Stakeholders
Establishment of Environmental, Social and Governance Committee	**Consequences of decisions in the long term**	Investors are looking for companies that prioritise the environment, are committed to diversity and inclusion and have robust ESG commitment and compliance policies. A key objective of the ESG Committee is to ensure that ESG is an integral part of the Company's strategy and culture from the top down. ESG performance is also an important part of the executive directors' personal strategic objectives and features in the annual bonus scheme for senior leaders.
	Fostering Business Relationships	We continue to work with our customers to reduce their carbon footprint. Our comprehensive product and services portfolio and industry knowledge mean that customers rely on us to help them deliver reliable, energy efficient solutions that minimise their environmental impact.
	Acting Fairly between shareholders	Ensuring a balance between running responsible and profitable operations, improving health and safety for our employees, and safeguarding the environment.
	Community	Investing in job creation, utilising local talent and supply chains. Helping to support and grow the communities in which we operate at the grassroots-level and establishing Rotork as a global company with local roots.
	Environmental Impact	Promoting energy efficiency – both in our own and our customers' operations. Reducing emissions through defining and implementing our decarbonisation strategy.
	Reputation	Demonstrating ethical behaviour and high levels of integrity.

Figure 3.7
HSBC 2020 ARA (p24) explains how it considered stakeholder expectations in reviewing and approving a new climate ambition.

Climate ambition

During the year, the Board reviewed and approved a new climate ambition for the Group.

In reviewing and approving a new climate ambition, the Board acknowledged that ESG issues have developed significantly over recent years, and such issues are now recognised by stakeholders as key elements and risks for businesses to manage.

In May 2020, the Board conducted a detailed review of stakeholder expectations and was advised of key stakeholders impacted by the proposed climate strategy and the leading role HSBC was expected to take. This included a comprehensive market update on current positions taken by non-government organisations, investors, competitors, regulators and increased societal awareness.

As part of the review, HSBC's climate advisory panel – consisting of representatives from non-government organisations, clients and academics – was consulted in the development and drafting of the new climate ambition. Wider stakeholder engagement was undertaken to help inform the Group's position from a customer perspective including the HSBC Sustainable Financing and Investment Survey 2020 and the HSBC Navigator survey.

In the course of the Board's discussions, it considered stakeholder feedback in the context of our business mix and the need to work towards an orderly transition, given current exposures to fossil fuels assets. The Board acknowledged the opportunity to help support our customers with their transition to lower carbon emissions and to manage other expectations and matters impacting our shareholders, employees and local communities.

In addition, the Board noted that HSBC had been recognised as a leading bank for sustainable finance and acknowledged increased competitive activity. As a result, it was conscious of the need to maintain the Group's leadership in this area.

In making its decision, the Board recognised investors' expectations for HSBC to continue to make progress on climate change, as it provides sustainable finance and investment and gradually reduces exposure to high-carbon assets on a timeline aligned with the Paris Agreement.

4 Strategy

Many companies in our sample provided the descriptions of climate-related risks and their impact under the TCFD Risk Management pillar. However, strictly speaking these recommended disclosures relate to the TCFD Strategy pillar, with the Risk Management pillar being focused more on the climate-related risk process itself and its integration with the wider risk management process.

Attributing disclosures to the appropriate TCFD pillar will help promote consistency in reporting, however we recognise that integration with the broader front half narrative may result in varied practice developing in this respect in the context of UK corporate reporting. Ultimately, ensuring that adequate attention is given to improving processes, making the required disclosures and taking meaningful action in response to climate change are more important than the placement of those disclosures.

TCFD recommended disclosures

Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.

Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.

Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Description of climate-related risks

Companies within our sample have taken different approaches to determining the categorisation of climate risk (See Figure 2.2 regarding how companies categorise climate change within their risk disclosures):

a

Principal risks: Some companies chose to disclose climate change (**Anglo American** 2020 ARA, p55) or another climate-related heading (e.g., "sustainable aviation" by **International Airlines Group** (IAG) 2020 ARA, p52) as a standalone principal risk. Others included climate change as a component of another principal risks (e.g., technology and business resilience, **RELX** 2020 ARA, p62).

b

Emerging risks: Some companies disclosed climate-related matters as emerging risks, whilst a few chose to elevate climate change from an emerging to a principal risk this year (**Fresnillo** 2020 ARA, p112).

c

Cross-cutting risk: The **Climate Change Risk Forum Guide 2020** for financial firms notes that good practice is to treat climate change risk as a transverse or cross-cutting risk rather than a standalone risk. This was the approach taken by **Standard Chartered** which, in its 2020 ARA (p116), removed climate-related transition and physical risks and classified climate risk as a cross-cutting risk.

The impact and assessment of climate-related risks will differ depending on the business model and industry, and even within the same sector, views can be different. In our view what is most important is for companies to meaningfully describe how climate risk will crystallise for their business, locations and assets.

Impact on strategy and financial planning

There is limited disclosure explaining how business strategies and capital allocation plans have been adapted and changed to align with the net zero transition.

Scenario analysis

Scenario planning, including ambitious 1.5˚C pathways[11], is often missing. In line with TCFD's recommendation[12], we encourage companies to consider a phased approach to disclosure – rather than deciding not to disclose at all. For example, start by providing broader, qualitative information on climate-related risks and opportunities as it becomes available and follow with more specific, quantitative data and information over time.

"Financial statements are to a great extent focused on past performance and any underlying assumptions have to withstand the auditor's scrutiny. This makes linking the 'front half' considerations of future impacts of climate change to the financial statements difficult.

It is therefore not surprising that some climate-related matters are not translated effectively into the financial statements — which is why scenario analysis, with clearly disclosed assumptions, is so important to investors.

Assumptions are very often drawn from industry bodies, e.g., the International Energy Agency (IEA) for oil and gas companies, but sometimes that means they are not sufficiently balanced or the range of inputs is not sufficiently broad.

In a similar way that the auditor challenges assumptions underpinning impairment considerations, we would like to see the auditor challenge the assumptions used by companies in their scenario analysis and report its findings.

Lloyd McAllister, Responsible Investment Analyst, Newton Investment Management

11 **Climate Action 100+ Net Zero Company Benchmark**, Climate Action 100+, March 2021.
12 **2020 Status Report**, TCFD, October 2020. For further guidance published by TCFD on October 2020 in relation to scenario analysis for non-financial companies, see **here**.

Hallmarks of leading practice

- Establish what the business considers to be the relevant short, medium and long term time horizons, taking into account that climate-related issues often manifest over longer periods.
- Consider climate-related opportunities, which may include:
  - Decisions that reduce the embodied carbon of products used
  - Innovations that reduce the operational carbon emissions
  - Renewable energy generation and procurement
  - Transport and distribution network optimisation
  - Use of climate bonds and sustainability-linked loans
  - Strategic partnerships to advance climate strategy
- Consider climate-related risks, which may include:
  - Increased insurance premiums and potential for reduced availability of insurance on assets in high-risk locations
  - Reduced demand for goods and services (e.g., due to shifting customer preferences)
  - Increased production costs (e.g., inputs such as energy, water and output requirements such as waste treatment)
  - Re-pricing of assets (e.g., land valuations)
  - Write-offs, asset impairment and early retirement of existing assets due to policy changes
- Consider climate risks throughout the value chain, including the supply chain. Supply chain emissions are on average 11.4 times higher than operational emissions and supplier engagement continues to remain the exception rather than the norm.[13]
- Consider the specific potential climate-related issues arising in each time horizon that could have a material financial impact on the organisation.
- Use scenario analysis to understand potential major business risks and opportunities under different time horizons. Include a range of scenarios, including a 2˚C pathway within climate scenario planning (**Unilever**, see Figure 4.3). It may be possible to leverage climate modelling done by stakeholders such as the local council and insurers.
- Develop a strategic response to climate-related financial risk informed by scenario analysis/ stress tests. A longer-term view than the typical business planning cycle (i.e., three to five years) needs to be considered, in addition to short and medium-term risks arising from the transition.[14]
- Integrate the consideration of climate-related data into decision making in respect of the strategic business plan and budget. Align future capital expenditures with the net zero transition and the company's long-term climate ambitions.

13 **Global Supply Chain Report 2020**, CDP, February 2021.

14 As a follow-on from the Brydon report, the Government is considering whether companies should be required to produce an annual Resilience Statement to assess the prospects and challenges of the business model over the short, medium and long term, including the impact of climate change. See **consultation on restoring trust in audit and corporate governanc**e, BEIS, March 2021.

Hallmarks of leading disclosure

- Describe what the business considers to be the short, medium and long term horizons, and associate climate-related risks and opportunities with the relevant time horizons (**Polymetal**, see Figure 4.1).
- If climate change has not been identified as a principal risk, explain how directors challenged this outcome and the basis for their conclusion.
- Disclose the likelihood and impact of climate-related principal risk(s) and the significance of climate-related risks relative to other risks.
- Distinguish between physical risks (acute and chronic) and transition risks (policy and legal, technology, market and reputation) (**Polymetal** (see Figure 4.1) and **AstraZeneca** (see Figure 4.2)). Specify the assets or location of operations most impacted by climate-related risk.
- Disclose the impact on the business and strategy on areas such as products and services, investment in research and development and operations (**Rotork**, see Figure 4.6).
- Disclose the impact on financial planning (**Polymetal**, see Figure 4.1) on areas including operating costs, capital allocation and access to capital, including where carbon reduction targets have been set.
- Ensure disclosures on scenario analysis include the rationale for the scenarios selected, detail on the assumptions made in these scenarios, and the implications on resilience. Explain the impact of scenario analysis on board strategic decisions and financial planning.

Integration across the ARA

- If the ARA contains a 'market context' section, cover the broad economic dynamics which the business is most sensitive to, including carbon pricing considerations, an assessment of the impact on supply and demand for your products/services etc. (**Rotork** 2020 ARA, p13).
- Explain how climate change considerations have impacted your strategic priorities and business model.
- Discuss how climate transition impacts your competitive advantage or investment case (**Glencore**, see Figure 4.4).
- When discussing business performance, explain the actions taken/planned to increase resilience within the business model in order to respond to negative impacts of climate change (**Persimmon** 2020 ARA, p67).
- Address climate impacts on your future investments within capital allocation disclosures (**BP**, see Figure 4.5).

Figure 4.1
Polymetal 2020 ARA (pp58 and 59) describes its time horizons for assessing risks. It also sets out the significance level (high, medium or low) for each climate-related risk and their areas of impact on the business at a high level.

We have mapped each scenario above across three timeframe horizons:

Scenarios

- **Business as usual** (>2 degrees)
- **Paris Agreement scenario** (<2 degrees)
- **Sustainable development** (<1.5 degrees)

Time horizon

<1 year	1–5 years	Life-of-mine (>5 years)
Short term: • Annual business and operational planning • Regulatory and policy driving forces are considered when developing business plans	**Medium term:** • Incorporating the impact of changing weather patterns in our integrated risk-management system • Quantifying climate risk levels and incorporating risk mitigation and opportunity maximisation	**Long term:** • Identifying and quantifying the longer-term climate change impacts • Assessing post-closure risks and opportunities in portfolio reviews

Transitional

Risk	Impact
Limiting GHG emissions at national and international levels	Carbon tax payment; Fines for non-compliance with legislation or emission standards; Increased operating costs
Implementation of environmental insurance	Environmental insurance payment; Increased operating costs
Compulsory requirements for energy efficiency and renewable energy usage	Capital expenditure on adaptation and implementation of new technologies
Increase in the cost of carbon-intensive resources	Increased operating costs

Physical

Acute (short-/medium-term)		Chronic (life-of-mine timescale)	
Risk	Impact	Risk	Impact
Thermokarst processes in permafrost areas	Tailings storage facilities damage; Building and structural damage; Transport infrastructure damage	Thawing of permafrost	Tailings storage facilities damage; Building and structural damage; Transport infrastructure damage
Hurricanes	Power line breakages; Building and structural damage	Average temperature rises	Lack of water resources; Increased operating costs
Shifts in rainfall/ snowfall patterns	Power line breakages; Transport infrastructure damage	Floods and longer flooding seasons (change in hydrological cycles)	Disruption to logistics and shipping; Transport infrastructure damage

Polymetal Climate Change Report 2021 (p32) provides detail on its climate-related capital expenditure, including its overall capital expenditure estimate for green projects for 2021-30.

Capital expenditure

Polymetal will finance projects that support low-carbon and climate change-resilient growth, as well as waste efficiency and improved water management. The primary targets are climate impact mitigation, such as increased energy efficiency and use of renewable energy, as well as environmental impact reduction such as reduced waste and emissions.

Our major green initiatives relate to reducing our carbon footprint and fresh water usage, electrification of our fleet at certain mines and renewable energy at remote operations. Our overall capital expenditure estimate for green projects for 2021–2030 is **$1,100 million**.

We see **green financing** as an ideal tool to finance the transition to a low-carbon economy and safer environment. It also ensures responsible financing that aligns capital with the Company's stronger ESG performance, as well as contributing to sustainable development by earmarking the proceeds for green projects and expenditures. Green financing is a natural extension of the sustainability efforts that are conducted throughout the organisation. More importantly, it is a tool to align the Company's interests and those of society at large by financing further transition to responsible mining. It gives us trusting relationships with our lenders and stakeholders, and pride and commitment among our employees.

To create a standard for green financing that can be used with a number of Polymetal's sources of funding, we have developed a Green Financing Framework. The Framework establishes the terms and conditions for the management of funds and for follow-up and reporting to lenders and investors. Polymetal hopes to continue to broaden its lenders base by attracting like-minded creditors who seek to target their funds towards environmentally friendly projects.

Polymetal has set up a dedicated cross-departmental Green Financing Committee to identify and select eligible projects for green financing. These are projects that are aligned with national environmental and technical legal requirements. The Committee includes representatives from corporate finance, sustainability, operational, energy and environmental, procurement, design, and construction departments, as well as, on a case-by-case basis, the Group's business units.

All information about Polymetal's focus on green financing with links to the Framework, second opinions and reporting is available on our website.

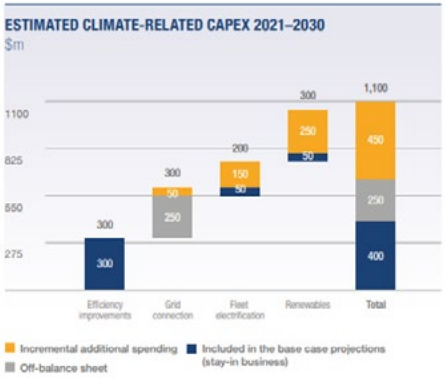


Figure 4.2
AstraZeneca 2020 ARA (pp 276, 277 and 278) describes its assessment and management of physical risks and transitional risks arising from climate change.

