Excellence in climate change reporting

A review of leading UK companies

Building Public Trust
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pwc

A message from Alan McGill

Alan McGill

Global Sustainability Reporting and Assurance Partner, PricewaterhouseCoopers LLP

This year's Building Public Trust Awards mark the first year that we have reviewed climate change reporting across the FTSE 350, public interest entities (PIEs), and inbound companies, producing a report which sits alongside our review of sustainability reporting. Unfortunately, circumstances have prevented us from hosting an awards ceremony this year, but we hope that through this report, we can provide the insights and expertise which will help your company to progress on the journey towards better climate change reporting.

Despite the pandemic, awareness and concern over climate change continues to grow, with increasing numbers of companies and organisations making net zero commitments and setting science-based targets. The conversation has clearly moved on from whether anthropogenic climate change is real, to what we should do about it, in terms of both mitigating the impacts and improving our resilience. The science shows that in order to avoid catastrophic impacts of climate change, carbon emissions need to halve over the course of the next decade. This level of urgency has been reflected by an increased focus from companies on climate change, in part driven by a societal expectation that the corporate world needs to play its part.

Organisations are expected to not only minimise their negative impacts but to also contribute positively, and shareholders expect the various physical and transitional risks to be addressed.

We believe that effective climate change reporting is the foundation of this undertaking. This year New Zealand were the first country to make climate change reporting under the 'Task Force on Climate-related Financial Disclosure' (TCFD) framework mandatory for certain large financial institutions with the United Kingdom expected to follow suit within 2 years. This review has been conducted under the framework of the TCFD, which is the leading industry standard for assessing climate-change reporting.

As a part of our review we considered over 470 organisations and used our reporting experts to produce criteria by which to judge the level of reporting.

In line with the TCFD our review has been categorised into 'governance,' 'strategy,' 'risk management' and 'metrics and targets.' In each section we have provided an analysis of the quality of the reporting, tips for how to make your reporting more effective, and illustrated examples of best practice.

A message from Jon Williams

Jon Williams

PwC Partner and member of the Task Force on Climate-related Financial Disclosures

We are pleased to see that implementation of the recommendations from the Task Force on Climate-related Financial Disclosure (TCFD) has increased since last year, with almost twice as many (1,500) companies officially supporting the recommendations, as well as over 100 regulators and government entities, including the UK government.

We have aligned our review of FTSE 100 companies with the 11 recommendations of the TCFD. This assessment complements our input into the TCFD's review of about 1,700 large companies over a 3 year period, assisted by artificial intelligence, to understand TCFD reporting on a global scale.

Our analysis supported the results showing that the Energy sector had the highest percentage of disclosure. Full results can be found in the recently released TCFD 2020 Status Report.

Key findings from the TCFD 2020 Status Report

- Financial institutions responsible for financial assets of over $150 trillion have supported the TCFD and are encouraging businesses to report in line with the TCFD guidelines.
- Companies' disclosure of the potential financial impact of climate change on their business strategies, and financial planning remains low.
- The percentage of companies disclosing the resilience of their strategies, taking into account different climate-related scenarios, was significantly lower than that of any other recommended disclosure.
- Expert users find the impact of climate change on a company's business and strategy as the 'most useful' for decision-making.

Support and guidance is available on the TCFD website: https://www.fsb-tcfd.org/

Executive summary and key messages

Governance

There is a promising proportion of companies disclosing where the responsibility for climate change sits in their organisation, with more than half providing this information at both a board and executive level. However, less than a third give examples of how climate change has affected strategic decisions or even stated that climate change has been discussed at board meetings during the year. Disclosure of the board's ability to consider climate change is also poor, with less than a fifth of companies either stating that at least one board member has climate change-related expertise, or that related training has taken place.

Strategy

Strategy is a relatively strong section with over two thirds of the companies identifying physical and transition risks over different time horizons, although only 40% discuss the related impacts which is likely the more important aspect to the users of the report. Encouragingly, almost 80% have committed to net zero and over 33% have conducted scenario analysis, including a 'well below 2 degrees' scenario.

A spotlight on scenario analysis

40-60% of the companies had performed scenario analysis across most of the 6 industry groups analysed, with only 'Energy' and 'Materials and Buildings' outliers with 86% and 29% respectively. Scenario analysis is an integral part of climate change reporting due to the uncertainties surrounding climate predictions. Furthermore, not only is the state of the climate and the impacts of climate change at any point in the future uncertain, but the pathway to reach that point is also unknown – might the temperature increase and net zero transition be smooth or stepped, early or late?

A spotlight on net zero

Per the 2015 Paris Agreement, in order to keep the increase in temperature from the pre-industrial era to well under 2 degrees, global emissions must be 'net zero' by 2050. Many companies have set a net zero target but have likely done so without realising the personal benefit this could afford. It is important to realise that by setting (and reaching) a net zero target, companies can greatly mitigate the transition risks presented by climate change, thereby benefiting not only society at large, but also their own stakeholders.

Risk management

Overall, risk management is reported poorly. Following from most companies disclosing risks, to less than half considering the impacts, only 17% put these impacts into a financial context and even fewer (14%) disclose how they plan to mitigate the risks. Half identify climate change as an emerging or current risk but only a third have integrated climate risk management into their overall risk management process, which is crucial to provide the
focus required.

Metrics and targets

Most companies disclose their scope 1, 2 and 3 emissions which is positive given the difficulty in assessing and measuring the latter. However, only a third produced sophisticated metrics which went much beyond simply reporting GHG emissions. Only a third have science-based targets but given the lengthy certification process, many more are likely to disclose SBTs in the near future. Half of the companies disclose progress against their targets.

About this report

This report contains the results of our analysis, expert guidance to improve your reporting and a selection of leading examples that we at PwC have identified following our review of annual reports, sustainability reports and associated websites of the FTSE 350, PIEs and selected inbounds. The report is structured as follows:

- A summary of what should be reported and why, set in the framework of the TCFD guidance
- Basic, intermediate and advanced tips for improving your reporting
- A quantitative analysis of the performance of the companies scored as a part of this review
- An in-depth exploration of company performance for each of the 4 categories, with each sub-divided into further sections. Each subsection includes:
  - Key findings and analysis by industry
  - Results summary including reporting tips
  - Annotated best practice examples

If you would like more personalised advice on your own reporting, do get in touch with us – our contact details are on the back page. You can also find more examples of good practice by visiting our **website**.

Contents

Good practice climate change reporting based on the TCFD guidance

		What	Why
Governance	Board-level knowledge and training	Provide details of the current competencies of board members in relation to climate change, and any past or future training on the subject matter.	This allows the reader to understand the level of climate-related expertise at board level, as well as the proactiveness of the board to upskill themselves.
	Board oversight on climate change	Document the governance structure regarding board level responsibility for climate change. If relevant, disclose that climate change is on the agenda at board meetings and examples are provided for how climate-related risks/opportunities have affected strategic decisions.	This enables the reader to understand how and by whom climate change is considered at board level, and shows them how this is affecting decision making.
	Management oversight on climate change	Explain the responsibility for climate change at executive level and if applicable, disclose that executive remuneration is linked to climate-related objectives.	This enables the reader to understand how and by whom climate change is considered at an executive level and demonstrates to them how seriously the issue is being taken by linking climate-related objectives to executive remuneration.
Strategy	Identification of material risks and opportunities	Identify and disclose physical and transitional risks and opportunities, and do so with an associated time horizon.	This provides detail on the specific impacts of climate change on your business and contextualises them in the short, medium and long-term.
	Disclosure of impacts on and by the business	Identify the impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning and furthermore, disclose the impact of the organisation on the climate.	This makes it clear what the impact of climate-related risks and opportunities could be, and also to what extent the organisation itself is contributing to climate change.
	Business resilience to climate-related risks and opportunities	If applicable, disclose the organisation's commitment to net zero and describe the scenario analysis performed.	This illustrates the organisation's commitment to fighting climate change and also shows its preparedness in considering its resilience under multiple future scenarios.
Risk Management	Risk identification, assessment and management	Describe the process for identifying, assessing and managing climate-related risk and impact. Provide details of the mitigation/management techniques used.	This allows the reader to understand the process behind the disclosures your company has made with regards to strategy and risk. The management techniques enable the reader to understand how the organisation is mitigating the risks it is presented with.
	Engagement with stakeholders	Document engagement with stakeholders beyond the organisation's operations regarding the climate change agenda.	This demonstrates to the reader that a holistic approach is being taken with regards to tackling the issue of climate change, and the extent to which the organisation is looking beyond its own operations.
	Integration with current risk process	Disclose how the climate-related risk (CRR) management process is integrated into the overall risk management process.	This illustrates how the issue of climate risk is now considered an integral part of the overall risk management process.
Metrics and Targets	Disclosing climate-related metrics	Disclose a range of climate and sustainability-related metrics, including GHG emissions.	This will provide the reader with the quantitative detail of the company's impact on the environment and climate, as well as showing how this has changed through time.
	Setting climate-related targets and reporting on performance	Disclose the targets (and related progress) the company uses to manage climate-related risks and opportunities.	This will provide the reader with information on how proactive the company is being with regards to reducing its climate impact, and whether they are set to reach their targets.

Tips to make your reporting more effective

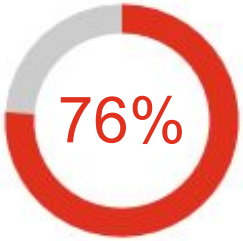
	Basic reporting tips	Intermediate reporting tips	Advanced reporting tips
G	Briefly mention board member climate-related competencies, and state that future training is required.	Outline a more detailed training plan with a timeline and, if applicable, discuss previous training completed	Provide an extensive narrative concerning board member competency in relation to climate change.
	Mention board level responsibility for climate change and state that it is included as an agenda item in board meetings.	Provide detail on the individual/committee responsible for climate change at board level. Disclose the number and frequency of board meetings with climate change on the agenda, and exemplify how this has affected strategic decisions.	Provide multiple detailed examples of how the assessment of climate-related risks/opportunities have affected strategic decisions at board level.
	Document how climate-related responsibilities have been assigned to executive-level committees or individuals.	Explain the associated organisational structure and how management reports to the board on these matters. Mention that executive remuneration is linked to climate-related objectives.	Provide detailed disclosure on how executive remuneration is linked to climate-related objectives e.g. carbon emissions targets, KPIs, time frames etc.
S	Disclose the physical and transition risks and opportunities and associate them with different time horizons.	Provide a materiality assessment of the risks and opportunities identified and ensure that the associated time frames align with the long-term nature of climate change (i.e. consider time frames >10 years).	Detail the financial impact (i.e. in terms of cost) and align the time horizons considered with the Paris Agreement i.e. 2030 and 2050.
	Identify climate-related impacts and provide a brief discussion over the impact of the organisation on the climate.	Provide a detailed discussion on the impact of the organisation on the climate.	Link the climate-related impacts identified to financial performance indicators e.g. costs, revenue, liabilities, assets.
	Disclose that the organisation has made a net zero commitment.	Explain the detail of the net zero strategy. Disclose the consideration of, and the resilience of the organisation to, one possible scenario.	Disclose the consideration of, and the resilience of the organisation to, at least 2 different scenarios, one being <2 degrees C and one being a stressed scenario.
RM	Disclose how the identification, assessment and management of risks and impacts is conducted for your direct operations. Provide details on how these risks are mitigated.	Ensure that the discussion over identification, assessment and management of risks and impacts covers the entire value chain.	Discuss how addressing the financial impact of climate-related risks and opportunities is built into your impact assessment process. Ensure that the financial impacts of the mitigation methods are captured.
	Provide disclosure of engagement with at least one type of stakeholder.	Show that multiple stakeholders have been engaged with.	Improve the narrative to provide high levels of detail concerning the initiatives which have been disclosed.
	If applicable, disclose the operational linkage of climate-related risk management into the overall risk management process.	Include a narrative explaining how this integration took place.	If applicable, ensure that it is detailed that there is full integration into the overall risk management process, including on a financial level.
M&T	Report predominantly straightforward metrics such as Scope 1 and 2 emissions and those relating to the direct operations of the company.	Increase the sophistication of the metrics reported by providing comparatives, normalised metrics and Scope 3 emissions data.	Incorporate metrics concerning the wider supply chain and provide a financial context, for example, by using cost-related metrics.
	Produce targets accompanied by a qualitative description of progress.	Include targets set over different timeframes, provide quantitative progress and add accompanying analysis.	Ensure that any GHG emissions reduction targets are science-based (and therefore in line with the Paris Agreement). Extend the accompanying narrative.

Overview of analysis

Our analysis of FTSE 100 companies yielded the following statistics across the range of criteria considered by the Climate Change reporting award.

1. Governance

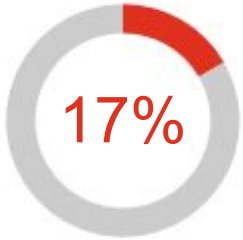
Of the FTSE 100 companies we reviewed:



Have a **Board-level committee** with climate change oversight

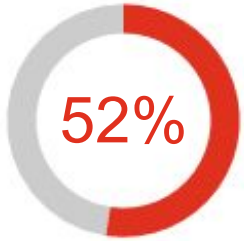
Disclose the number/ **frequency of Board meetings** with climate change on the agenda

Describe the climate change **competencies** of Board members



Disclose that **Board training** has taken place

Describe how climate risks/opportunities affect **strategic decisions** made at Board level

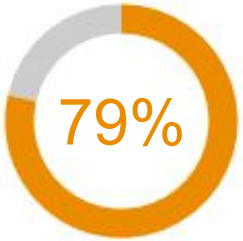


Describe how **management** reports to the Board on climate-related responsibilities

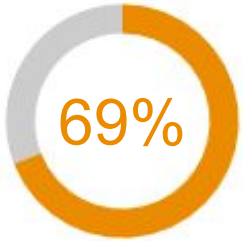
Describe how **executive remuneratio n** is linked to climate-related objectives

2. Strategy

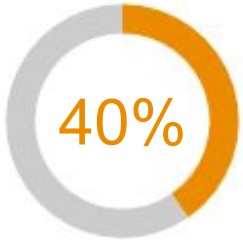
Of the FTSE 100 companies we reviewed:



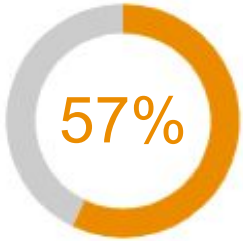
Identify **physical risks** and/or opportunities



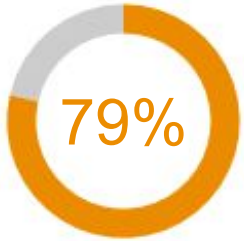
Identify **transition risks** and/or opportunities



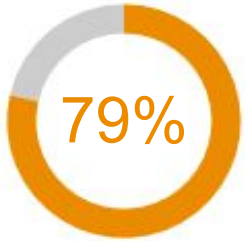
Associate risks and opportunities with **time horizons**



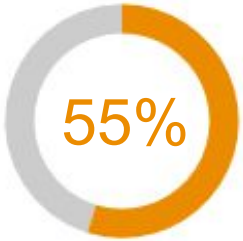
Perform **climate scenario analysis**



Identify the **impact on the organisation's business** of climate-related risks and opportunities



Disclose how the organisation **contributes to climate change**



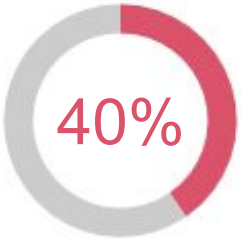
Have committed to **net zero**

Overview of analysis

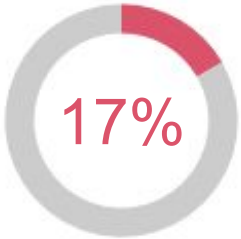
Our analysis of FTSE 100 companies yielded the following statistics across the range of criteria considered by the Climate Change reporting award.