Physical assessment
In 2020, working with environmental resource managements experts, ERM Group, Inc, (ERM), we conducted a screening study of two future climatic scenarios to explore our physical climate-related risks (floods, water scarcity, extreme heat, cyclones and wild fires); Representative Concentration Pathways (RCP) 4.5 (+2°C) and RCP 8.5 (+4°C) were used for this study. These scenarios were applied to 61 AstraZeneca sites with predictions out from 2020 to 2030 and 2050. The sites evaluated included all business-critical operations sites, R&D Hubs, IT centres and other strategic hubs; pure commercial sites were out of scope as they posed a low material risk. The outcome of these screening studies across the 61 sites was combined with a revenue-based assessment for each site to identify medium- to long-term risks.

Transitional assessment
In 2020, working with ERM we defined the risks and opportunities associated with the transition to a low-carbon economy. To measure these transitional risks, we adopted two scenarios; a base case (~3.5°C) and low carbon (~2°C) scenario with predictions out to 2025, 2030, 2035 and 2040. Risks and opportunities were assessed at an enterprise level and product-specific level for the top ten brands where life-cycle assessment (LCA) data is available, representing approximately 50% of Total Revenue with examples from all therapy areas.

Risk or opportunity	Potential impact	How it is managed
Physical risks		
Increased frequency of extreme weather and climate-related natural disasters. (R)	In 2020, we conducted a screening study of two future climatic scenarios to explore our physical climate related risks (floods, water scarcity, extreme heat, cyclones and wildfires) across 61 business critical sites. Eight sites were predicted to be exposed to increased risk of severe or very severe climate-related hazards in the next 10 years based on the worst-case scenario. Out of the eight 'at-risk' sites, a deep dive was conducted at the manufacturing site in Wuxi, China to verify the global screening results with help from local climate data and infrastructure. The outcome indicated increased risk of (a) heavy rainfall causing localised flooding, and (b) an extreme heat event in combination with air pollution that could cause increased need of cooling capacity, impact workers' health and potentially impact our licence to operate in the long term.	In 2021, indicative findings of increased risks (extreme heat, floods, drought and wild fires) will be verified by local assessments (based on learnings from the Wuxi study) across other potentially 'at risk' strategic sites (Södertälje, Maihara, Chennai, West Chester, Guadalajara, Gothenburg, Cairo, Canovanas, Mount Vernon, Newark, Frederick, Bensalem, North Ryde and Taizhou). Any climate risks identified will be integrated into our existing risk management processes including local site and business continuity plans to ensure they contain measures to proactively manage any physical climate risks and embed climate resilience in their short-, medium- and long-term planning. Business resilience has also been increased as a result of exposure to extreme weather events like hurricane Maria at Canovanas (Puerto Rico, 2016), an extended period of heat in Södertälje (Sweden, 2018) and water scarcity in Chennai (India, 2019). Our site in Canovanas has taken proactive steps to increase its resilience and mitigate the risks posed to our business operations by installing its own heat and power plant to reduce reliance on the local power network. In 2019, we restored two lakes next to our site in Chennai, together with the local community, to help protect against extremes in water stress and availability. In 2021, physical risk assessments will be conducted on the broader value chain and our critical suppliers for (i) our top ten products, and (ii) our long-term strategic suppliers responsible for bulk drug production.
Transitional risks and opportunities		
Increased demand for sustainable low Global Warming Potential (GWP) products and services from healthcare providers in some countries may result in the potential for green substitution of medicinal products with a high GWP (e.g. anaesthetics and respiratory products). **Business opportunities will exist with increased future demand for low GWP alternatives and where earlier diagnosis and clinical intervention can reduce the carbon footprint of healthcare pathways.** (R) (O)	Some healthcare providers and professionals are actively looking to substitute medicinal products based on their Greenhouse Gas (GHG) footprint in order to reduce their own Scope 3 footprint, as part of their net-zero targets (e.g. UK NHS). This could impact market access and revenue in some countries for high GWP products. Future revenue from our pMDI inhaled medicines portfolio could be 'at risk' should substitution become widespread before the transition to our next-generation low GWP pMDIs. These risks are currently low and limited to a few countries. Transitioning to low GWP respiratory products as part of AstraZeneca Ambition Zero Carbon, and understanding the positive impacts that early diagnosis and clinical intervention can have on the carbon footprint of specific patient care pathways, will provide business opportunities to improve the standard of care and clinical outcomes with a lower environmental footprint.	> AstraZeneca has life-cycle assessments (LCAs) in place for key brands (respiratory and wider) that includes the GHG footprint to help assess and manage risks and target interventions to reduce the environmental footprint of our products. For more information on product environmental stewardship, see our Sustainability Report available on our website, www.astrazeneca.com/sustainability. > In 2020 we developed a Product Sustainability Index (PSI) as part of our Product Environmental Stewardship strategy. The PSI captures carbon and water intensity metrics per product, per patient, per annum – as well as measures of % renewable power and resource efficiency used to make that product. > As part of our $1 billion AstraZeneca Ambition Zero Carbon commitment, we will transition to low GWP propellants across our asthma and COPD products between 2025 and 2030. For more information on our GHG footprint, see our Sustainability Report available on our website, www.astrazeneca.com/sustainability. > Patients whose treatment is optimised are more likely to have a lower carbon impact overall, through reduced reliever pMDI use and fewer unscheduled healthcare interventions. > We are working with academics and healthcare agencies to understand the environmental impact of respiratory care pathways for patients with controlled and uncontrolled asthma and the opportunities for improved clinical care with a lower environmental footprint. The output of these environmental and clinical studies will be communicated at scientific conferences and via peer-reviewed literature in 2021.

Risk or opportunity	Potential impact	How it is managed
Transitional risks and opportunities *continued*		
Review of the US, EU, UK and other national F-Gas Regulations and their impact on respiratory medicines used to treat asthma and COPD. (R) (O)	> The US and EU F-Gas review carries the potential risk that some F-gases used in pMDI-based respiratory products could be subject to emission restrictions from which they are currently exempt. Loss of the medicinal exemption, or failure to have a long-term phased transition, could prevent or limit availability of products in our pMDI inhaled medicines portfolio, should these restrictions become applicable before the transition to our next-generation low GWP pMDIs. > Inhaler device selection is a critical consideration as patient need or preference for a specific device type will influence adherence to treatment which in turn impacts clinical outcomes.	Patient-centric advocacy assesses both clinical and environmental outcomes. > As part of the $1 billion AstraZeneca Ambition Zero Carbon commitment, AstraZeneca will transition to low GWP propellants in its asthma and COPD products between 2025 and 2030. > We are advocating a phased transition to at least 2030 if the medicinal exemption is lifted to ensure transition to alternative low GWP propellants within the scope of the AstraZeneca Ambition Zero Carbon programme. > We are working with academics and healthcare agencies to understand the environmental impact of respiratory care pathways for patients with controlled and uncontrolled asthma, and the opportunities for improved clinical care with a lower environmental footprint.
Ban and/or restrictions on the sale of petrol and diesel vehicles in some markets. (R) (O)	AstraZeneca has approximately 16,900 leased vehicles as part of its commercial fleet, of which 51% are internal combustion engine (ICE), 39% are self-generating hybrids, 7% are plug-in hybrid electric vehicles (PHEVs) and 0.3% are battery electric vehicles (BEVs). With some countries banning or restricting sales of ICE vehicles in the future, AstraZeneca will need to transition to BEVs across its markets and there is an expectation that duties on fossil fuels associated with our fleet will increase over the next decade. There is also an increase in the number of clean air zones globally with cities or regions either restricting fossil fuel vehicles or charging a daily premium for ICE vehicles to access those regions. A proactive shift to BEVs opens up an opportunity to decrease the future cost of ownership and maintain access to these restricted clean air zones.	> As part of AstraZeneca Ambition Zero Carbon we will transition to 100% BEV by 2025 and we are signatories to the Climate Group's EV100 commitment. > A market readiness study has been conducted for our top markets and those countries that are BEV ready have been identified. Transitioning to BEVs will start in 2021 as part of the existing fleet renewal cycles in those market ready countries. Incremental costs can be offset by relatively small reductions in fleet number and kilometres driven or through adopting mobility as a service and digitalisation as described in the two bullet points below. > We are also looking at mobility options as a holistic service, where we will reduce our reliance on vehicles within urban regions and make more use of low carbon integrated private and public transport systems. > An increase in digitalisation (e-detailing) and virtual selling to reduce our reliance on a physical vehicle fleet is also being adopted.
Carbon pricing and future environmental taxation. (R)	There is uncertainty over the future environmental policy and fiscal landscape in many countries where we operate. We anticipate that carbon pricing and environmental taxation will increase over the medium to long term.	> Our AstraZeneca Ambition Zero Carbon commitment will help to mitigate exposure to future carbon pricing and environmental taxation for our operations and our wider value chain. Managed correctly, this presents a commercial opportunity where peers have yet to establish a path to net-zero or carbon zero. We are being positive advocates for science-based targets to address climate change across our industry and supply chain via trade associations and networks.

Key
(R) Risk (O) Opportunity

Figure 4.3
Unilever 2020 ARA (pp52-53) describes the two scenarios used in its analysis: 1) Modelling the potential financial impact of 2˚C and 4˚C temperature increases on its business and; 2) Deep-dive analysis of the potential financial impact on key agricultural commodities (i.e. soybean, black tea and palm oil).

Understanding financial impact: scenario analysis

Scenario analysis helps us to understand the potential impact of climate change on our business in 2030 to inform our strategy and financial planning. We used two types of scenario analysis:

1. Modelling the potential financial impact of average global temperature increases of 2°C and 4°C on our business in 2030.
2. Deep-dive analysis of the potential financial impact of climate change on three of our key agricultural commodities: soy, black tea and palm oil.

We plan to extend our scenario analysis to assess the impact of 1.5°C temperature increases to reflect the latest science and our commitment to limit global temperature increases, to well below 2°C and ideally no more than 1.5°C above pre-industrial levels.

1. Modelling the potential financial impact of 2°C and 4°C temperature increases on our business
We have made a high-level assessment of the impact of 2°C and 4°C temperature increases due to climate change by 2100. Carried out in 2017, the assessment focused on the material impacts on our business in the year 2030. The modelling assumed that our business activities are the same as they are today. The scenarios were based on existing internal and external data.

While we understand that policy risk and physical impact can happen simultaneously, we made the following simplifying assumptions:

- In the 2°C scenario, we assumed that in the period to 2030 society acts rapidly to limit greenhouse gas emissions and puts in place measures to restrain deforestation and discourage emissions (for example implementing carbon pricing at $75-$100 per tonne, taken from the International Energy Agency's 450 scenario). We have assumed that there will be no significant impact to our business from the physical ramifications of climate change by 2030 – i.e. from greater scarcity of water or increased impact of severe weather events. The scenario assesses the impact on our business from regulatory changes.
- In the 4°C scenario, we assumed climate policy is less ambitious and emissions remain high so the physical manifestations of climate change are increasingly apparent by 2030. Given this we have not included impacts from regulatory restrictions but focus on those resulting from the physical impacts.

We identified the material impacts on Unilever's business arising from each of these scenarios based on existing internal and external data. The impacts were assessed without considering any actions that Unilever might take to mitigate or adapt to the adverse impacts or to introduce new products which might offer new sources of revenue as consumers adjust to the new circumstances.

The main elements of the 2°C scenario are as follows:

- Carbon pricing is introduced in key countries and hence there are increases in both manufacturing costs and the costs of raw materials such as dairy ingredients and the metals used in packaging.
- Zero net deforestation requirements are introduced and a shift to sustainable agriculture e.g. Climate Smart Agriculture, puts pressure on agricultural production, raising the price of certain raw materials.

The main impacts of the 4°C scenario are as follows:

- Chronic and acute water stress reduces agricultural productivity in some regions, raising prices of raw materials.
- Increased frequency of extreme weather (storms and floods) causes increased incidence of disruption to our manufacturing and distribution networks.
- Temperature increase and extreme weather events reduce economic activity, GDP growth and hence sales levels fall.

Our analysis shows that, without action, both scenarios present financial risks to Unilever by 2030, predominantly due to increased costs. However, while there are financial risks which would need to be managed, we would not have to materially change our business model. The most significant impacts of both scenarios are on our supply chain where costs of raw materials and packaging rise, due to carbon pricing and rapid shift to sustainable agriculture in a 2°C scenario and due to chronic water stress and extreme weather in a 4°C scenario. The impacts on sales and our own manufacturing operations in the scenarios tested are relatively small.

Scenario: Potential impact of a 2°C temperature increase by 2100 (transition impacts)

Scenario drivers	Potential financial impact in 2030 if no actions to mitigate risks are taken
Increased costs due to carbon pricing.	Turnover: **Not material** Expenditure: Estimated increase of **€0.8bn**
Increased raw material costs from zero net deforestation policies and a shift to sustainable agriculture.	Turnover: **Not material** Expenditure: Estimated increase of **€0.9bn**

Scenario: Potential impact of a 4°C temperature increase by 2100 (physical impacts)

Scenario drivers	Potential financial impact in 2030 if no actions to mitigate risks are taken
Chronic and acute water stress reduces agricultural productivity in some regions, raising prices of raw materials.	Turnover: **Not material** Expenditure: Estimated increase of **€2.7bn**
Increased frequency of extreme weather (storms and floods) causes increased incidence of disruption to our manufacturing and distribution networks.	Turnover: Estimated reduction of **€0.4bn** Expenditure: **Not material**
Temperature increase and extreme weather events reduce economic activity, GDP growth and hence sales levels fall.	Turnover: Estimated reduction of **€2.1bn** Expenditure: **Not material**

2. Deep-dive analysis of the potential financial impact of climate change on key agricultural commodities
To help us understand the potential impact of climate change on our supply chain, we've completed more detailed analysis on three of our key agricultural commodities: palm oil, soybean oil and black tea. We selected these commodities because of their strategic importance to Unilever, the large volumes we purchase and the availability of data.

We first piloted a methodology for soybean oil in 2018 and since 2019 we've worked with the Potsdam Institute for Climate Impact Research to develop models for black tea and palm oil. Our methodology forecasts future yields using crop-specific and climate models. The price model uses a range of supply and demand drivers to determine the impact of changes in yield from direct risks of climate change, isolating other factors such as acreage and technology on price. Three modelling steps were performed:

- Yield estimation: We analysed multiple crop and climate models to provide a forecast range of expected yields in key growing regions.
- Price relationship: An econometric model was developed, based on an analysis of the raw material's market and historical trends, to estimate the impact of climate-induced yield changes on future prices. The model seeks to isolate the impact of yield changes on prices from other important factors such as acreage, farming technology, extreme weather events and man-made factors such as elections and governmental policy.
- Impact estimation: Future yields and price impacts were then translated into an estimated financial exposure from climate change for our business, using our forecast procurement volumes.

While the 2°C and 4°C scenarios discussed above identified financial risks to our supply chain, when we looked into these specific commodities in more detail we found that overall, the direct financial impact on our business is low. This is because the high level 2°C and 4°C scenario analysis and the commodity-specific deep-dive analyses are modelling different conditions and the results cannot be directly compared. For the commodities and sourcing countries we modelled, climate change could increase crop growth due to CO_2 fertilisation and extended growing seasons, offsetting any downside risks from changing rainfall or temperature patterns.

However, we do face higher risks in some specific scenarios modelled for black tea. In two of four countries modelled we found yields could decrease and prices increase, although overall the results for black tea showed yield increases so our total risk exposure remains low. We also face indirect risks relating to climate change which were not included in the modelling. These include the impacts of extreme weather events and external policy changes. We also face price disruption, reputational risks and land-use policy changes associated with deforestation. We considered these indirect impacts alongside the quantitative modelling and discuss results in more detail below.

Palm oil

We are one of the largest buyers of palm oil in the consumer goods industry. It's an important raw material for many of our brands, including in food, beauty and household cleaning products.

What we modelled: We worked with Potsdam Institute for Climate Impact Research to develop suitable climate models for palm oil. We modelled yields for Indonesia and Malaysia, where most palm oil is produced, along with four other countries. The palm oil market operates globally so we used a single price model. The market is characterised by high monthly inventory levels (creating relatively stable prices), substitution with other oils such as sunflower oil, and government regulations on biodiesel. The price model controlled for these factors and isolated the effect of changes in yield from the direct impacts of climate change on prices.

Impact on yields: Likely increase in palm oil yields due to CO_2 fertilisation in all countries modelled over the 2030 to 2050 timeframe, leading to between 18% and 42% lower palm oil prices.

Risk profile: Low direct financial risk to our business.

Key risks: Potential indirect risks from extreme weather events, which can't yet be sufficiently modelled. More palm oil acreage will be needed to meet demand, but concerns about deforestation could lead to changing regulations on land use that could limit growth and impact prices. For example, in Malaysia and Indonesia, the total land available for palm oil plantations is being capped or new plantation licenses have been halted. Despite the potential financial impact to Unilever from deforestation regulation, we support policies that tackle deforestation associated with palm oil.

We also face significant corporate reputational risks associated with deforestation. Therefore, avoiding deforestation is essential to improving the sustainability and image of palm oil and land-use restrictions are a positive development. Palm oil could also become increasingly attractive compared to alternative oils because it produces the most oil per hectare, which could further stimulate demand and affect prices.

Mitigating actions: We are committed to ending deforestation in our supply chain by 2023 and we have been at the forefront of driving industry-wide change to ensure a sustainable future for palm oil, including as a founding member of the Roundtable on Sustainable Palm Oil (RSPO). We were the first consumer goods company to publish a list of palm oil suppliers and mills and we expect all our suppliers to follow our Sustainable Palm Oil Sourcing Policy. This includes commitments to 'No deforestation, No development on peat and No exploitation'.

We are working with suppliers to increase traceability and transparency, including through using AI and technology solutions. For instance, we're working with Orbital Insight, a US technology company that specialises in using GPS technology to trace palm and soy used in our products back to the farmland it was grown on (see page 27). We also help smallholder farmers be more productive and adopt more sustainable techniques, supporting them with high-quality palm varieties, technology, finance and training.

Figure 4.4
Glencore 2020 ARA (pp5-7) explains how climate change is considered as part of the business investment case.

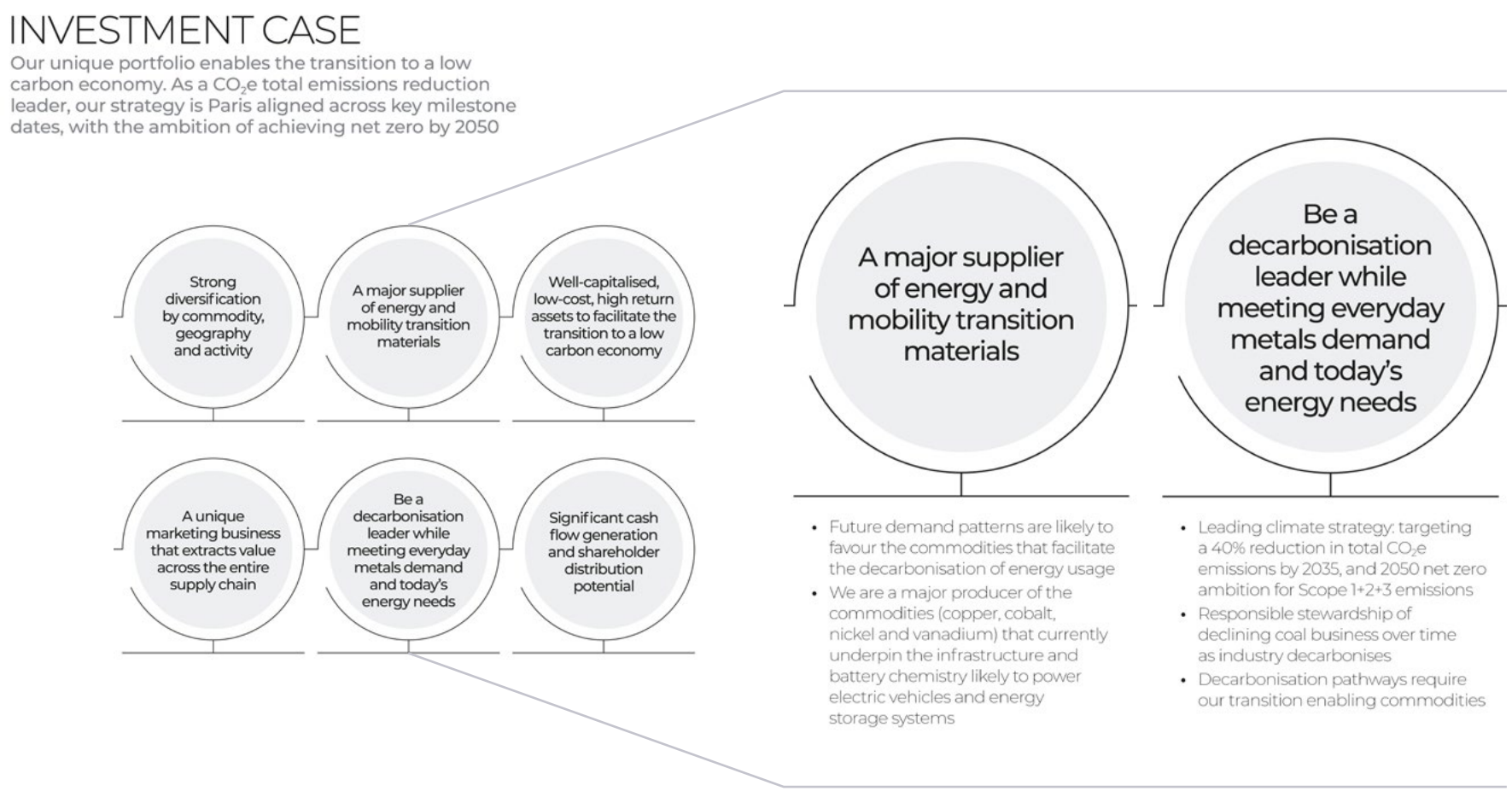


Figure 4.5
BP 2020 ARA (pp33, 52 and 53) describes how it evaluates material capital expenditure in line with the Paris goals.

The role of the board in evaluating material capex consistency with Paris
The board assesses the impact of portfolio changes, such as strategic acquisitions and the allocation of capital. It also considers specific investment cases which have been approved by the resource commitment meeting, see page 29.

Investment governance and evaluating consistency with the Paris goals

Governance

bp's investments fall within a governance framework. This seeks to ensure investments align with our strategy, fall within our prevailing financial frame, and add shareholder value. The governance framework also provides for investments to be assessed consistently and against a range of other outcomes relevant to our strategy, including a range of environmental and sustainability factors.

Investments follow an integrated stage-gate process designed to enable us to choose and develop the most attractive investment cases. A balanced set of investment criteria is used, see page 30. This allows for the comparison and prioritization of investments across an increasingly diverse range of business models.

The governance framework also specifies that proposed investments are tested, including against carbon prices for projected operational emissions, and are subject to assurance by functions independent of the business before a final investment decision (FID) is taken.

→ **See page 88** for more information on bp's governance framework.

Resource commitment meeting

For capital investments above defined financial thresholds for organic or inorganic spend, the investment approval is conducted by the executive-level resource commitment meeting (RCM), which is chaired by the chief executive officer. The RCM reviews the merits of each such investment case against a balanced set of criteria and considers any key issues raised in the assurance process.

The CA100+ resolution requires bp to disclose how we evaluate the consistency of new material capex investments* with (i) the Paris goals and (ii) a range of other outcomes relevant to bp's strategy. bp's evaluation of consistency of such investments with the Paris goals was undertaken by the RCM for new material capex investments sanctioned in 2020, see page 31. bp's evaluation of an investment's consistency with 'a range of other relevant outcomes' is achieved by considering its merits against bp's balanced investment criteria as described on page 30.

The role of the board

The board assesses the impact of portfolio changes, such as strategic acquisitions and the allocation of capital. The board reviews capital investments that are more than $3 billion for resilient hydrocarbons, more than $1 billion for all transition or low carbon investments and, in addition, any significant inorganic acquisition that is exceptional or unique in nature.

bp board
Reviews investment cases more than $3 billion for resilient hydrocarbons, more than $1 billion for all transition or low carbon investments and any significant inorganic acquisition that is exceptional or unique in nature.

Resource commitment meeting
Approves investment decisions related to existing and new lines of business above $250 million organic and $25 million inorganic, or which exceeds the relevant EVP financial authority, and for any project considered strategically important such as new market entry.

Investment allocation committees
EVP level forums to review investment cases within a business group as per individual EVP financial authority (up to $250 million organic, $25 million inorganic capital investment).

Business unit investment governance meetings
SVP level forums which review investment cases within a business group, enabler or integrator up to the individual SVP financial authority.

Cross-group meetings and forums
Meetings and forums to allow cross-group discussions and integration. Includes Country Forums, Regional Energy Plan Forum, the Carbon Table and Digital Forum. The forums do not hold decision rights, but inform and underpin the decision-making process delivering integration opportunities across bp.

In 2020 three new material capex investment decisions qualified for evaluation of Paris consistency, using our materiality threshold of $250 million.

Herschel development
Three-well tie-in to the existing Na Kika infrastructure in the US Gulf of Mexico.

Shafag-Asiman exploration well
Gas exploration well in the Shafag-Asiman field in Azerbaijan.

US offshore wind acquisition
Entry into the US offshore wind market through a strategic partnership with Equinor to develop four assets in existing wind leases.

In addition, because there was an unusually low number of new material capex investments in 2020, we also decided to evaluate the Paris consistency of the four largest new capex investments which fell below our materiality threshold.

Lambert Deep GWF-3
Four-well subsea tieback to the existing Karratha gas plant in Australia.

Qattameya Shallow
Additional spend to bring the Qattameya gas field in Egypt online.

Isabela 3
Single-well tie-in to the Na Kika platform in the US Gulf of Mexico.

Galapagos Deep West well
Exploration well in 'Cretaceous Thicks' play in the US Gulf of Mexico.

Figure 4.6
Rotork 2020 ARA (pp20 and 34) explains how it is adapting its strategy in response to sustainability considerations, which includes emissions reduction.

? Did you know?

ESG is integrated into innovation and New Product Development at Rotork.

An early step in the Growth Acceleration Programme was the overhaul of how we manage product development. New products are now developed with ESG at the forefront.

Our new Development & Launch Process consists of seven phases from discovery to launch. We incorporate the voice of the customer in the process and target four key sustainability performance features, as follows:
- **Energy usage reduction**
- **Emissions reduction**
- **Enabling the use of renewable energy**
- **Safety systems**

In this way, sustainability considerations are fully integrated into new product design. We track sustainability outcomes achieved. Each element attracts an equal score our evaluation. We are committed to continuous innovation, thinking differently and finding smarter ways to design our products. We want to help customers reduce emissions, reduce energy usage, and make greater use of renewable energy.

Read more on page 14

Sustainability

Rotork's approach to sustainability is embedded in our Purpose: 'keeping the world flowing for future generations'. We have sharpened our focus on our sustainability agenda this year, recognising its potential to support a competitive advantage and create sustainable value for all of our stakeholders.

Strategic initiatives

- **ESG Committee formed.** We established a formal Environmental, Social and Governance Board Committee and appointed our first Head of ESG and Sustainability.
- **Adoption of the UN SDGs.** We adopted the United Nations Sustainable Development Goals to help guide our sustainability strategy.
- **Sustainability framework put in place.** We developed a framework around priority sustainability issues and selected SDGs, having undertaken a 'materiality' assessment (see opposite and page 57 for details).
- **SDGs chosen.** We will target five main SDGs (6, 7, 9, 12 & 13) where we have greatest potential to make a difference. We have also adopted Goals 5 & 8 to help drive progress on these issues.

Progress in 2020

- People & Environment Report published.
- We further embedded sustainability considerations in our Innovation and New Product Development processes.
- Reduced our scope 1 & 2 carbon emissions by 18% and water consumption by 4.8%.
- Globally across our workforce, women make up 21.8% of our people (37.5% of our Board).
- Our employees gave time and money to charities and good causes all around the world.
- We committed to a Real Living Wage Policy.
- We delivered four employee 'pulse' surveys with an average engagement score of 7.1.

> Simply reporting against TCFD is not going to bring about the change that is so urgently needed. Non-executive directors (NEDs) need to challenge management to really get to grips with the carbon footprint of the business – i.e. where we are today, including scope 3 emissions, and devise a strategy that clearly prioritises actions including how they will be funded. NEDs need to demand to be brought into the conversations as the CEO is shaping the plan and when the trade-offs are being debated rather than waiting to critique the final output or having assumptions made about the level of risk that the board might or might not be willing to accept. This may feel uncomfortable because of the complexity of climate change considerations and it is also a change in the way we have done things to date; but the speed with which we need to see improvements demands radical changes in the way we conduct our business and run our boards.

Susan Hooper, Plural NED and chair on multiple boards for over 20 years and a founding director of Chapter Zero*

* An organisation dedicated to providing education, insight and support on climate change to non-executive board directors.

View from EY Climate Change and Sustainability Services (CCASS): Developing a decarbonisation strategy

Whilst there are an ever-increasing number of companies seeking to reduce their own GHG emissions and set net zero ambitions, the value of considering a decarbonisation strategy doesn't necessarily hinge on this. In fact, in many cases, the scope 1 and 2 GHG emissions from a company can be a poor indicator of its exposure to climate risk and, indeed, opportunity. Understanding how the physical impacts from a changing climate, as well as the transitionary implications of economies shifting to a net zero emissions future, therefore becomes far more critical in piloting a path towards a more sustainable, profitable, future.

TCFD reports are already beginning to demonstrate the degree to which organisations, and the sectors they operate in, could be impacted by a range of climate scenarios. Whilst many market commentators are calling for greater convergence on the types of climate scenarios assessed by companies, there may be a significant advantage for those who tailor climate scenarios that are most meaningful to their organisation's ability to create value over time.

EY's decarbonisation approach is designed to help support companies to navigate the different stages of developing and implementing a climate strategy.