3. Risk management

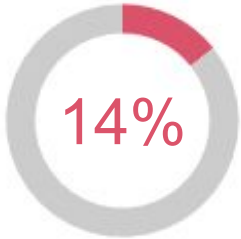
Of the FTSE 100 companies we reviewed:



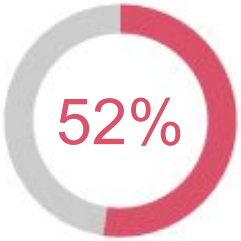
Outline a process for **identifying, assessing and managing** climate-related risks across the entire value chain



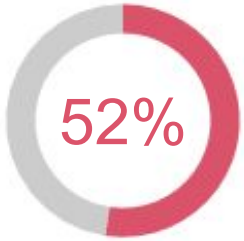
Assess the **financial impact** of climate-related risks



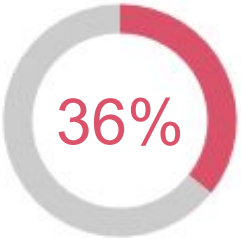
Disclose the process of **mitigation of risks**, linked to financial implications



Identify climate as a **current/emerging risk**



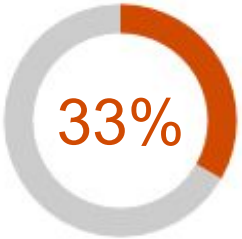
Engage with **multiple stakeholders** on the subject of climate risk



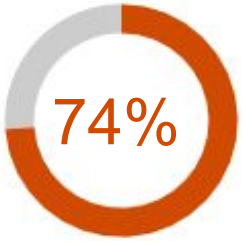
Integrate climate-related risk into the overall risk-management process

4. Metrics and targets

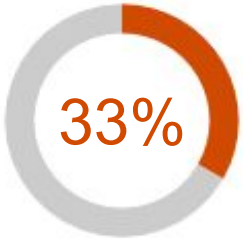
Of the FTSE 100 companies we reviewed:



Report sophisticated **non-emission climate-related metrics**, including supply-chain, comparatives, financial metrics



Disclose **scope 1, 2 and 3 emissions**



Disclose science-based **targets** linked to climate-related risks and opportunities

Disclose **performance** against targets using quantitative comparatives

1

Governance

Key findings from Governance scoring

In 2017, the TCFD recommended that companies disclose the organisation's governance around climate-related risks and opportunities.

Of the FTSE 100 companies that we assessed, nearly all companies outline the responsibility for climate change at board level, however very few outline the competencies of any board members in relation to climate change or reference any plan that training has or will take place. Most companies describe responsibility for climate change at executive level, but much fewer link remuneration of management to climate change.

Board-level knowledge and training

Of the FTSE 100 companies we assessed:

- **10%** described the competencies of one or more board members in relation to climate change
- **Over one quarter** identified a need for training of board members or have already carried out training
- Best performing industry group: **Financial Services**
- Worst performing industry group: **Transportation**

Board oversight on climate change

Of the FTSE 100 companies we assessed:

- Over **three quarters** mentioned a Board level committee with climate change oversight
- **One quarter** disclosed the frequency of Board meeting where climate change is on the agenda
- **Nearly 60%** give at least one example of how climate-related risks and opportunities affect strategic decisions made at Board level
- Best performing industry group: **Energy**
- Worst performing industry group: **Agriculture, Food, and Forest Products (including FMCG)**

Management oversight on climate change

Of the FTSE 100 companies we assessed:

- **Half** described management's climate-related responsibilities and how management reports to the Board
- **Over one quarter** mentioned executive remuneration linked to climate-related objectives
- Best performing industry group: **Transportation**
- Worst performing industry group: **Materials and Buildings**

Board-level knowledge and training

Provide details of the current competencies of board members in relation to climate change, and any past or future training on the subject matter.

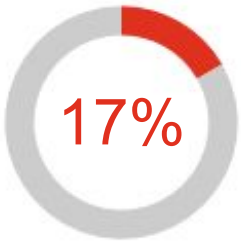
This allows the reader to understand the level of climate-related expertise at board level, as well as the proactiveness of the board to upskill themselves.

Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Briefly mention board member climate-related competencies, and state that future training is required.	Outline a more detailed training plan with a timeline and, if applicable, discuss previous training completed.	Provide an extensive narrative concerning board member competency in relation to climate change.

Of the FTSE 100 companies we reviewed:

Describe the climate change **competencies** of Board members



Disclose that **Board training** has taken place

> We liked how HSBC gave significant detail over the specific activities of the board, particularly regarding climate change. Furthermore it was disclosed that climate change training took place during the year.

HSBC Annual Report, pg. 168 & 171

Board activities during 2019

The activities of the Board were structured to support the development of the Group's strategy and to enable the Board to support executive management on its delivery within a transparent governance framework.

Business performance and strategy

The Board is responsible for the monitoring and delivery of the Group's strategy. In 2019, the Board reviewed the progress against the strategic priorities set in June 2018 and will oversee the implementation of the new business update approved in 2020.

As a matter of course, the Board considered and approved key standing items such as the long-term viability statement and certain acquisitions, mergers and disposals. Additional sessions requested by the Group Chairman ensured that the Board considered non-standing items, which included sustainable finance and climate change. A deep dive session on climate change was completed by the Board in July 2019. This session considered the potential impacts of climate change on the business and the climate-related risk initiatives progressing within the Group. It was confirmed that climate-related risk would remain a thematic issue within the Group's 'Top and emerging risk' report. Further details can be found on page 79 and in the *ESG Update*.

The Board managed the process involving the departure of the Group Chief Executive and the appointment of an interim Group Chief Executive on 5 August 2019. Further details can be found on page 171.

Severn Trent Annual Report 2019, pg. 83

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	●		●	●	●	●	●	●	●

> We liked how Severn Trent provided a skills matrix for board members, which included climate change.

Board oversight on climate change

Document the governance structure regarding board level responsibility for climate change. If relevant, disclose that climate change is on the agenda at board meetings and examples are provided for how climate-related risks/opportunities have affected strategic decisions.

This enables the reader to understand how and by whom climate change is considered at board level, and shows them how this is affecting decision making.

Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Mention board level responsibility for climate change and state that it is included as an agenda item in board meetings.	Provide detail on those responsible for climate change at board level. Disclose the number and frequency of board meetings with climate change on the agenda, and exemplify how this has affected strategic decisions.	Provide detailed examples of how the assessment of climate-related risks/ opportunities have affected strategic decisions at board level.