Understand the climate risks and opportunities

In order to understand the strategic implications of climate-related risks and opportunities, companies need to:

- Map the entire value chain, up and downstream, and complete analysis of the organisation's carbon footprint to identify material exposures.
- Perform scenario modelling to stress test the business model, and to clarify risks (both physical and transition) and opportunities, as well as quantify the financial consequences.

Climate scenario analysis considers possible climate trajectories, acknowledging that there is uncertainty in future climate and climate policy impacts. As such, underlying assumptions are critical to the approach.

1

Establish a view of the potential transition and physical risks and opportunities across the value chain and across sectors and geographies. This should include analysis of the current carbon footprint to identify material exposures. The risks should be prioritised considering the likelihood and impact on the organisation, as well as their likely time horizons to inform the latter stages of planning.

2

Consider the organisation's climate policy environment and its temperature ambition:

- High ambition: Policy ambition consistent with minimising warming to 1.5°C
- Paris Ambition (required by TCFD): Policy ambition consistent with minimising warming to 2°C
- Low Ambition: Business as usual policy ambition resulting in warming of 4°C

3

Determine the scenarios to be modelled. There are multiple transition pathway considerations within different temperature ambitions (for example whether to model a disorderly or an orderly transition) and thought will need to be given to the range of climate events and their potential cross-dependencies. Time periods will need to be selected based on key internal time horizons and aligned with availability of data.

4

Once scenarios have been established, a qualitative physical and transition risk and opportunity assessment needs to be undertaken to set out the plausible impacts of each scenario on the business, its supply chain and customer base.

5

The next stage is to translate the scenarios into representative pathways by conducting the modelling and quantifying the financial risk and opportunity. This assessment should consider aspects such as the impact of different demand curves, frequency of weather events and changes in markets.

Develop and implement a climate strategy

When it comes to developing and implementing a climate change strategy, no two approaches will be the same. How an organisation chooses to execute is dependent on both the strategy itself and the organisation's processes and structure. However, our approach to supporting organisations through this process considers the following steps:

- Defining the organisation's purpose and ambition, and any GHG emissions reduction targets
- Identifying and assessing the strategic options – these may include (but not be limited to):
  - Decarbonisation of products or services
  - Transforming the supply chain
  - Optimising operations
  - De-risking the operational portfolio
  - Integrating new technologies

1

Define the strategy: The climate change strategy should be linked to external drivers, the specific climate change risks and available opportunities from stage 1. An organisation should set the level of ambition, whether they wish to be in a position of compliance or whether they wish to capture the full value add and be an architect of future markets creating products and services with positive climate change outcomes.

2

Identify carbon reduction targets: The identification of carbon reduction targets can be seen as the quantification of the ambition established in the strategy. It is expected by investors and ESG ratings agencies as well as the TCFD. Targets should be considered in both breadth and depth. Breadth as to whether targets will cover emissions from own operations to scope 3 targets that cover the value chain, and depth as to whether absolute reduction targets will be made to carbon-negative targets. Frameworks such as Science Based Targets Initiative (SBTi) should be considered.

3

Identify and assess strategic options: To execute reduction targets, mitigate risks and capitalise on climate-related opportunities, an organisation should map its strategic options between level of impact and the level of effort in order to prioritise projects.

4

Implementation: The final stage is determining what needs to be done to implement the decarbonisation journey by executing the strategic initiatives, managing work streams and monitoring the results against the desired outcomes.

It is important to remember that in addition to creating risks for organisations, climate change can also create significant opportunities as society transitions to a lower-carbon future. Therefore, developing a robust climate strategy that can be incorporated within the existing business strategy is essential to unlock long-term value creation.

5 Risk management

Climate-related risk processes included top-down and bottom-up risk assessments. A number of companies stated explicitly that they had included climate change on the risk register, and undertaken risk projects to strengthen their understanding of current and future climate-related risks. Examples of mitigation activities included setting an internal price on carbon to encourage low-carbon spending, and encouraging specialists to better understand climate-related risk.

Hallmarks of leading practice

- Employ a dynamic risk assessment as an evolution of more traditional risk assessment methodologies. This expands the criteria for assessing risks (beyond impact and likelihood) to take into account future trends, risk interconnectivity and velocity, and the capacity of an entity to adapt and respond to the risks, given speed of potential change etc. Figure 5.1 on the following page provides insight into the way in which Dynamic Risk Assessment might be applied to climate change and other risks.

TCFD recommended disclosures

Describe the organisation's processes for identifying and assessing climate-related risks.

Describe the organisation's processes for managing climate-related risks.

Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

Figure 5.1
Application of prioritisation criteria to ESG-related risks (adapted from the COSO ERM Framework).[15]

Criteria	Description	Relevance for ESG-related risks
Adaptability	The capacity of an entity to adapt and respond to risks	A risk may be significant and unpredictable; however, an organisation can build in adaptability mechanisms to respond to or absorb the risk. For example, in the 1980s, Shell diversified its portfolio and used scenario planning to prepare and adapt to potential oil price fluctuations that were generally considered unforeseeable.
Complexity	The scope and nature of a risk to the entity's success	Many ESG-related risks are interrelated, global, industry-wide and constantly changing. For example, health care companies are aware of the complex relationship between climate change and health. Climate change impacts may lead to potential disruptions to operations, whilst also leading to health impacts on individuals (increasing the demand for health care services).
Velocity	The speed at which risk impacts an entity	ESG-related risks are often emerging and unforeseen until swift events result in extreme consequences. Climate change impacts often manifest in the form of more extreme or frequent occurrences of known events, such as droughts and floods, and are best understood by studying longer temporal horizons than are usually associated with typical risk management.
Persistence	How long a risk impacts an entity	Risk severity should consider the extent to which the impact will be an acute, one-time impact (e.g., cyclones, hurricanes or earthquakes) versus a chronic issue that will cause ongoing impacts (e.g., sustained higher temperatures or droughts).
Recovery	The capacity of an entity to return to tolerance	Consider how quickly the business would recover if a risk occurred today. For some ESG issues, impacts are irreversible. For example, in the food, beverage and agriculture sector, the impacts of climate change have the potential to alter growing conditions and seasons, increase pests and disease, and decrease crop yield.

Hallmarks of leading disclosure

- Reflect the impact of climate risk within the financial statements, such as in relation to forward-looking assumptions and judgments applied (see Section 7 below).
- Link each risk to a specific business area/ risk owner.
- Bring out the interconnectivity between climate change and other principal risks.

Integration across the ARA

- Discuss the impacts of climate change in the risk management section (**M&G**, see Figure 5.3; **Royal London Asset Management**, see Figure 5.4).
- Companies in high-risk industries should be explicit on how viability scenarios have considered the impact of climate change (**Rolls-Royce Holdings plc**, see Figure 5.2). In our work we identified some companies that referenced climate change in their scenarios even though they do not identify climate change as a principal or emerging risk; in such cases we recommend explaining the reason for this.

15 **Applying enterprise risk management to ESG-related risks**, World Business Council for Sustainable Development (WBCSD) – Committee of Sponsoring Organizations of the Treadway Commission (COSO), October 2018.

Figure 5.2
Rolls-Royce Holdings plc 2020 ARA (pp55 and 136) references the impact of climate change at a high level within its viability statement.

Viability

The viability assessment considers solvency and liquidity over a longer period than the going concern assessment. Our downside scenario uses the same assumptions as the going concern statement and in 2023 to 2025 assumes a slower recovery back to 2019 level than assumed in our base case. The analysis excludes proceeds from disposals and additional funding which have not yet been agreed but, if and when realised, will increase liquidity at least £2bn.

Consistent with previous years, we have assessed our viability over a five-year period which is in line with our five-year annual target setting process. We continue to believe that this is the most appropriate time period to consider as, inevitably, the degree of certainty reduces over any longer period.

In making the assessment, we have used the same base case and severe but plausible downside scenarios and existing committed borrowing facilities as set out in the going concern assessment, with the analysis extended over five years. We have combined additional severe but plausible scenarios that estimate the potential impact of additional principal risks arising over the assessment period, for example: the loss of a key element of the supply chain, a compliance breach, a trade war between major trading blocs, failure to deliver the expected benefits from our restructuring activities, the impact of climate change or a significant product safety event. The impact on viability of some of the risks modelled, such as Business Continuity and Political risk, has reduced compared to last year due to falling OE volumes and lower EFHs.

The assessment takes into account UK tax laws that, in broad terms, restrict the offset of the carried forward tax losses to 50% of current year profits. Based on this assessment, the Group has recognised a deferred tax asset of £801m relating to losses and £163m relating to ACT. This reflects the conclusions that:

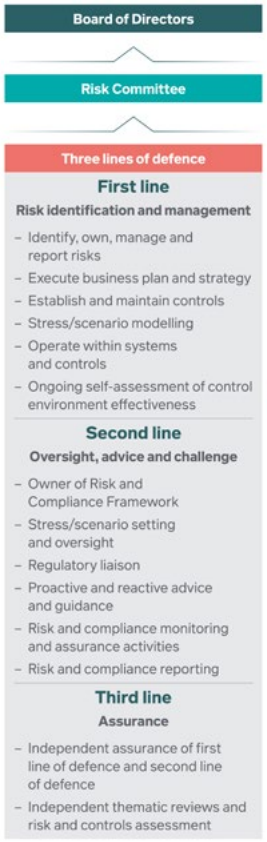
- It is probable that the business will generate taxable income and tax liabilities in the future against which these losses and the ACT can be utilised.
- Based on current forecasts and using various scenarios these losses and the ACT will be used in full within the expected widebody engine programme lifecycles.
- The Group has not recognised any deferred tax assets in respect of 2020 UK losses and de-recognised £327m of the deferred tax asset on the balance sheet at 31 December 2019. Of the total charge, £51m is underlying with the balance of £276m non-underlying
- This is based on management's assumptions relating to the amounts and timing of future taxable profits and takes into account the impact of COVID-19 and climate change on existing widebody engine programmes.

Changes in future profits will impact the recoverability of the deferred tax assets and as explained in note 1, the key assumptions impact contract margins. A 5% change in such margins over the remaining life of the programmes, against which the recovery of the tax losses and ACT is assessed, would result in a variance of around £100m in the related deferred tax balances recorded on the balance sheet, assuming a 19% tax rate and the 50% loss offset restriction mentioned above.

The assessment also considered the potential impact of climate change on profit forecasts, including additional taxes and levies that could arise and changes in consumer behaviour which could result in a reduction in shop visits (driven by EFHs, which are influenced by a number of factors including climate change). A 5% reduction in shop visits over the remaining life of the programmes would result in a variance of around £100m in the related deferred tax balances.

Figure 5.3
M&G 2020 ARA (p67) discusses climate risk management as part of the regular Risk Management Framework.

Figure 1



Our expected ability to stay within appetite is assessed during the annual business planning process, with the actual position monitored and managed regularly throughout the year.

We also have risk appetite statements and accompanying financial limits in place for significant individual risks, including a comprehensive Group Approved Limits Framework. In combination, the individual appetite statements and limits are set such that we operate in line with the aggregate approved risk appetite statements even when the individual limits are fully utilised.

We use prescribed indicators to inform whether a risk may move out of appetite and, together with limit utilisation, this is a core element of risk reporting to Board and Executive Risk Committees with appropriate management actions.

Climate risks

Climate change risk is currently managed through the M&G plc Risk Management Framework, with risk oversight and assurance delivered in accordance with the three lines of defence model. In addition an M&G plc ESG Risk Management Framework is being established to provide additional focus on the risk management activities required for ESG and climate change initiatives, including specific details on the requirements to effectively identify, monitor, manage and report on ESG and climate change risks. The management and monitoring of ESG risk, including climate change risk, will also align to our ESG risk appetite statement(s), which are currently under development, to support our ESG-related commitments and targets, with the aspiration of meeting stakeholder expectations. We are also building our risk management controls to cater for the diverse needs of a range of stakeholders groups, geographical territories and compliance requirements to identify the most effective data, policy, process and reporting approach for the future.

Sustainability risks, along with other risk types, are identified, assessed and managed under the M&G plc Risk Management Framework and specific emphasis on the management of this risk will be outlined within the M&G plc ESG Risk Management Framework, which is currently under development. Consideration of ESG Risk is built into the decision-making processes and a requirement of key strategic board risk assessment papers. Climate change risk is being integrated into our scenario analysis process with both top down and bottom up consideration over a range of time horizons.

Climate change is significant to our corporate operations and the large portfolios of assets we manage on our own balance sheet and for clients, making ESG risks critical to our business model and priorities.

We combine a range of approaches to help us to identify, understand and articulate climate risks, including academic research, industry-shared learning, scanning tools and relevant data sources, and best practice guides.

Scenario analysis is an important tool in assessing the impacts of these risks over a range of time horizons and potential climate pathways. M&G has undertaken climate scenario analysis with further work underway to develop and enhance our approach to provide additional insights into the climate risk faced by the business both now and in the future.

Figure 5.4
Royal London Asset Management TCFD Report 2020 ARA (pp24-25) explains the integration of climate change into the risk management framework.

Risk management

RLAM's risk management framework consists of a cohesive set of components designed to sustain and uphold high standards. This helps to ensure that the firm's performance and achievement of its objectives are not undermined by unexpected events.

As part of its risk management framework, RLAM defines risk strategy, risk appetite and policies which set out the objectives, limits and tolerances within which the board expects the business to operate. Such an approach provides assurance that the risks to which RLAM may be exposed are being appropriately identified and managed within risk appetite, whilst impact is being minimised.

Climate risk in RLAM

As an asset manager, RLAM has the fiduciary responsibility to protect the assets managed on behalf of our clients and mitigate the impact that climate change can have on these holdings. Therefore, during the course of 2020, RLAM undertook a number of initiatives to integrate climate change into its risk management framework and ensure that its climate change strategy is reflected through different components of this framework to enable informed decision-making at various levels.

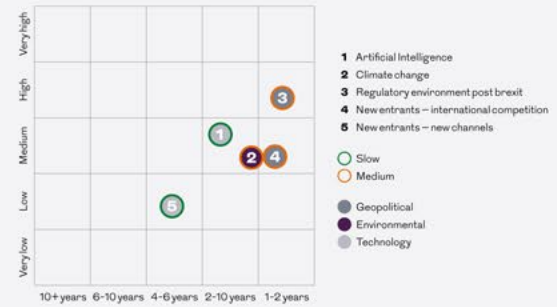
The risk management framework consists of a set of tools and procedures which allows RLAM to identify, manage and mitigate risks the firm is exposed to. In particular, climate change risk has been recognised in the risk taxonomy, risk and control self-assessment process and throughout risk governance. Climate risk is identified as an emerging risk within RLAM's risk register, in recognition of the long-term nature of some of its impacts. Additionally, climate-related risks are captured in our risk management system and are linked to reputational, operational and regulatory risks. See figure 10.

Emerging risks arise from the external environment as a result of technological, economic, environmental and/or geopolitical changes. We manage emerging risks with the aim of protecting our business and achieving its strategy. See figure 11.

Through its integration in RLAM's risk register, climate risk is covered and reviewed by our three lines of defence operating model. See figure 12.

The structure for identifying, managing and reviewing RLAM's climate risks is displayed. See figure 13.

Figure 10: Emerging risk assessment



Velocity – when a risk has crystallised, the time expected to be taken for it to reach its full impact.

Extract from RLAM Emerging Risk Profile (covers all legal entities). As of June 2020.

Figure 11: Emerging risk assessment

Emerging risk description	Opportunity/ threat	Impact	Timescale
Climate change – Driven by the general trends and client demands, climate change risk may soon become a key element in investment management threatening our ability to participate and compete.	Opportunity and threat	Medium	2-3 years

Figure 12: RLAM 3-line of defence

Ownership of risks and accountable for **implementing, embedding and using** the Risk Management System

- Delivering the business plan within risk appetite and managing the risk profile.
- Identifying and evaluating all significant risks in decision-making.
- Monitoring and analysing changes in the risk profile on a regular basis and assessing these against risk appetite.
- Producing regular and timely reports on all significant risk positions.

Accountable for providing effective **challenge and oversight** of the management of risks, ensuring that risk has been adequately considered in all significant business decisions.

- Provides an independent and forward looking view of the risk profile to the Board Risk Committee (BRC).
- Provides assurance that all significant risks have been considered by the first line.
- Accountable for **developing and maintaining** the Risk Management System the first line use in its day-to-day business.
- Provides assurance to the BRC that the Risk Management System is being operated effectively by the first line. Makes remedial recommendations as needed.

Accountable for providing **independent and objective assurance** over the effectiveness of corporate standards and business compliance, including assurance that the risk management process is functioning and identifies improvement opportunities.

Figure 13: RLAM Climate Risk Management Framework

View from EY Enterprise Risk Management: Integrating climate-related risk

EY can help companies strengthen their consideration of climate-related risks and their impact (per TCFD Strategy pillar), as well as integrating climate-related risks into the wider risk management processes (per TCFD Risk Management pillar).

Based on our work to date, what is clear is that the challenges organisations face in integrating their climate-related risks depend on the maturity of the existing risk approach. Where the risk approach is dynamic and flexible – capitalising on risk automation and the right risk behaviours – incorporating a 'new/emerging' risk is more straightforward than for others who are still operating a more traditional, manual based approach that is heavily focused on following a fixed, annual process.

Irrespective of maturity, climate-related risk needs to be considered across all aspects of the risk approach. As a minimum, when working with companies we recommend prioritising the following areas:

1

Risk articulation: What are the risks that are relevant to the organisation and may affect the achievement of its objectives – both from a transition and physical perspective – and who should be involved in helping to define these? Is there upside opportunity to exploit as well as downside risk to manage?

a. What time horizon should these be considered over, and how does this align with existing risk time frames?

b. Do these risks give rise to a standalone principal risk, or are they drivers or constituents of other risks? How does it make most sense to define these in terms of the organisation's strategy, objectives and resources to address these risks?

c. How do these risks fit with the organisation's risk universe/taxonomy and existing risk profile?

2

Risk assessment: Has the organisation expressed its appetite for managing climate-related risks within its risk appetite statements, and do the current risk scoring criteria allow for a proper consideration of this? If not, how should the organisation's appetite for these risks be articulated?

a. Should the organisation establish a separate risk appetite for climate risk or include this with an existing category, e.g., ESG, social licence to operate?

b. If the risk is believed to be emerging for the organisation, are traditional methods of assessing risk (e.g., likelihood and impact) appropriate or is there a need to think about different ways to measure the risk, velocity, management preparedness?

3

Risk response: What responses to these risks are proportionate in the context of the organisation?

a. How is the organisation's appetite for addressing these risks reflected across its control framework e.g., considered in policies, processes, training, etc.?

b. Have potential climate-related scenarios been analysed and tested to ensure an objective and proportionate response has been applied to the risks?

4

Risk oversight and reporting: What governance and monitoring mechanisms need to be in place to help ensure climate-related risk information is available at the right time and in the right format for the right people to make decisions?

a. Who should own climate risk within the organisation?
b. How are roles and responsibilities for these risks defined, communicated and monitored across the three lines of defence?
c. How are these risks incorporated within the risk reporting process? Is data available in real time? Are predictive indicators (KRIs) used to warn of increasing exposure?

5

Risk culture and behaviours: How has the role of behaviour and culture been considered in the management of climate-related risks?

a. Have risk behaviours been defined and assessed to target communications, education and other interventions to drive the right support and actions of different internal stakeholder groups?
b. How does the management of climate-related risk fit with the organisational purpose and values? How does it impact decisions around its interactions with third parties and the broader value chain?

As with any other type of risk, what we have observed is that effectively integrating climate-related risk within the existing risk approach will enable better engagement with a range of stakeholders. In addition, integration helps to ensure quality risk conversations and appropriate responses based on the materiality of these risks in the context of the existing risk profile.

6 Metrics and targets

As noted in a recent benchmark analysis issued by Climate Action 100+, the world's largest investor engagement initiative on climate change, 52% of the world's largest emitters have made a net zero commitment of some type but more work is needed on interim targets and the strategy for decarbonisation.[16] We found that a number of companies within our sample have set goals such as 'net zero', but it is not always clear how progress towards these will be measured, monitored or assured. From our engagement it also appears that reporters are not always clear on the difference between the concepts of net zero, science-based targets and carbon neutrality.

TCFD recommended disclosures

Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

Disclose scope 1, scope 2, and, if appropriate, scope 3 greenhouse gas (GHG) emissions, and the related risks.

Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

16 **Climate Action 100+ Net Zero Company Benchmark**, Climate Action 100+, March 2021.

Hallmarks of leading practice

- Set ambitious targets, for example, to achieve net zero by 2050 or sooner.
- Provide an overarching roadmap for achieving net zero, providing shorter-term interim targets to support the longer-term goals.
- Establish and monitor metrics relating to climate-related risks and opportunities, e.g., percentage of 'green revenue'. Climate-related KPIs should be established based on what is most relevant in the context of the resilience of the business model to climate-related risks. As an example, for a property company this might be percentage value of portfolio exposed to a 10-20% risk of inland, coastal and flash flooding within a certain period.
- Use a science-based approach to set your targets[17] to reduce emissions (**Senior**, see Figure 6.1).
- Start measuring scope 3 emissions and monitor their alignment with the ambition that has been set (**Anglo American**, see Figure 6.3).
- Participate in external benchmarking of performance to help track and assess progress, such as using reporting to CDP.
- Develop appropriate control systems for climate-related disclosures; as a first step focus on improving internal controls over the data collection, before obtaining third-party assurance. **Diageo** 2020 ARA (p184) obtained independent limited assurance of selected sustainability and responsibility performance data for its 2020 ARA. **Intertek** 2020 ARA (p37) obtained independent assurance of its environmental performance.
- Align executive pay to longer time horizons and, where relevant, incorporate assured climate-related metrics (**Croda**, see Figure 6.4).

Examples of leading disclosure

- Explain targets clearly, e.g., what 'net zero' means, with reference to specific timeframes, base year, milestones etc. Provide a description of methodologies used to calculate targets and measures, including their boundaries.
- Provide commentary in respect of the Streamlined Energy and Carbon Reporting (SECR) disclosures that is both transparent and meaningful. **NatWest** 2020 ARA (p28) provides a useful table overview to highlight the key information in relation to SECR such as intensity ratio and scope 3 emissions.
- Disclose scope 3 emissions to demonstrate how well you understand the climate exposure of your value chain.
- Disclose decarbonisation pathways, especially given the increased scrutiny on how well companies prepare and contribute to decarbonisation solutions (**Glencore**, see Figure 6.5).

A number of global groups are working to consider what credible net zero plans should look like, including the Science Based Targets initiative (we consider setting science-based targets to be leading practice) as well as the Climate Action 100+ investor group.

Having consensus on an agreed definition of net zero will help to address "greenwashing" and controversy over so-called "avoided-emissions" and the use of carbon offsets highlight.

Carbon offsets should not be confused with carbon removal. Similarly, so-called avoided emissions do not count towards science-based targets.

17 Science-based targets show companies how much and how quickly they need to reduce their greenhouse gas (GHG) emissions to prevent the worst effects of climate change. For more detail, see **The Science Based Targets** initiative.

“

Reporting should not be used as a fig leaf for inaction. Investors are concerned that companies are hiding behind disclosures without truly addressing climate change.

We are forward-looking, which is why a company’s trajectory, its intention and actions for the future are very important to us.

Companies should set stretch targets backed by interim goals and clear plans. Targets should also be Paris aligned and signed off by the Science Based Targets initiative.

Companies sometimes worry that they will be automatically “punished” for not meeting a climate target in the near-term. As long as the reasons are clearly explained, credible actions to rectify the situation have been identified and we can understand the future direction of travel of the business, that will not be the route we take.

Lloyd McAllister, Responsible Investment Analyst, Newton Investment Management

Integration across the ARA

- If the ARA contains an upfront ‘performance highlights’ section, consider including a climate-related metric.
- Link climate-related metrics to any key risk indicators (KRI-metrics of risk exposure) associated with physical and transition risks.
- Consider whether any climate-related metrics should be considered as key performance indicators (KPIs) (**Barclays**, see Figure 6.2).
- Demonstrate a cohesive narrative across the strategic report and the directors’ remuneration report.

“

There are various interesting forward-looking indicators in development (e.g. warming potential) that may help with the assessment of portfolio alignment (noting that portfolio alignment per se does not guarantee real-world decarbonisation.). These are however in their infancy and the results can be very divergent. Which is why companies in their reporting need to establish the methodologies, assumptions and limitations related to key climate metrics and these need to be clearly disclosed. It is impossible to contextualise information without this.

Carlota Garcia-Manas, MSc
Senior Responsible Investment Analyst at RLAM

Figure 6.1
Senior 2020 ARA (p15) has its emissions reduction targets independently verified.

Senior takes leadership position in verifying our carbon reduction targets

In 2020 we were successful in having our carbon emission reduction targets verified by the Science Based Target Initiative ("SBTi"). The SBTi is a partnership between CDP, the United Nations Global Compact ("UNGC"), World Resources Institute ("WRI") and the Worldwide Fund for Nature ("WWF"). The SBTi call to action is one of the We Mean Business Coalition commitments.

Senior is the first company in the global Aerospace & Defence sector to have its emissions reduction targets independently verified and approved by the SBTi. The targets covering GHG emissions from Senior's operations are consistent with reductions required to limiting climate warming to 1.5°C.

The Paris Agreement's long-term temperature goal is to keep the increase in global average temperature to well below 2°C above pre-industrial levels; and to pursue efforts to limit the increase to 1.5°C, recognising that this would substantially reduce the risks and impacts of climate change.

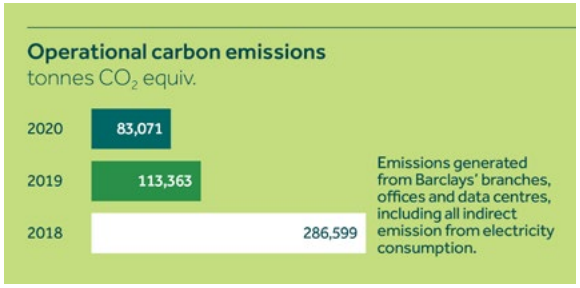
SBTi have approved the following targets:

- Senior commits to reduce its absolute Scope 1 and 2 GHG emissions by 30% by 2025 compared to a 2018 base year
- For Scope 3 GHG emissions, Senior also commits that 80% of its suppliers by spend, covering purchased goods and services and capital goods, will have science-based targets by 2025.

In the SBTi's target assessment report, Senior's Scope 1 and 2 targets were considered ambitious as they track to a 1.5°C global temperature increase.

Criterion	Criterion description	Result of the assessment	Recommendations to address non-compliance
C12	The use of offsets is not counted as emissions reduction towards the progress of companies' science-based targets. The SBTi requires that companies set targets based on emission reductions through direct action within their own operations or their value chains. Offsets are only considered to be an option for companies wanting to finance additional emission reductions beyond their science-based targets.	The submitted targets do not include offsets, and therefore complies with Criterion 12.	Compliant
C13	Avoided emissions fall under a separate accounting system from corporate inventories and do not count towards science-based targets.	The submitted targets do not include avoided emissions, and therefore complies with Criterion 13.	Compliant

Figure 6.2
Barclays 2020 ARA (pp22-23) provides two KPIs relating to climate-related considerations (i.e., operational carbon emissions as well as social and environmental financing).



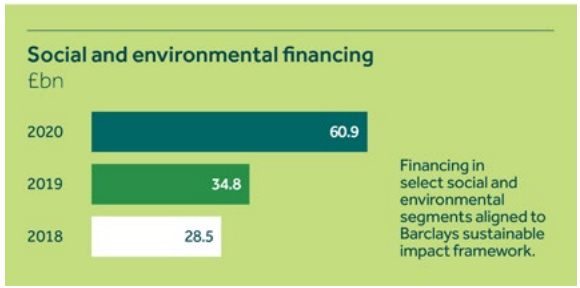


Figure 6.3
Anglo American 2020 ARA (p37) assesses scope 3 emissions across its entire value chain once every two years.

In 2019, we undertook a Group-wide Scope 3 emissions assessment, covering the period 1 January 2018 to 31 December 2018. The emissions from this period were 225 Mt CO_2e. We plan to carry out this detailed assessment every two years.

For more information on our Scope 3 emissions, see
www.angloamerican.com/sustainability-data

Anglo American 2020 Sustainability Report (p40).

Scope 3

We recognise that our Scope 3 emissions are always another organisation's Scope 1 and 2 emissions. In other words, they are not directly within our control and are complex to measure.

In 2020, we published a detailed inventory of our 2018 Scope 3 emissions, which provides clarity across the 15 categories into which Scope 3 is divided, covering the full value chain. This provides a firm foundation for future action.

Figure 6.4
Croda 2020 ARA (pp32, 39 and 90) discloses its commitment to have its SBTs validated.
Emissions performance is assured and considered as a KPI, and linked to executive remuneration.

Tackling the climate crisis is our biggest challenge, but, through decarbonisation, innovation and customer collaboration, it also offers us our greatest opportunities.

Reducing emissions

Milestones
- 25% reduction in absolute scope 1 and scope 2 emissions by the end of 2024
- All Croda locations to have a decarbonisation roadmap by the end of 2022

We are committed to reducing emissions in line with the science required to limit global warming to 1.5°C above pre-industrial levels, and are signed up to the UN Global Compact's Business Ambition for 1.5°C. Early in 2021 we will have our Science Based Targets validated — to be on track to achieve our targets, our manufacturing sites need to reduce emissions by 46.2% by 2030 (using 2018 as the baseline).