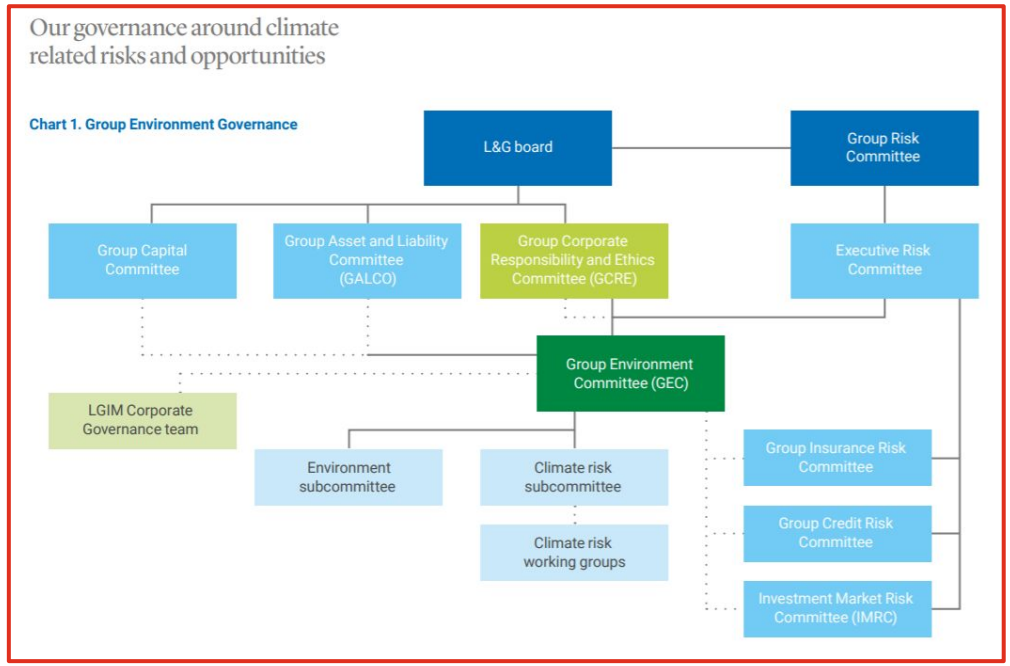
Of the FTSE 100 companies we reviewed:

Have a **Board-level committee** with climate change oversight

Disclose the number/ **frequency of Board meetings** with climate change on the agenda

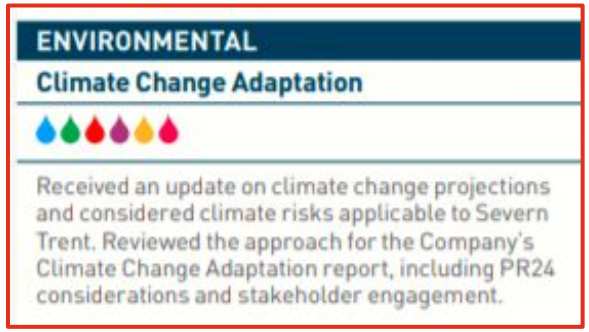
Describe how climate risks/opportunities affect **strategic decisions** made at Board level

Legal and General TCFD Report 2019, pg. 6



Severn Trent Annual Report 2019, pg. 79

We liked how Legal and General portray oversight of climate risk and how Severn Trent disclosed detail of climate-related discussion at board level.



Barclays ESG Report 2019, pg. 44

CLIMATE-RELATED FINANCIAL DISCLOSURES

Governance

Group governance of climate matters

The Barclays PLC (BPLC) Board sets the strategic direction and risk appetite of the Group and is the ultimate decision-making body for matters of Group-wide strategic, financial, regulatory or reputational significance. More detail about the Group's overall governance framework can be found on pages 17 to 20.

A key development during 2019 has been that oversight of social and environmental matters, including climate change, has been taken up by the Board, where previously it was overseen by the Board Reputation Committee. This change in governance confirms the importance placed on these topics. Areas considered by the board in 2019 included our strategy on green financing, our policy positions relating to carbon intensive industries and our commitments to aligning with the goals of the Paris Accord.

In addition we appointed the Group Chief Risk Officer as Senior Manager responsible for climate-related financial risk under the Senior Managers Regime.

For further information on governance of climate risk please refer to page 50.

Environmental and Social Impact Committee

Demonstrating the growing strategic importance of these issues, the Group Executive Committee created the Environmental and Social Impact (ESI) Committee in June 2019 to provide senior oversight and set the overall direction of Barclays' strategy to manage its broader social and environmental impacts. Chaired by the Group Chief Executive, with representation from business and function leadership, the Committee provides strategic management oversight, sets a firm-wide approach on key-topics and monitors execution against priorities.

TCFD Forum

This senior forum, chaired by the Global Head of Sustainability and ESG, with representation from business lines and function teams including strategy, risk, finance, treasury and compliance, was set up in 2017 to provide oversight and drive implementation of the TCFD recommendations and the Group's wider climate change strategy. The forum reports into ESI on Barclays' response to the issue of climate change, including: the approach to climate-related opportunities and risks within the bank; and ensuring public commitments on the TCFD recommendation are upheld.

Divisional sustainability coordination

The 2019 launch of the ESI has inspired the creation of multiple Sustainability Forums focused within specific business areas including Investment Banking, Corporate Banking and Retail and Business Banking. These forums advance and replace the work of the Barclays Green Banking Council, which was started in 2017. They operate in a targeted manner to drive client, employee and stakeholder engagement on environmental and climate change issues, whilst continuing to develop a leading product set to support our clients' transition to a low-carbon economy.

> We liked how Barclays illustrate a clear link between forums, executive committees and the Board. The existence of a TCFD specific forum is also positive.

Governance
Board training
Board oversight
Management responsibility
Strategy
Identification
Impact
Resilience
Risk management
Identification, assessment and management
Stakeholder engagement
Integration
Metrics and targets
Metrics
Targets and performance

Management oversight on climate change

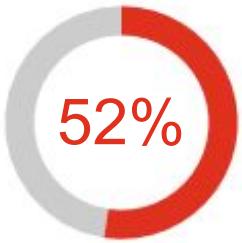
Explain the responsibility for climate change at executive level and if applicable, disclose that executive remuneration is linked to climate-related objectives.

This enables the reader to understand how and by whom climate change is considered at an executive level and demonstrates to them how seriously the issue is being taken by linking climate-related objectives to executive remuneration.

Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Document how climate-related responsibilities have been assigned to executive-level committees or individuals.	Explain the organisational structure and how management reports to the board on these matters. Mention that executive remuneration is linked to climate-related o bjectives.	Provide detailed disclosure on how executive remuneration is linked to climate-related objectives e.g. carbon emissions targets, KPIs, time frames etc.

Of the FTSE 100 companies we reviewed:



Describe how **management** reports to the Board on climate-related responsibilities

Describe how **executive remuneration** is linked to climate-related objectives

> We liked how Rio Tinto disclose that executive remuneration is linked to the meeting of long-term climate change-related targets.

Rio Tinto Climate Change Report, pg. 10

Climate change governance and risk management

5/7

The Board met seven times in 2019 and covered climate change on five separate occasions. At the two strategy meetings (in April and September 2019), the Board discussed the Group's long-term climate change ambition and options for operational emissions targets, having considered different abatement options and offsets. In November 2019, the Board further considered and agreed in principle the Group's long-term climate change ambition, 2030 emissions targets and the financing of our climate change initiatives.

See page 29 for our climate resilience analysis

Climate change is a topic of on-going discussion and analysis at the most senior levels of management and by the Board. The Board approves our climate policy and sets the Group's ambition and emissions targets. The Sustainability Committee of the Board is responsible for monitoring performance against the targets and ensuring operational-level resilience. The Sustainability Committee also has oversight of key sustainability risk areas that may be related to climate change, such as biodiversity and water, including the effectiveness of associated controls.

The Board also discussed industry association memberships and approved the disclosure of our review of associations' climate policy positions. In addition, members of our Board have participated in numerous discussions focusing on climate change with civil society organisations and investors.

Strengthening the link between executive remuneration and our climate targets

Our Chief executive's performance objectives are reflected in his Short Term Incentive Plan, which includes delivery of the Group's strategy on climate consistent with the new 2030 targets. These are cascaded down into the annual objectives of relevant members of the Executive Committee and other members of senior management.

Our climate change strategy is embedded in our business strategy, and aligned with our overall approach to sustainability. Climate risks and opportunities have formed part of our strategic thinking and investment decisions for over two decades, and we now have a portfolio that is well positioned for the transition to a low-carbon economy. Some 76% of the power consumption at our managed operations already comes from renewable energy and we are the only major diversified mining company not involved in fossil fuel extraction.