In 2020, manufacturing sites representing 90% of our total emissions developed decarbonisation roadmaps to 2030. This involved understanding current energy requirements, identifying opportunities to reduce and re-use energy, as well as exploring the feasibility of switching to renewable sources. These roadmaps have been collated and the global position quantified from both financial and carbon-reduction impact perspectives. This outstanding work gives us confidence that our Climate Positive commitment is achievable.

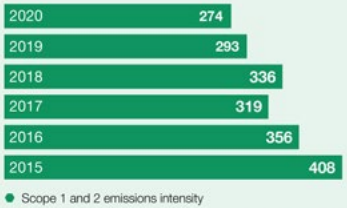
2020 also saw us confirm and start to implement an internal carbon price of £50/tonne CO_2e for all capital expenditure applications. We believe this will continue to drive the right investment decisions for us to meet the challenging targets we have set.

The majority of our emissions lie within our supply chain, embedded in our raw materials. To reduce these emissions, we will also set a scope 3 Science Based Target during 2021. Collaboration, engagement and encouraging suppliers to set their own emissions reduction targets will be key to us making progress. As many of our key customers have also committed to Science Based Targets, our Climate Positive commitments will support them in achieving their own scope 3 reductions, with the cradle-to-gate carbon footprint of our products significantly reducing over this critical decade for climate action.

> "It is an exciting and valuable experience to be involved in creating the roadmap, where we can improve current processes and explore novel technologies which may very soon become the norm for us."
>
> **Shu Ying Tan**
> Graduate Trainee, Croda Singapore

GHG emissions ($TeCO_2e$)[1]

GHG emissions intensity ($TeCO_2e$/£m)



Since 2015, our baseline year, our total scope 1 and 2 GHG emissions have reduced by 15.4%. Within this, our scope 1 emissions have increased by 13.3%, whilst we have seen a greater than 67% reduction in scope 2 emissions. Since 2017 we have been reporting market-based scope 2 emissions, which better reflect our purchasing of renewable electricity at greater levels than the national averages in the countries where we operate.

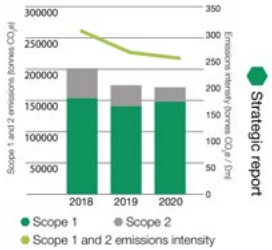
Scope 1 and 2 GHG emissions from our UK operations were 35,277 $TeCO_2e$ in 2020 (2019: 34,932 $TeCO_2e$) representing approximately 20% of our global GHG emissions.

Our chosen measure of GHG emission intensity divides our GHG emissions (market-based scope 2 emissions) by value added[2], a measure of our business activity. Our 2015 baseline year, along with 2016, were calculated using location-based scope 2 emissions as a proxy. Since 2015, our GHG emissions intensity has improved by 33%, illustrating how we are decoupling growth from our environmental impact.

Our scope 1, 2 and 3 GHG emissions are verified by Avieco. Their formal independent verification statement is available at: www.croda.com/carbonverification.

Energy consumption and efficiency improvements
In 2020 we consumed 1,113,064,125 kWh (2019: 1,026,316,451 kWh) of energy across our global operations. This included 223,177,222 kWh (2019: 223,465,355 kWh) consumed by UK operations. As part of our strategy to improve the efficiency of energy consumption, 27 projects were implemented globally, realising 31,642,487 kWh of annualised efficiency improvements, equivalent to 18,500 $TeCO_2e$ avoided emissions.

1. Scope 1 emissions are calculated using Defra Government emission conversion factors for greenhouse gas company reporting. Scope 2 emissions are market-based (location-based by proxy for 2015 and 2016).
2. Value added is defined as operating profit before depreciation and employee costs at 2015 constant currency.

KPI	Comment	Target	Our performance
Absolute scope 1 & 2 emissions and scope 1 & 2 emissions intensity (R)	Since 2018, our emissions have reduced in line with the absolute emissions reduction pathway required by the Science Based Targets initiative for limiting global warming to no more than 1.5°C above pre-industrial levels. These reductions are from our scope 2 emissions, as we have switched to renewable electricity where possible. Our emissions intensity has fallen by 16% since 2018, demonstrating how we continue to decouple economic growth from environmental impact.	By 2030, we will have achieved our Science Based Target, reducing emissions in line with limiting global warming to no more than 1.5°C above pre-industrial levels. **On target**	

KPI definition: Our operational emissions (associated with burning fuels onsite and purchased electricity), both in absolute terms as well as emissions intensity. Our chosen measure of GHG emission intensity divides our GHG emissions (market-based scope 2 emissions) by value added: a measure of our business activity.

GHG emission intensity divides our GHG emissions (market-based scope 2 emissions) by value added, defined as operating profit before depreciation and employee costs in reported currency.

Performance share plan	Steve Foots 225% of salary	Jez Maiden 175% of salary
The targets for the awards are set out below:		
Performance measure (weighting)	Threshold vesting	Maximum vesting
EPS[1] (35%)	5% p.a.	11% p.a.
TSR[2] (35%)	Median	Upper quartile
Sustainability metrics (30%)	• **NPP (15%) – NPP sales to grow at twice the rate of non-NPP, subject to overall positive Group profit growth and a minimum average of 3% NPP growth per year, with payments being made on a sliding scale up to 5% growth per year.** • 'Climate Positive' (7.5%) – a reduction target specifically aimed at Scope 1 emissions and aligned with our external commitment to achieve a Science Based Target (SBT) in line with a 1.5°C pathway. Over the three-year PSP performance period the target is a 12.6% reduction (average of 4.2% per year) compared to verified emissions[3] in 2020 with any award paid in defined ranges between: - a reduction of 12.6% and above award of 7.5% (maximum) - a reduction of 6.2% and below no award (0%). • 'Land Positive' (7.5%) – our key target for 2030 is that we will save more land than we use. For the three-year PSP performance period we have set annual targets for Land Area saved, with a target in 2023 of 56,750 ha of additional land saved over that in the 2019 baseline year with any award paid in defined ranges between: - 56,750 ha or above award of 7.5% (maximum) - below 35,600 ha no award (0%).	

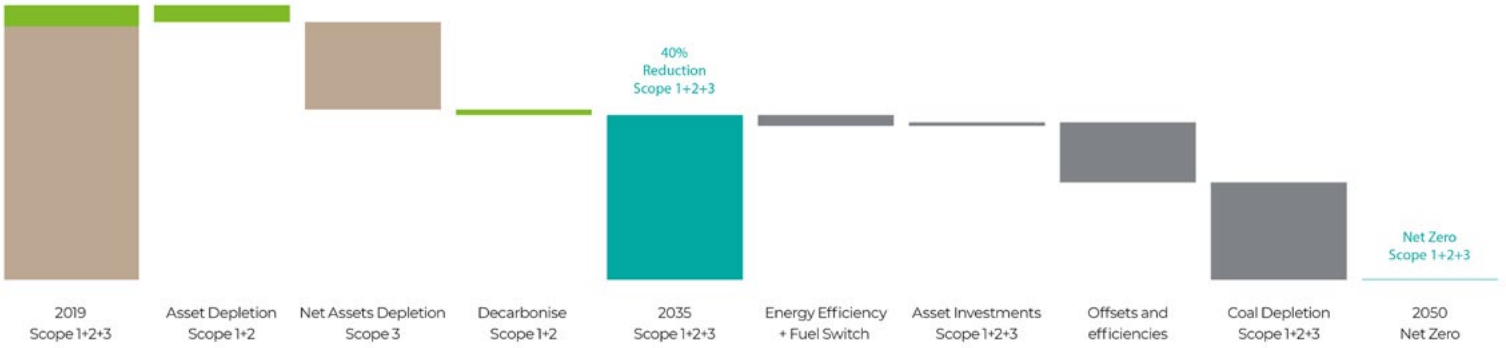
Figure 6.5
Glencore 2020 ARA (pp17 and 19) illustrates its pathway to achieve its medium-term target and long-term ambition.

In 2020, we conducted assessments of physical and regulatory risks to our operations against the Current Pathway and Rapid Transition scenarios. Our **Climate Report 2020: Pathway to net zero** details the risks and opportunities identified across the business, as well as the mitigating actions.

Our work programme for 2021 includes:

- Validating the 2019 baseline for Scope 3 emissions
- Progressing commodity departments' marginal abatement cost curves to support our assessment and implementation for CO_2 emission reduction projects

Illustrative emissions pathway to net zero
(million tonnes CO_2)



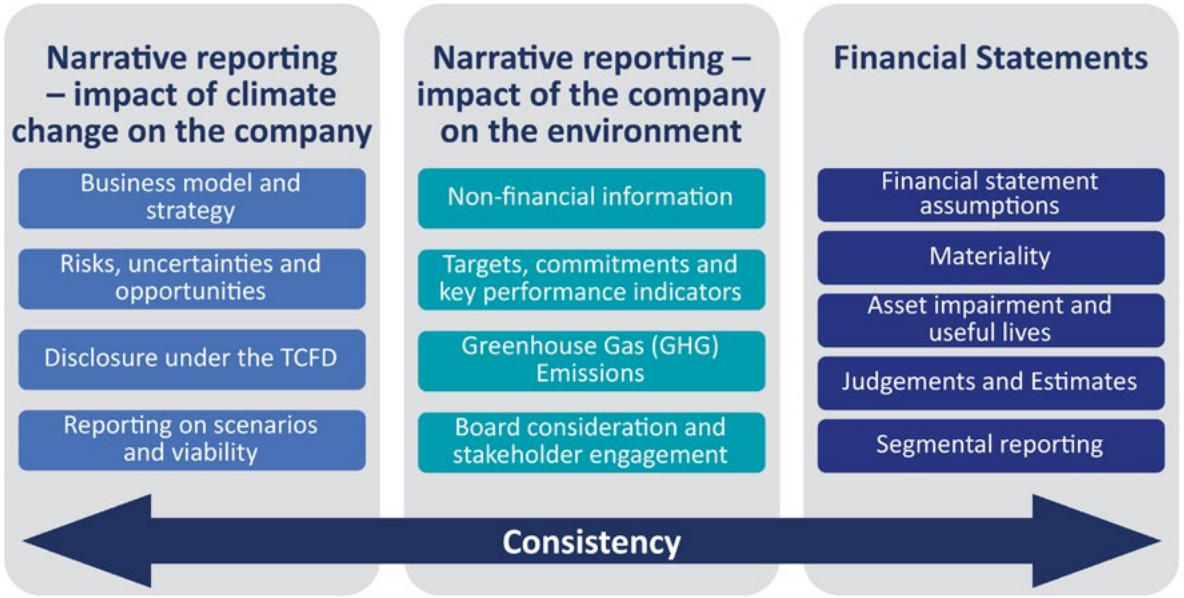
7 Financial statements impacts

Based on our review, the disclosure of climate change in the financial statements lags behind narrative reporting and is often not reflective of the quantified information that is already being provided within CDP disclosures.

Even where disclosures are not required by a standard, we encourage companies to disclose financial implications arising from climate-related risks to address investor expectations. These may include but are not limited to the following:

- Asset impairment, including goodwill (IAS 36)
- Changes in the useful life of assets (IAS 16; IAS 38)
- Changes in the fair valuation of assets (IFRS 13)
- Effects on impairment calculations because of increased costs or reduced demand (IAS 36)
- Changes in provisions for onerous contracts because of increased costs or reduced demand (IAS 37)
- Changes in provisions and contingent liabilities arising from fines and penalties (IAS 37)
- Changes in expected credit losses for loans and other financial assets (IFRS 7)

Figure 7.1: Overview of key considerations in respect of climate reporting within the ARA.[18]



For further guidance in this area, refer to the International Accounting Standards Board's (IASB) **paper** on the effects of climate-related matters on financial statements (Nov 2020), which is also referenced in EY's **IFRS Developments Issue 177: Effects of climate-related matters on financial statements publication**. See also The Climate Disclosure Standards Board's **publication** for considerations in relation to integrating climate-related matters into financial reporting, which builds on IASB's position on accounting for climate.

We found only a few companies that reference climate-related matters in relation to the financial statements, most of these in the extractive industry. For example, Shell 2020 ARA (p150) discloses the AC's consideration on the potential impacts of climate change in respect of impairment and taxation. For further examples, see Figures 7.2 and 7.3.

18 **Climate Thematic Review**, Financial Reporting Council (FRC), 2020.

Figure 7.2
Anglo American 2020 ARA (pp117, 169, 170 and 181) references the AC's consideration of climate change in the context of asset impairment and the company's approach to assurance over sustainability KPIs.

Significant accounting issues considered by the Audit Committee in relation to the Group's financial statements	Response of the Audit Committee
▶ **Impairment and impairment reversals of assets** The value of mining operations is sensitive to a range of characteristics unique to each asset. Management is required to apply judgement in the estimation of Ore Reserves, and price and production forecasts which drive cash flow projections.	The Committee exercises oversight over the impairment review process. The Committee assessed the identification of impairment and impairment reversal indicators, the impact of Covid-19 and climate change on commodity price and exchange rate assumptions, the review of changes in the valuation of cash generating units (CGU) and associated sensitivity analysis, and the appropriateness of disclosures made within the 2020 Integrated Annual Report on key sources of estimation uncertainty. During 2020, the most significant assets considered were the following:
▶ **New accounting standards and best practice guidance** The impact of new accounting standards, and any elections made in their application, involves judgement to ensure their adoption is managed appropriately.	The Committee reviewed management's impact assessment of new standards and amendments which came into effect on 1 January 2020, but were not considered to have a material impact on the Group. The Committee also reviewed the steps taken by management to ensure that the Group is able to comply with the JSE controls reporting requirements that came into effect for reporting periods ending on 31 December 2020. The Committee considered the Group's approach to sustainability KPI assurance in order to facilitate best practice climate change disclosures. The Committee also received updates on government consultations regarding UK Corporate Reform which are anticipated to bring wide-ranging changes to the corporate regulatory landscape.

Accounting judgements

Environmental restoration and decommissioning provisions

The recognition and measurement of environmental restoration and decommissioning provisions requires judgement and is based on assumptions and estimates, including the required closure and rehabilitation costs, the timing of future cash flows, and the discount rates applied. The Group considers that no reasonably possible change to a single assumption would have a material impact on the provisions, however a combination of changes in multiple assumptions may.

The Group considers the impact of climate change on environmental restoration and decommissioning provisions, specifically the timing of future cash flows, and has concluded that it does not currently represent a key source of estimation uncertainty. Changes to legislation, including in relation to climate change, are factored into the provisions when the legislation becomes enacted.

It also references climate change risks and uncertainties within the financial statements' disclosure on judgments and estimates.

Impairment and impairment reversals of assets

i) Critical accounting judgements

The Group assesses at each reporting date whether there are any indicators that its assets and cash generating units (CGUs) may be impaired. Operating and economic assumptions which could affect the valuation of assets using discounted cash flows, including those that could be impacted by the Group's current and emerging principal risks such as climate change, are updated regularly as part of the Group's planning and forecasting processes. Judgement is therefore required to determine whether the updates represent significant changes in the service potential of an asset or CGU, and are therefore indicators of impairment or impairment reversal. The judgement also takes into account the Group's long term economic forecasts, market consensus and sensitivity analysis of the discounted cash flow models used to value the Group's assets.

– Discount rates
Cash flow projections used in fair value less costs of disposal impairment models are discounted based on real post-tax discount rates, assessed annually. Adjustments to the rates are made for any risks that are not reflected in the underlying cash flows, including the risk profile of the individual asset and country risk. A real discount rate of 7.0% has been used in the majority of the Group's fair value less costs of disposal models which are prepared in US dollars (2019: 7.0% used in all valuation models). A real discount rate of 9.5% has been used for South African thermal coal assets (for which the valuation model has been prepared in South African rand) to reflect specific risk factors including country risk, climate change risks and other asset specific risks.

– Climate change
Climate change may have a number of impacts for the Group including the risks and opportunities relating to the demand for the Group's commodities as a result of the transition to a low carbon economy and physical risks caused by climate change. For managed operations, the Group has incorporated carbon pricing, where material, in its projected cash flows. Short term carbon prices are incorporated based on currently enacted legislation, and where applicable longer term carbon prices are based on latest internal views, formed with reference to external forecasts. Separate carbon prices are used for developed and developing economies. Carbon costs are based on a carbon price per tonne/CO_2e, multiplied by estimated Scope 1 and 2 emissions. The cost and benefit of achieving the Group's emissions reduction strategy is included when the Group has a high degree of confidence that a project will achieve a reduction, which typically aligns with the related capital project being internally approved. The Group's commodity price and other key assumptions represent management's best estimate and do not reflect a specific climate-related scenario.

Figure 7.3
Rolls-Royce Holdings plc 2020 ARA (pp114, 118 and 179) references climate-related considerations in respect of its financial statements under key areas of judgment and sources of estimation uncertainty.

Key areas of judgement and sources of estimation uncertainty

The carrying value of the investment in subsidiary undertakings is reviewed for impairment on an annual basis. The recoverable amount is determined based on value in use which requires the determination of appropriate assumptions (which are sources of estimation uncertainty) in relation to the cash flow forecasts (including the impact of climate change), the long-term growth rate to be applied and the risk-adjusted discount rate used to discount the estimated cash flows to present value.

Estimation uncertainty arises due to changing economic and market factors, most particularly as a result of the COVID-19 pandemic. The recoverable amount of the investments in Rolls-Royce Group Limited and Rolls-Royce plc of £14.7bn has been assessed for impairment based on a value in use calculation using cash flow projections from the Group's latest forecasts which have regard to the current market and the Group's views on the future achievable growth. Discount rates used reflect current market assessments of the time value of money and the rate of return a market participant would require. The rate used to discount the forecast cash flows reflect the individual businesses in the Group and is 9% post-tax. The Directors have determined that no impairment charge is required. An increase in the rate from 9% to 10% would cause the carrying amount of the Company's investment to equal its recoverable amount. This sensitivity does not assign value to the new programmes that the Company expects to bring to market as part of its sustainability initiatives.

Climate change

In preparing the Consolidated Financial Statements management has considered the impact of climate change, particularly in the context of the disclosures included in the Strategic Report this year and the stated net zero targets. These considerations did not have a material impact on the financial reporting judgements and estimates, consistent with the assessment that climate change is not expected to have a significant impact on the Group's going concern assessment to September 2022 nor the viability of the Group over the next five years. The following specific points were considered:

- The Group continues to invest in new technologies including hybrid electric solutions in Power Systems, continued development of the more efficient UltraFan aero engine, testing of sustainable aviation fuels, SMRs and hybrid and fully electric propulsion.
- The Group continues to invest in onsite renewable energy generation solutions for our facilities and investment is included in our five year forecasts to enable us to meet our 2030 target for zero greenhouse gas emissions (scope 1 and 2) from our operations and facilities.
- Management has considered the impact of climate change on a number of key estimates within the financial statements, including:
  - the estimates of future cash flows used in impairment assessments of the carrying value of non-current assets (such as programme intangible assets and goodwill) (see note 9);
  - the estimates of future profitability used in our assessment of the recoverability of deferred tax assets in the UK (see note 5); and
  - the long-term contract accounting assumptions, such as the level of EFHs assumed, which consider our future expectations of consumer and airline customer behaviour (see note 16).

Key estimate – Estimates necessary to assess whether it is probable that sufficient suitable taxable profits will arise in the UK to utilise the deferred tax assets

Deferred tax assets are recognised to the extent it is probable that future taxable profits will be available, against which the deductible temporary difference can be utilised, based on management's assumptions relating to the quantum of future taxable profits. Future taxable profits require significant estimates to be made, including the pattern of future maintenance activity and the costs to be incurred; lifecycle cost improvements over the term of the contracts; and escalation of revenue and costs. The estimates take account of the inherent uncertainties, constraining the expected level of profit as appropriate. Changes in these estimates will affect future profits and therefore the recoverability of the deferred tax assets. Further details can be found in note 5.

A 5% change in margin in the main Civil Aerospace widebody programmes or a 5% change in the number of shop visits (driven by EFHs which are influenced by a number of factors including climate change) over the remaining life of the programmes, would result in an increase/decrease in the deferred tax asset by around £100m.

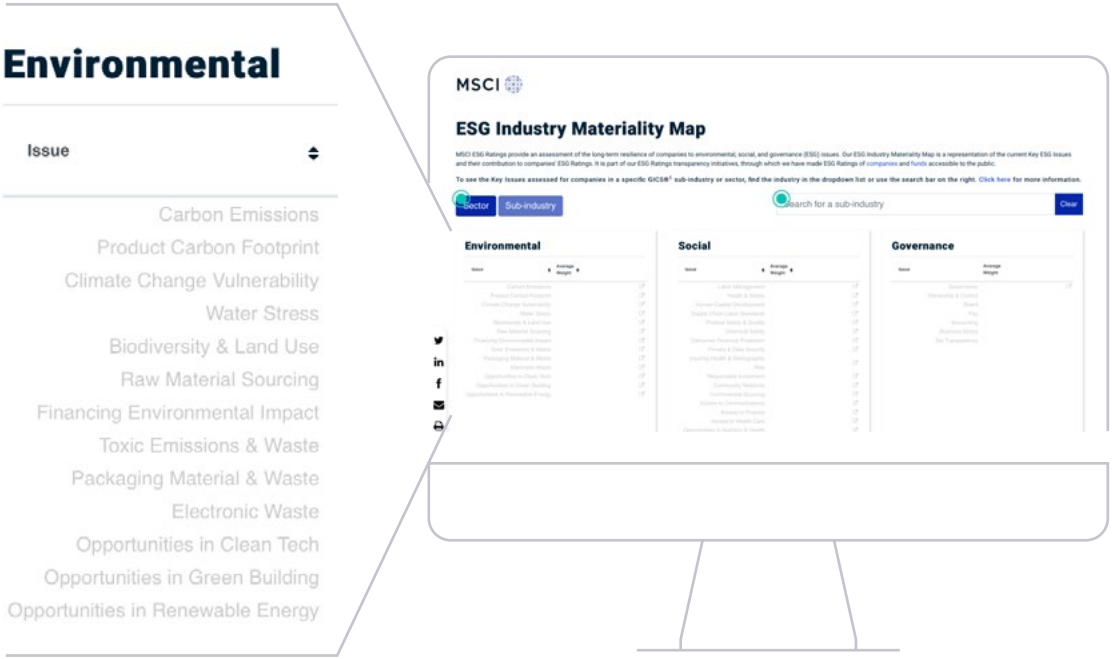
8 Other areas of environmental considerations (beyond carbon)

Environmental considerations are not limited to climate change or carbon emissions. Whilst this is the focus of TCFD, companies need to address wider factors material to their business, even where reporting on these is not yet mandated. These include, but are not limited to, natural resources (including water, biodiversity, land use and forestry, and marine resources), as well as pollution, waste and circular economy (see Figure 8.1).

If climate-change-related risk is anything to judge by, regulators will continue to look to the industry (investors and companies), whilst developing sustainability-related legislation. One area worth paying special attention to is biodiversity:

- As Sir Partha Dasgupta notes in the Government's review on biodiversity[20], it is no longer possible to exclude nature from our economic analysis.
- As many as 55% of respondents who took part in the Credit Suisse and Responsible Investor survey believe biodiversity needs to be addressed in the next 24 months.[21]
- BlackRock states it may vote against the re-election of directors if companies had not effectively managed, overseen or disclosed natural capital-related risks (i.e. the supply of the world's natural resources). It may also vote for shareholder proposals that highlight material natural capital risks.[22]
- BNP Paribas Asset Management, AXA Investment Managers and Mirova are developing a tool to rate companies according to their impact on biodiversity on a large scale, creating a methodology and database for investors to use in their investment decision-making process.[23]
- 73 organisations, including financial institutions, private firms and regulating bodies, are working towards the scope of a new Taskforce on Nature-Related Financial Disclosures[24] (TNFD) to develop an international reporting standard for nature.
- 11 of the top 50 asset managers have published position papers on biodiversity. Most of these papers are from 2020 onwards, signalling an upsurge of interest in this subject by the investment community.[25]

Figure 8.1
MSCI Industry Materiality Map in relation to Environmental issues[19] which covers the current key ESG issues and their contribution to companies' ESG ratings.



Companies are already reporting environmental matters beyond climate risk, within ARAs and separate sustainability reporting, and we have included a number of examples of such disclosures. See Figures 8.2 - 8.5.

19 **MSCI Industry Materiality Map**, March 2021.
20 **Economics of Biodiversity: The Dasgupta Review**, HM Treasury, February 2021.
21 **Unearthing investor action on biodiversity**, Credit Suisse and Responsible Investor, January 2021.
22 **Investment stewardship commentary**, BlackRock, March 2021.
23 Press release **AXA IM, BNP Paribas AM, Sycomore AM and Mirova launch joint initiative to develop pioneering tool for measuring investment impact on biodiversity**, AXA Investment Managers, January 2020.
24 For more information about TNFD, visit **https://tnfd.info/**
25 **The playing field – a look at the world's largest 50 asset managers**, SquareWell, February 2021.

Figure 8.2
Rio Tinto 2020 ARA (p85) explains its participation in TNFD, and the implementation of its biodiversity protection and natural resources management standard across all its operations.

Biodiversity

We are acutely aware of the interconnected challenges of climate change and biodiversity loss, and the significant risks these have for the environment, wildlife and humanity as a whole. We recognise our operations inherently pose a risk to biodiversity, as well as to the communities that rely on the environment – directly and indirectly – for their lives and livelihoods. Our aim is to avoid such harm when possible and mitigate it when we cannot avoid it.

Protecting biodiversity, therefore, is an important part of our commitment to communities and our employees, as well as to the environment. We are committed to minimising our risks and impacts to biodiversity through the application of the mitigation hierarchy, with the ambition of achieving no net loss to biodiversity at our assets. 'No net loss' means striking a balance between negative impacts on biodiversity and positive outcomes through mitigation.

To that end, we have been engaging with several external programmes to develop both our roadmap for disclosure and target-setting approach for biodiversity and land. For example, in 2020, we joined the Informal Working Group on the Task Force on Nature-related Financial Disclosures, which will help steer business towards positive outcomes for nature.

This year, to further sharpen our biodiversity management processes, we assessed all of our managed operations using an approach developed in 2019 by experts from the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). Using this methodology – combined with global biodiversity datasets of threatened species and conservation and protected areas – we prioritised our operations based on their biodiversity sensitivity. Twenty-eight managed operations were identified as being within a five kilometre radius of a Protected Area; we confirmed 12 high-priority sites.

Also in 2020, we assessed the implementation of our biodiversity protection and natural resources management standard across all of our operations. The review indicated that the completion of risk assessments for biodiversity features, development of action plans and monitoring programmes across our operations is tracking well (see figure one). In 2021, we will focus on ensuring all priority sites have their monitoring programme independently reviewed – another key requirement of the standard.

Assurance processes such as these allow us to identify good practices for replication across the business, while also ensuring assets receive the right support and expertise to match their level of risk.

Figure one summarises the implementation of key components of the biodiversity protection and natural resources management standard for all managed sites with a focus on the high-priority sites.

Our biodiversity standard implementation status across all Rio Tinto sites

Our biodiversity standard implementation status across Rio Tinto high-priority biodiversity sites

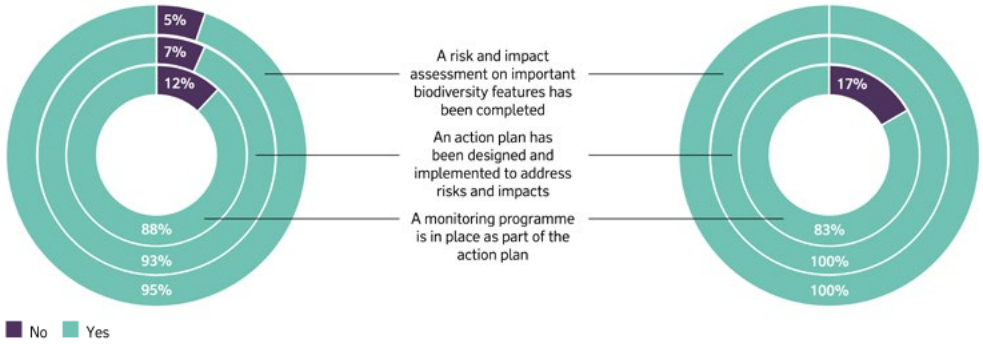


Figure 8.3
Unilever 2020 ARA (p34) reports on its environmental impact in relation to water, waste and raw materials.

Reducing environmental impact				
Greenhouse gases Target: Halve the greenhouse gas impact of our products across the lifecycle (from the sourcing of the raw materials to the greenhouse gas emissions linked to people using our products) by 2030 (greenhouse gas impact per consumer use; 2010 baseline)[c][d]	(50%)	(10%)	(8%)[b]◊	(3%)[b]
Target: By 2020 CO_2 emissions from energy from our factories will be at or below 2008 levels (≤145.92) despite significantly higher volumes (reduction in CO_2 from energy in kg per tonne of production since 2008)*	≤145.92	36.94†	50.76◊	70.46Δ
Water Target: Halve the water associated with the consumer use of our products by 2020 (water impact per consumer use; 2010 baseline)[c]	(50%)	0%	1%◊	(2%)
Target: By 2020 water abstraction by our global factory network will be at or below 2008 levels (≤2.97) despite significantly higher volumes (reduction in water abstraction in m^3 per tonne of production since 2008)*	≤2.97	1.52†	1.58◊	1.67Δ
Waste Target: Halve the waste associated with the disposal of our products by 2020 (waste impact per consumer use; 2010 baseline)[c]	(50%)	(34%)†	(32%)	(31%)
Target: By 2020 total waste sent for disposal will be at or below 2008 levels (≤7.91) despite significantly higher volumes (reduction in total waste in kg per tonne of production since 2008)*	≤7.91	0.34†	0.30◊	0.23[e]
Sustainable sourcing Target: By 2020 we will source 100% of our agricultural raw materials sustainably (% of tonnes purchased)	100%	67%	62%◊	56%

Figure 8.4
Travis Perkins 2020 ARA (p68) discloses targets and progress made in relation to waste reduction and recycling.