The Board sets the Group's ambition and emissions targets

Responsibility for identifying, evaluating and managing the risks associated with climate change lies with all our employees and business leaders, operating within a Group-wide risk management framework and approved limits. Our risk framework lays out a three lines of defence approach to managing risks and controls:

- **First line:** employees and business leaders own risks.
- **Second line:** our central support functions and Risk Management Committee oversee our risk framework and internal control systems.
- **Third line:** Group Internal Audit assures our internal control systems.

Rio Tinto has an enterprise-wide risk management information system where all material risks and actions, including those related to climate change, are documented and kept current for managing and reporting purposes. Our Critical Risk Assessment process is firmly founded in site-specific exposures, including those related to climate change such as wildfires, cyclones, floods, and landslides at a more regional level.

Burberry Annual Report 2019, pg. 113

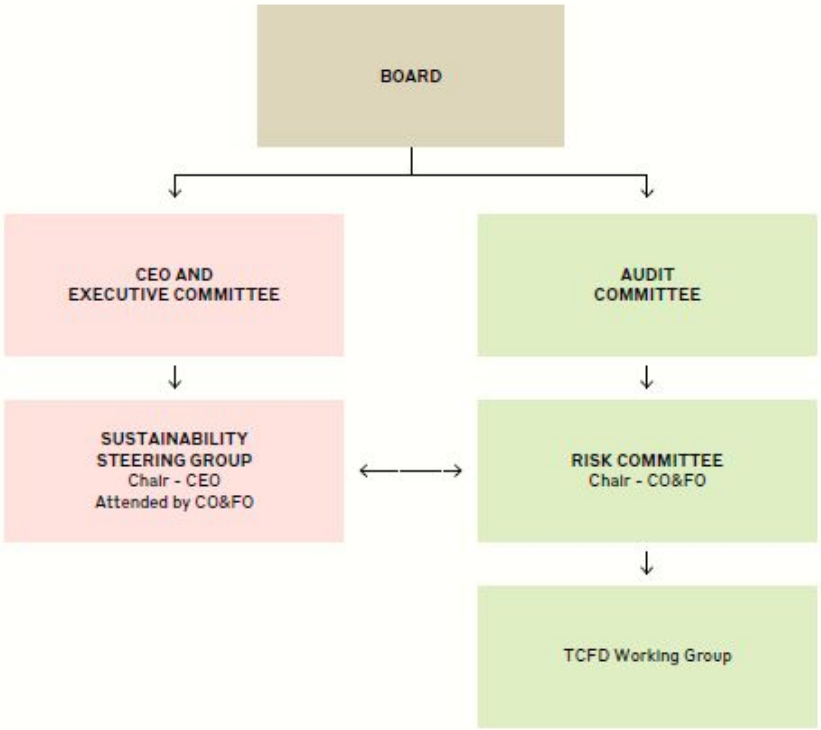
TASKFORCE FOR CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

Burberry is committed to implementing the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD).

A cross-functional working group has been established to assess and implement the required governance and strategy for climate-related risks and opportunities, and the metrics and targets used to assess and manage these.

Governance for managing climate-related risks and opportunities across the Group is incorporated into the existing governance framework as shown below. This includes oversight of implementation of the recommendations of the TCFD.



We like how Burberry both demonstrate responsibility for climate risk at an Executive level and also show the linkage to the Board. Burberry also mention a plan to link remuneration to ESG targets.

GOVERNANCE

A Sustainability Steering Group (SSG) was established in the year to review and oversee the Group's strategy on environmental and social issues. The SSG will convene at least three times a year and is chaired by the Chief Executive Officer who is accountable for ensuring oversight of climate-related risks and opportunities, and is attended by the Chief Operating and Finance Officer, who is also a member of the Leadership Network for the Accounting for Sustainability (A4S) initiative. The cross-functional TCFD working group reports to the Risk Committee, which is chaired by the CO&FO.

We have evolved our governance structure to manage climate-related risks and opportunities and the Board has received updates on sustainability-related matters, including those related to climate change. These were supported by insights from independent sustainability strategy consultants.

Next Steps: The Remuneration Committee is considering how to include non-financial performance metrics including the achievement of ESG targets for senior leaders across the Group.

2

Strategy

Key findings from strategy scoring

In 2017, the TCFD recommended that companies disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.

Of the FTSE 100 companies that we assessed, most identified some material climate-related risks and opportunities, however few aligned these with time horizons associated with global climate goals and even fewer linked these with quantified financial impacts.

Identification of material risks and opportunities

Of the FTSE 100 companies we assessed:

- More companies identified **physical risks** than identified **transition risks**
- **40%** of companies are associating risk and opportunities with different **time horizons**
- Best performing industry group – **Transportation**
- Worst performing industry group – **Materials and Buildings**

Disclosure of impacts on and by the business

Of the FTSE 100 companies we assessed:

- **Nearly 40%** of companies link climate impacts to financial performance in some way
- **Nearly 80%** of companies discussed the impact of the organisation on the climate
- Best performing industry group – **Transportation**
- Worst performing industry group – **Agriculture, Food, and Forest Products (including FMCG)**

Business resilience to climate-related risks and opportunities

Of the FTSE 100 companies we assessed

- **Over half** have Made net zero commitments
- **Over a third** have performed scenario analysis and described the resilience of strategy in each scenario
- Best performing industry group – **Energy**
- Worst performing industry group – **Material and Buildings**

Identification of material risks and opportunities

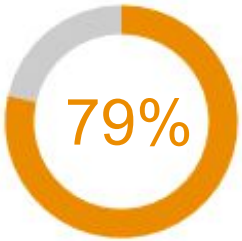
Identify and disclose physical and transitional risks and opportunities, and do so with an associated time horizon.

This provides detail on the specific impacts of climate change on your business and contextualises them in the short, medium and long-term.

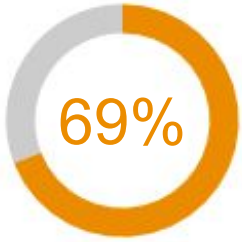
Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Disclose the physical and transition risks and opportunities and associate them with different time horizons.	Provide a materiality assessment of the risks and opportunities identified and ensure that the associated time frames align with the long-term nature of climate change (i.e. consider time frames >10 years).	Detail the financial impact (i.e. in terms of cost) and align the time horizons considered with the Paris Agreement i.e. 2030 and 2050.

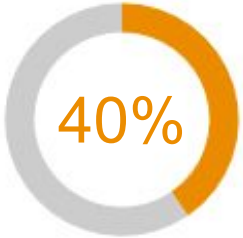
Of the FTSE 100 companies we reviewed:



Identify **physical risks** and/ or opportunities



Identify **transition risks** and/ or opportunities



Associate risks and opportunities with **time horizons**

National Grid Annual Report 2019, pg. 60

Risk/ opportunity type	Description	Our response
Transition		
Markets	The operating environment and regulatory framework are rapidly changing in line with the decarbonisation of the electricity and gas networks in the UK and US.	Facilitating the transition to a low-carbon economy is central to our purpose as a business, and certain key actions we are taking in relation to decarbonisation and decentralisation are set out on pages 12 – 15.
Markets	Commercial opportunities from the transition towards net zero (short/medium and long-term).	Development of a strategy to enable the building of charging stations across our US jurisdictions and UK highways and to meet demand for **electric vehicles**. We have developed a dedicated programme to understand what is required to incorporate **hydrogen and renewable natural gas** into the gas supply. Acquisition of Geronimo, a leading developer of wind and solar generation assets based in Minneapolis, Minnesota, to help position us to develop and **grow a large-scale renewable business** in the US. Our **interconnectors** form an important part of the UK decarbonisation, by allowing us to exchange surplus renewable electricity with neighbouring countries. We are leading the development of **Carbon Capture Utilisation and Storage (CCUS)** technology in the Humber, UK, to support this area to become the first zero carbon region in the world. **Our continuing energy-efficiency** programmes across Massachusetts, Rhode Island and New York have reduced CO_2 emissions by more than 725,000 metric tonnes over the past year which is equivalent to the GHG emissions from over 156,000 passenger vehicles driven for one year.
Markets	Changes in supply and demand for existing and new technologies.	Our analysis, underpinned by the ESO Future Energy Scenarios (FES) shows that, even with increased decentralisation of electricity, there is a key role for Electricity Transmission in the UK under a range of scenarios that meet the UK's 2050 climate change goals. As the transition to renewable generation continues, we will work with the Long Island Power Authority (LIPA) to transform our generation fleet by responding to future RFPs. Under our existing contracts which extend through 2028, LIPA determines their reliability and sustainability needs and which units are operated, retired or transformed. Our FES will be aligned to not meeting, meeting or exceeding the 2050 net zero target.
Security and reliability	Electricity grid reliability and peak capacity.	Our principal focus is around ensuring that our electricity network is able to actively support and contribute to a future where demand for and supply of electricity are ever changing. With growth in renewables increasing intermittency on the network, and electrification of transport and heat likely, we are working with our stakeholders to ensure that grid reliability is understood, managed and planned at appropriate levels.
Security and reliability	Facilitating zero carbon operation of the Great Britain electricity system.	In April 2019, the ESO announced its ambition to transform the operation of the electricity system by 2025. Our goal is to be able to operate the system safely and securely at zero carbon whenever there is sufficient renewable generation online and available to meet the total national load. To facilitate this, the ESO has agreed contracts with five parties, worth £328 million over a six-year period, in a world-first approach to managing the stability of the electricity system.
Physical risks		
Extreme weather	Physical impacts from extreme weather events such as storms and flooding.	We continue to address the physical risks from extreme weather-related events, with a focus on flooding events (in both the UK and US) and storm hardening (in the US). See case study on page 61. As this work continues, it will be informed by not only the weather patterns we are experiencing, but also the results of the ongoing scenario testing.
Changing weather conditions	Increased frequency of weather incidents leading to asset damage/compromise and operational risks.	We will undertake a review of resilience from weather impacts to date. Work is ongoing to update standards with updated information. As an example, our US engineering team is updating standards for new and rebuilt substations to address changes in inland and coastal flooding projections. The ongoing scenario testing will consider whether our design standards are still appropriate under different scenarios, for example, a wider temperature range.
Changing weather conditions	Changes in supply of and demand for gas and electricity as a result of changing weather conditions.	The ESO is undertaking a project, Mapping Impacts and Visualisation of Risks of extreme weather on system operation (MIVOR), to evaluate the impacts of extreme weather events on system operation up to 2050.

> We like how National Grid identifies physical and transition risks and opportunities and also outlines actions taken so far, sometimes contextualising their response in the timeframe of their net zero target.

Severn Trent Climate Adaptation Report, pg. 65

> We like how Severn Trent rank the opportunities and risks and link them to financial impacts.

4. All climate change opportunities

This is a complete list of the climate change opportunities we have identified, including 'Neutral' scores which represent both threats and opportunities depending upon the outcome.

Rank	Climate Driver	Risk	Risk Description	Risk Score	
01	Warmer Winters	**Reduced Leakage**	Reduced number of frost-related bursts and leaks, reducing supply disruptions and saving cost.	**Opp**	**30**
02	Wetter Winters & Increased Storminess	**Recharge of groundwater aquifers**	Higher winter rainfall gives increased recharge to groundwater aquifers, increasing summer baseflow. More water available to abstract, allowing storage to meet supply shortages.	**Opp**	**26**
03	Hotter & Drier summers	**Increased value of wastewater effluent**	Higher water demand increases value of waste water effluent.	**Opp**	**21**
04	Warmer, wetter winters & drier summers including extreme rainfall events	**Alterations to land suitability for sludge disposal**	Wetter winters may cause land to become saturated creating unsuitable conditions for sludge application, whereas hotter drier summers may extend suitable period for application - impacts upon costs of storage, value of sludge and need to find alternative routes of disposal.	**Neut**	**17**
05	Increase in temperatures	**Changes to buildings heating demands**	Higher average temperatures reduce our need for heating in buildings but also increase our need for cooling	**Neut**	**16**
06	Increase in temperatures	**Changes to energy crop yields**	Changes to energy crop yields; extended dry seasons and damage from storms could decrease yields, however, increase in average temperatures could increase growing seasons. Impacts on energy generation and associated costs.	**Neut**	**15**
07	Hotter Summers	**Increased biological treatment**	Improvements in biological treatment performance and effluent removal efficiency. Lower treatment costs.	**Opp**	**13**
08	Warmer Winters	**Reduced risk to drivers of snow on roads**	Reduced frost and snow cover on our sites and road network; reduces risk to our drivers and costs associated with gritting.	**Opp**	**13**
09	Wetter Winters	**Increased hydroelectric power**	Increased reservoir levels in winter allows greater utilisation of river compensation releases with associated Hydro-Electric Power generation.	**Opp**	**7**
010	Changing wind patterns	**Changes to wind power generation**	Potential threat of reduced wind power generation, although opportunity of increased wind generation equally likely due to unknown projections.	**Neut**	**5**
011	Increase in temperatures	**Improved efficiency of biogas production**	Higher ambient temperature increases the efficiency of the biology and mechanical operation of the digestion and biogas process, with small associated cost savings.	**Opp**	**2**

Disclosure of impacts on and by the business

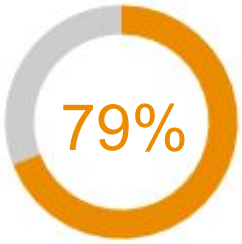
Identify the impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning and furthermore, disclose the impact of the organisation on the climate.

This makes it clear what the impact of climate-related risks and opportunities could be, and also to what extent the organisation itself is contributing to climate change.

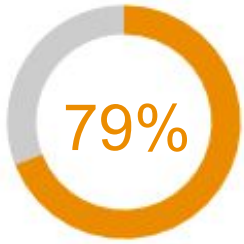
Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Identify climate-related impacts and provide a brief discussion over the impact of the organisation on the climate	Provide a detailed discussion on the impact of the organisation on the climate.	Link the climate-related impacts identified to financial performance indicators e.g. costs, revenue, liabilities, assets.

Of the FTSE 100 companies we reviewed:



Identify the **impact on the organisation's business** of climate-related risks and opportunities



Disclose the **impact on the climate** of the organisation

WPP Sustainability Report 2019, pg. 60

ENVIRONMENTAL IMPACTS

GREENHOUSE GAS EMISSIONS: £3.9 MILLION NET COST TO SOCIETY

The hidden cost of our emissions was £8.6 million in 2019. This calculation takes into account our GHG emissions from energy and business air travel (but excludes other estimated impacts such as leased cars, taxis and couriers) as well as the benefits resulting from our green electricity purchasing (zero emissions assumed). With our investments in renewable energy offsets included (see below), our net cost to society is £3.9 million.

In 2019, WPP invested in renewable energy projects to offset 65,014 tCO_2e emissions associated with climate change impacts of business air travel. Based on the assumed social cost of carbon, this represents a positive societal impact of £3 million. In addition, WPP purchased renewable energy certificates (RECs) in the United States, equivalent to saving 44,914 tCO_2e, with an assumed societal value of £1.7 million.

For consistency, we applied the same approach and value as the 2014 Impact Valuation report (i.e. cost of carbon based on the Stern Report), but adjusted upwards to allow for inflation (i.e. £39.22/tCO_2e). It should be noted though that the equivalent current UK government non-traded carbon price is 74% higher at £68.25/tCO_2e.

For transparency, we split the value into the negative impact of our gross emissions and the positive impact of our carbon offsets. In addition, we assume zero emissions for the purchase of renewable electricity. We have been recording our emissions in line with international standards since 2006 and as part of our reporting process we capture scope 1, scope 2 and a number of scope 3 emissions.