Waste

2020 objectives

- Set new targets for waste reduction and develop a roadmap.
- Review customer waste solutions to ensure that customer expectations are continually met.
- Engage with relevant forums and industry partners to share best practices and to learn and develop shared solutions as the industry moves towards a more circular economy.
- Engage with suppliers to reduce the amount of unnecessary packaging entering the Group's supply chain, in particular single-use plastics

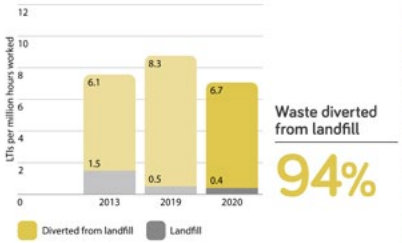
2020 progress

The Group set itself a new waste target: eliminate all unnecessary single-use packaging by 2025. In addition, efforts to divert 100% of waste from landfill continued.

Eliminating all unnecessary single-use packaging by 2025 is a challenging target and the Group is working with key supply chain partners to achieve it. Plans are being developed to meet the requirement of 30% recycled content in plastic packaging by April 2022.

Amidst the challenging conditions of 2020, the Group maintained its backhaul recycling operations to help branches recycle materials and divert waste from landfill. The Group backhauled 5,100 tonnes of cardboard, 1,100 tonnes of plastic and 12,200 tonnes of timber, representing 52% of total waste for 2020.

Tonnes of waste per £m of yard and core sales



Waste diverted from landfill

94%

Case study: Engagement and reducing packaging

At the start of the year a new Waste & Resources Working Group was formed to bring together subject matter experts from across the Group. This working group has developed a new Waste Policy setting out the Group's expectations and aspirations, as well as producing a series of Packaging Advice Sheets to advise on alternative, innovative packaging solutions and help reduce single-use plastic.

Waste reduction and recycling remains a key action area for the business. We recognise the importance of a circular economy and we're excited to be developing our plans to ensure our business offers products that can be repaired, reused or recycled by the end user.

Lucy Perkins
Group Materials and Waste Manager

Case study: Removal of plastic packaging

Packaging is a key business risk. To mitigate this, the Group has implemented a packaging-reduction strategy that will reduce the use of unnecessary packaging and eliminate avoidable single-use plastic. Throughout 2020 the Group's businesses have engaged with key suppliers to target products for packaging reviews.

Toolstation is working with suppliers to eliminate black plastic, polystyrene and avoidable single-use plastic by 2021. Many other suppliers across the Group have confirmed that they are removing plastic from their packaging. The commercial team in Shanghai has identified over 2,000 products that will be targeted for a plastic saving of up to 91 tonnes. The P&H businesses have removed 100 tonnes of polystyrene and 14 tonnes of plastic bags whilst Benchmarx has removed over 40 tonnes of styrofoam plastic.

Internal packaging has also been looked at. Travis Perkins and Wickes reviewed their transit packaging to remove unnecessary shrink wrap and are working with packaging suppliers to replace single-use plastic with sustainable materials. In anticipation of the 2022 plastic tax, the Group is demanding at least 30% recycled content in plastic packaging across many areas of the business. CCF is leading the way with a 30%-recycled-plastic pallet hood.

What's next?

- Launch of a Waste & Circular Economy action plan.
- Work closely with suppliers to embed circular economy concepts into their products and explore reuse opportunities from surplus building products with reuse organisations.
- Ensure suppliers include at least 30% recycled content in packaging.
- Continue to work towards the target of diverting 100% of waste from landfill.
- Expand the Group's backhaul recycling operation to enable "WEEE" recycling from branches and trial customer take-backs for bulk bags and other products.

Environment incidents (V)
In 2020 the Group recorded 25 environmental incidents with ten classed as "reportable" and 15 "non-reportable". Of the 25, eight were a result of "third party" sources (such as spillages from supplier or customer vehicles). Most incidents related to spillages such as hydraulic oil or paint.

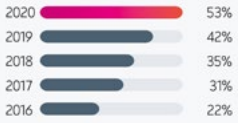
'(V)' indicates that the data point has been assured. Please see page 64 for more information.

Figure 8.5
Reckitt Benckiser 2020 ARA (pp24 and 27) discloses environmental metrics beyond climate as part of the business's KPIs.

ENVIRONMENT

GHG emissions per unit of production[3,6]

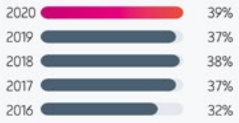
KPI: The percentage reduction in Greenhouse Gas emissions per unit of production, against our 2012 baseline.



Target to 2020: 40% reduction.

Water use per unit of production[3,6]

KPI: The percentage reduction in total water consumption per unit of production, against our 2012 baseline.



Target to 2020: 35% reduction.

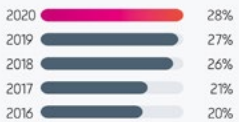
Sending zero waste to landfill[5]

KPI: The percentage of our factories achieving zero waste to landfill, including both hazardous and non-hazardous waste.

Target to 2020: 100%.

Manufacturing waste per unit of production[3]

KPI: The percentage reduction in manufacturing waste per unit of production, against our 2012 baseline



Target to 2020: 30% reduction.

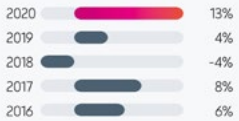
Carbon footprint per dose of product[3]

KPI: The percentage reduction in our total carbon footprint per dose of product sold against our 2012 baseline.

Target to 2020: 33% reduction.

Water impact per dose of product[3]

KPI: The percentage reduction in water used during the product's life cycle, adjusted to reflect water scarcity, per dose of product sold against our 2012 baseline.



Target to 2020: 33% reduction.

Financial and non-financial KPIs
We assess operational and strategic progress against key performance indicators, or KPIs. These provide a clear direction as to 'by how much' and 'in what way' we should achieve our goals. Importantly, these robust measures are reflected in management targets and are aligned with our growth objectives and our purpose, fight and compass.

The KPIs here address financial goals as well as wider social, environmental and cultural aspects. Different business functions measure progress against specific targets in areas such as supply chain performance, customer satisfaction, product innovation and other efficiency measures. These are built into managers' personal objectives and reviewed regularly.

Integrating environmental, social and governance goals
Our approach embeds non-financial performance into our business while meeting growing consumer and stakeholder expectations. Our organisational model strengthens collaboration between Global Functions and markets, helping us to deliver financial, environmental and social goals within a strong governance framework. Our Executive team reviews progress to continuously drive performance and our impact in society.

Social and environmental impact is increasingly embedded in our product innovation, our ways of working, and in our partnerships. Our partnerships reflect the complex networks and ecosystems we are part of. They amplify our collective efforts for greater shared impact.

As we close our 2020 targets we have made progress but know there is more to come. Looking forward, we are increasingly connecting our financial and non-financial goals. Our sustainability ambitions for 2030 are to reach half the world with products that contribute to a cleaner, healthier world and to engage 2 billion people in programmes, partnerships and campaigns that create a positive impact and support the SDGs. Collectively these are both an opportunity for growth and positive societal impact. Our three areas of activity: purpose-led brands; a healthier planet; and a fairer society, are the platforms through which we will deliver this growth and impact. Product innovation will meet the growing needs and expectations of consumers and society. Our actions on climate change build both resilience and opportunity for the future, for example within a low carbon economy. Our work to enable a fairer, more diverse and inclusive society can strengthen economies, livelihoods and communities while also enabling core values within society. More details of our sustainability ambitions for 2030, and the full details of our targets, our approach and performance are available at www.reckitt.com/sustainability.

9 Closing thoughts

> “Environmental and social externalities have to be tackled in unison — without addressing the social frictions of energy transition we risk the pace of change slowing or worse, we risk a stalemate. Companies and governments may find themselves unable to execute on their plan to decarbonise, if they do not have a plan to address social aspects that arise from it. Which is why we want companies to go beyond TCFD and, either as a standalone report or integrated within other disclosures, explain how they are engaging with stakeholders and working towards a Just Transition.
>
> Carlota Garcia-Manas, MSc
> Senior Responsible Investment Analyst at RLAM

TCFD is challenging but achievable

Companies should not delay getting started. Even for companies which have made a good head start in responding to TCFD, there will need to be further fine tuning/improvements, and an evolution of reporting and underlying processes in the coming years, including in response to the development of recognised standards or guidance. Companies must grasp the nettle, put in the required effort now, and view TCFD implementation both as an iterative journey and a framework that genuinely helps them to manage their exposure to climate-related risk more effectively.

Social impacts of decarbonisation

Finally, to support an inclusive economy, the potential social impacts of tackling climate change must not be ignored. A just transition considers positive and negative impacts on employees and communities in relation to the energy and ecological transition.

Investors are increasingly interested in corporate plans of **Just Transition**[26]:

- Investment groups Friends Provident Foundation (Friends Provident) and Royal London Asset Management (RLAM) have called on energy utility companies to put in place formal Just Transition strategies, to address the human and economic impact of the transition towards a low-carbon economy by November 2021.[27]
- Prompted by RLAM's and Friends Provident's engagement, **SSE** were the first to announce a formal Just Transition strategy in November 2020.[28]
- Climate Action 100+ may evolve its net zero company benchmark and efforts to better reflect its focus on Just Transition.[29]

26 **https://climatejusticealliance.org/just-transition/**
27 **Press release: Risk of social backlash to low-carbon transition if energy utility companies don't address its human and economic impact**, Royal London, December 2020.
28 **Just Transition Strategy**, SSE, November 2020.
29 **Press release: Records accelerated company commitments to net zero emissions but gaps remain, UN Principle Responsible Investment**, January 2021.

10 How EY can help

TCFD compliance requires significant work and a fundamental shift in how boards and management consider the impact of the low-carbon transition on strategy, risk, and how they develop measures to monitor performance.

We have developed a tailored approach that has been designed using EY's leading practice methodology to assess the level of maturity of climate risk disclosures against the TCFD recommendations. We leverage our EY climate disclosure PowerBI to determine how well aligned existing processes and systems are to the TCFD recommendations, how companies compare to their peers and what lessons can be drawn from leading practice.

We can support you as outlined below:

Climate risk identification and quantification

- Work with your stakeholders to identify key climate-related risks and opportunities.
- Determine the relevant time horizons for climate-related risk and describe the range of related potential futures.
- Conduct scenario analysis to identify how key risks and opportunities may develop over time.
- Advise on the adequacy of climate resilience measures currently in place.

Decarbonisation

- Help companies consider the different external and internal drivers that will influence their low-carbon strategy based on purpose and ambition.
- Develop decarbonisation pathways specific to your business.
- Help demonstrate how a company's long-term low-carbon position creates value.
- Advise on low-carbon transition and business transformation.

TCFD reporting

- Gap analysis and benchmarking report: Provision of insights through a recommendations report on how to close disclosure gaps against leading practice.
- Detailed priority report and roadmap ahead: Preparing a detailed roadmap of disclosure including key components of Governance, Strategy, Risk Management, Metric and Targets sections to meet stakeholder requirements.
- Full drafting of TCFD: We can develop your TCFD disclosures in full.
- Annual report integration: We can assess how well your TCFD narrative has been integrated within our broader front half narrative and provide recommendations for improvement.

Assurance

- Provide independent assurance of environmental performance.

For support and further information, please contact us.

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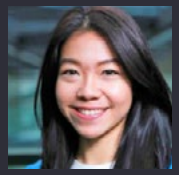

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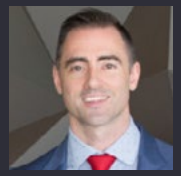

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11 Appendix

Appendix 1:
The Financial Stability Board established the Task Force on Climate-related Financial Disclosures (TCFD) to develop recommendations for more effective climate-related disclosures that could promote more informed investment, credit, and insurance underwriting decisions and, in turn, enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks. TCFD recommendations and supporting recommended disclosures.[30]

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the company's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material.	Disclose how the company identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.	a) Describe the company's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning.	b) Describe the company's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.	c) Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.

30 TCFD 2020 Status Report, TCFD, October 2020.

Appendix 2:
FCA's new Listing Rule for reporting periods beginning on or after 1 January 2021.

An extract of amendments to the Listing Rules sourcebook.[31]

Italics indicates new text and striking through indicates deleted text, unless otherwise stated.

9.8 Annual financial report

...

Additional information

9.8.6 R In the case of a listed company incorporated in the United Kingdom, the following additional items must be included in its annual financial report:

...

(6) a statement as to whether the listed company has: ...

(b) ...

iii) the company's reasons for non-compliance;

(7) a report to the shareholders by the Board which contains the information set out in LR 9.8.8R.; *and*

(8) a statement setting out:

(a) whether the listed company has included in its annual financial report climate-related financial disclosures consistent with the TCFD Recommendations and Recommended Disclosures;

(b) in cases where the listed company has:

(i) made climate-related financial disclosures consistent with the TCFD Recommendations and Recommended Disclosures, but has included some or all of these disclosures in a document other than the annual financial report:

(A) the recommendations and/or recommended disclosures for which it has included disclosures in that other document;

(B) a description of that document and where it can be found; and

(C) the reasons for including the relevant disclosures in that document and not in the annual financial report;

(ii) not included climate-related financial disclosures consistent with all of the TCFD Recommendations and Recommended Disclosures in either its annual financial report or other document as referred to in (i):

(A) the recommendations and/or recommended disclosures for which it has not included such disclosures;

(B) the reasons for not including such disclosures; and

(C) any steps it is taking or plans to take in order to be able to make those disclosures in the future, and the timeframe within which it expects to be able to make those disclosures; and

(c) where in its annual financial report or (where appropriate)other document the climate-related financial disclosures referred to in (a) can be found.

31 **PS20/17 Proposals to enhance climate-related disclosures by listed issuers and clarification of existing disclosure obligations**, FCA, December 2020.

Appendix: Resources

Below are resources which can help with your consideration of climate-related action and reporting:

1

Climate Action 100+ first-ever net zero company benchmark (March 2021) of the world's largest corporate emitters.

2

Annual reporting in 2019/20: From intent to action (September 2020), EY's seventh annual review of over FTSE 350 ARAs, covering a number of key aspects of narrative reporting including climate change.

3

'How will ESG performance shape your future?' (July 2020), EY's global institutional investor survey.

4

EY's Climate Risk Disclosure Barometer (2019) covering an overview of climate-related reporting based on a review of over 950 companies globally.

Primarily for financial institutions:

1

Climate change and sustainability: global financial regulators step up the pace (March 2021) sets out six no-regret actions for consideration by financial institutions to address both prudential and conduct implications.

2

TCFD report playbook (September 2020) developed by the Institute of International Finance, with input from EY, to help banks and other financial institutions meet the TCFD recommendations.

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Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

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