> We like how WPP quantified their environmental impact, linking renewable energy projects to emissions.

Rio Tinto Climate Change Report 2019, pg. 9

2019 business metrics	Commodity impact	Business impact	Overall
Iron ore • $17.0bn underlying EBITDA (2019) (includes Pilbara and Iron Ore Canada)	• Little change to underlying steel demand as not easily substitutable • Increased use of scrap in steel making process over medium-term, especially in China, displacing some iron ore • Wider iron ore product price differentials in favour of higher-grade products • Longer-term implications from development and deployment of new low-carbon steelmaking technologies	• Moderate negative impact on margin but remains a high-margin business positioned, at the bottom of a still steep industry cost curve • Scope to accelerate decarbonisation of an already low-carbon intensity business • Resilience from limited exposure to low-grade iron ore and opportunities for Pilbara lump and hydro-based Iron Ore Company of Canada pellets	↓
Aluminium • $2.3bn underlying EBITDA (2019)	• Demand supported by light weighting benefits in some applications, potentially offset by some substitution • Moderate increased use of scrap, but from an already relatively high base • Steeper industry cost curve with increased carbon costs for coal-fired smelters and projects in China, supporting higher prices	• Increased attractiveness of hydro-based Canadian smelters, further consolidating position at bottom of industry cost curve • Opportunity to be leading provider of aluminium with zero-carbon smelting through ELYSIS™ • Pressure to accelerate repowering of coal-based smelters in Australia • Increased carbon costs for our alumina business	↑

Copper
• $1.9bn underlying EBITDA (2019) (includes 100% of evaluation projects and other costs for Copper & Diamonds Product Group)
	• Demand supported by faster electrification
	• High copper intensity of low-carbon technologies
	  • Three to six times more copper used in each MW of solar and wind, compared to coal and gas
	  • Three to four times more copper used in electric vehicle, compared to combustion engine car
	• Higher prices required for industry to match supply with demand
		• Increased attractiveness of the overall copper sector
		• Opportunities to further improve low-carbon intensity of our copper business and develop new carbon-neutral mines
		• Pressure to develop low-carbon power options for our Oyu Tolgoi operations in Mongolia
			↑

Minerals • $0.8bn underlying EBITDA (2019) (TiO_2 and Borates)	• Stronger demand for battery minerals including high-purity nickel, lithium and cobalt • Little change to underlying TiO_2 pigment demand and limited scope for recycling	• Opportunity to enter the lithium market through the Jadar project in Serbia • Opportunity to acquire battery minerals businesses through Rio Tinto Ventures • Pressure to develop low-carbon power options for Richards Bay Minerals in South Africa	↑

> We like how Rio Tinto categorises the climate change impact by product, linking this to EBITDA, and using a specific scenario (IA SDS), which is linked to the IPCC scenarios.

National Grid Annual Report 2019, pg. 59

The main transition impacts of the 1.5°C scenario were:

- **A trend towards more large-scale renewables in the generation mix:** this would be a positive development for the Group, but for our electric network businesses the rate of new connections could increase beyond today's levels: this could increase costs or, without investment ahead of need, lead to a backlog.
- **A trend towards electrification:** increases in electricity demand would likely trigger electricity network upgrades and investment. Although network costs are a very small proportion of the customer bill, spikes in spending would need to be managed in conjunction with our regulators to ensure that customers, especially lower-income customers, are not unduly adversely affected.
- **Public pressure on gas:** in line with the Committee on Climate Change and other external sources, we do not believe substitutes to methane gas for space heating can reach scale in our territories by 2030 (or even 2040, unless extensive new policy is rapidly deployed). However, in this scenario we anticipate that, without mitigating action to reduce and offset emissions, there is a risk of pushback against the use of gas by environmental groups or concerned citizens. We are already experiencing growing resistance to building new gas infrastructure in our US business from politicians, concerned citizens and environmental groups.

> We like how National Grid describes climate-related impacts under two different scenarios.

Business resilience to climate-related risks and opportunities

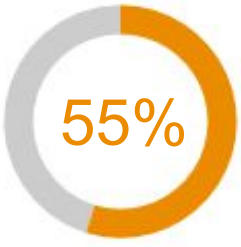
If applicable, disclose the organisation's commitment to net zero and describe the scenario analysis performed.

This illustrates the organisation's commitment to fighting climate change and also shows its preparedness in considering its resilience under multiple future scenarios.

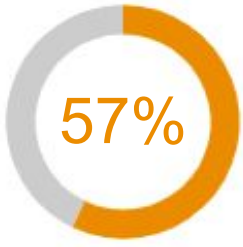
Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Disclose that the organisation has made a net zero commitment.	Explain the detail of the net zero strategy. Disclose the consideration of, and the resilience of the organisation to, one possible scenario.	Disclose the consideration of, and the resilience of the organisation to, at least 2 different scenarios, one being <2 degrees C and one being a stressed scenario.

Of the FTSE 100 companies we reviewed:



Have committed to **net zero**

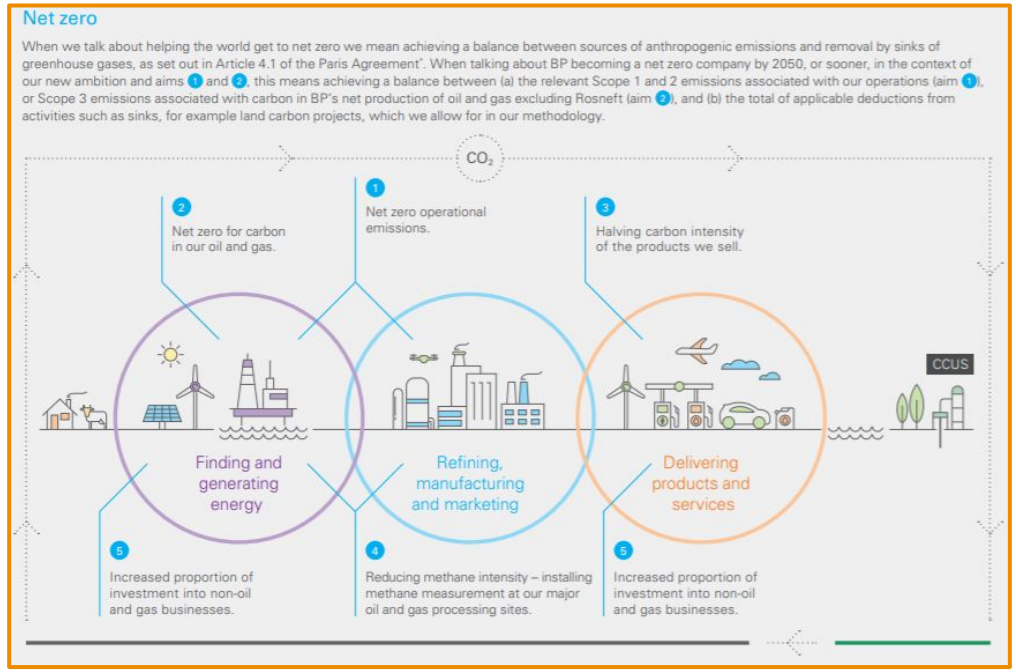


Perform **climate scenario analysis**

> We like how Unilever gives a detailed description of scenario analysis with some pilot examples of impact on specific materials. There is discussion of the resilience of the business to the risks and opportunities

BP Sustainability Report 2019, pg. 18

> We like how BP outlines the steps it will take to achieve Net Zero



Unilever Annual Report 2019, pg. 43 - 44

Understanding financial impact: scenario analysis

This section explains how scenario analysis helps us to understand the potential impact of climate change on our business in 2030 to inform our strategy and financial planning.

To further understand the impact that climate change could have on Unilever's business in the future, we performed a high-level assessment of the impact of 2°C and 4°C global warming scenarios. The 2°C and 4°C scenarios are constructed on the basis that average global temperatures will have increased by 2°C and 4°C in the year 2100. Unilever believes the world should seek to limit global temperatures to 1.5°C above pre-industrial levels. However, in line with guidance we have modelled scenarios based on 2°C and 4°C scenarios.

BT Annual Report 2019, pg. 63

Emerging risks

We face a number of uncertainties that have the potential to be materially significant to our long-term strategy but cannot be fully defined as a specific risk at present, and therefore cannot be fully assessed or managed. These emerging risks typically have a long time horizon, such as climate change, certain new technologies and long-term geopolitical trends.

Our enhanced risk management framework places greater emphasis on the identification of emerging risks, so that we can pro-actively monitor them and ensure they inform our strategic planning and resilience activities.

A focus on climate change:
The physical impacts of climate change and the actions taken by governments and society to try and limit global warming to well below 2°C by 2100 may impact our assets in the UK and globally, as well as our ability to source raw materials. As our customers seek to reduce their own emissions, demand for our propositions and services may also change.

We have conducted an analysis of the potential future climate-related impacts on BT; the main threats and opportunities identified are as follows:

Physical impacts:
- the impacts of extreme weather events, in particular of flooding and chronic increases in temperature, on our suppliers, operational assets and vehicle fleet.

Policy decisions and low carbon transition risks:
- potential carbon price increasing the operating cost of our assets
- potential policy changes that impact our ability to use our existing vehicle fleet
- increased costs of sourcing renewable energy due to changes in demand
- potential policy changes around end-of-life obligations and rights to repair relevant to our propositions.

Opportunities:
- the potential to recover and reuse infrastructure and product materials which can contribute to a low carbon, circular economy
- increasing demand for our propositions to support customers to move to a net zero society.

In response, we have pledged to become a net zero carbon emissions business by 2045. We plan to meet this target through the purchase of 100% renewable electricity, converting our vehicle fleet to ultra-low emissions vehicles and to continue to decarbonise our buildings. We are also considering our global response to physical climate impacts, building on work in the UK to implement flood defences and minimise service disruption.

See Digital impact and sustainability on page 36 for further information on our response to climate change.

> We like how BP identifies risks and opportunities, discloses the outputs of high-level scenario analysis and makes a Net Zero commitment with the high level strategy details.

3

Risk management

Key findings from risk management scoring

In 2017, the TCFD recommended that companies disclose how they identify, assess and manage climate-related risks.

Of the FTSE 100 companies that we assessed, almost all companies recognised climate change as a current and/or emerging risk. Many integrated climate-related risks into high-level assessment of other risks. However very few go onto identify the financial impact and mitigation measures around this.

Risk identification, assessment and management

Of the FTSE 100 companies we assessed:

- **Over half** described their **process to assess the potential impact** of climate-related risks
- **Almost 2/3rd** described some sort of **mitigation** of climate-related risks, however there was **very low** disclosure on management of **the financial implications** of climate risk
- Best performing industry group: **Transportation**
- Worst performing industry group: **Materials and Buildings**

Engagement with stakeholders

Of the FTSE 100 companies we assessed:

- **Over half** described engagement with multiple stakeholders (including suppliers, customers, industry or policy makers)
- Best performing industry group: **Energy**
- Worst performing industry group: **Agriculture, Food, and Forest Products (including FMCG**)

Integration with current risk process

Of the FTSE 100 companies we assessed:

- **80%** disclose some level of integration of risks into their risk management process
- Best performing industry group: **Energy**
- Worst performing industry group: **Material and Buildings**

Risk identification, assessment and management

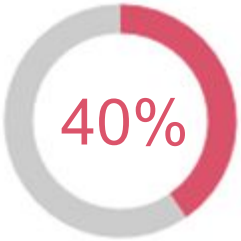
Describe the process for identifying, assessing and managing climate-related risk and impact. Provide details of the mitigation/management techniques used.

This allows the reader to understand the process behind the disclosures your company has made with regards to strategy and risk. The management techniques enable the reader to understand how the organisation is mitigating the risks it is presented with.

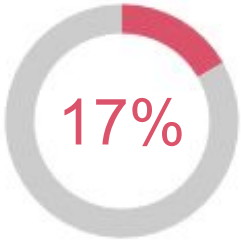
Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Disclose how the identification, assessment and management of risks and impacts is conducted. Provide details on how these risks are mitigated.	Ensure that the discussion over identification, assessment and management of risks and impacts covers the entire value chain.	Discuss how addressing the financial impact of climate-related risks and opportunities is built into your impact assessment process. Ensure that the financial impacts of the mitigation methods are captured.

Of the FTSE 100 companies we reviewed:



Outline a process for **identifying, assessing and managing** climate-related risks across the entire value chain



Assess the **financial impact** of climate-related risks

Disclose the process of **mitigation of risks**, linked to financial implications

Unilever CDP Response 2019, pg. 12

Process to assess the financial impact of risks

We use our 15 principal risks (see pages 29-33 of our Annual Report & Accounts 2018) to identify scenarios which could force Unilever to cease being viable over a 3-year period. In addition to general monitoring of the risks throughout the year, each year, we assess the cash flow impact a particular risk/mix of risks could have to the business based on the amount of cash held, our operating cash flows and the credit facilities available and their ability to affect the business operating and meeting its liabilities. Our time horizons are aligned with our forward-looking planning, set out in our three-year strategic plans and annual forecasts and our Boards assume overall accountability for the management of risk and reviewing the effectiveness of Unilever's risk management and internal control systems.

Definition of substantive financial impact

In assessing viability, 'severe but plausible' scenarios based on our principal risks are considered and the definition we work with is 1% of our Group Turnover which equalled €509m of turnover in 2018. We identify substantive financial impact in 2 ways:

- assessing scenarios for each individual principal risk, for example the termination of our relationships with the three largest global customers; the loss of all material litigation cases; a major IT data breach and the lost cost and growth opportunities from not keeping up with technological changes; and
- assessing scenarios that involve more than one principal risk, for example a major global incident affecting one or more of Unilever's key locations resulting in an outage for a year in a key sourcing unit and significant water shortages in our key developing markets All the principal risks could impact our business within the next two years (ie short-term risks), or could impact our business over the next three to five years (ie medium-term risks). Since risks arising from climate change risks are greatest over the 6 year time horizon, we wanted to understand the impact of global warming scenarios on our business up to 2030.

> We like how Unilever provide detail of the process for assessing the financial impact of climate risks.

Standard Life Aberdeen TCFD Report 2019, pg. 6

> We like how Standard Life Aberdeen identifies physical and transition risks, linking them to financial impact and disclosing mitigation strategies for these.

Table 1: Highest scoring climate-related financial risks:

Risk type			Potential financial impact (-)	Likelihood	Mitigation Strategy
It starts with us					
TRANSITIONAL RISKS	POLICY & LEGAL	Enhanced emissions-reporting obligations	Increased operating costs		• We have a process to identify and respond to regulatory and voluntary reporting change.
		Mandates on and regulation of existing products and services	Increased compliance costs, write-offs, asset impairment, and early retirement of existing assets due to policy changes		• We support transitional policies (e.g. carbon prices) and proactively engage with governments, regulators and industry organisations.
	REPUTATION	Increased stakeholder concern or negative stakeholder feedback	Reduction in capital availability		• Operationally we've set stretching long-term targets for Scope 1 and 2 emissions. We are increasing our procurement of renewable energy, invested in energy efficiency technology, and as of 2020 we are offsetting our operational GHG emissions.
		Significant shifts on consumer preferences	Reduced revenue from decreased demand for goods/services, Reduction in capital availability		• Our climate change approach encourages the allocation of capital to companies who are better placed for the transition to a low carbon world
Investing with purpose					
TRANSITIONAL RISKS	POLICY & LEGAL	Enhanced emissions-reporting obligations	Increased operating costs		• We are developing the data and tools to carry out necessary analysis and research for example, the weighted average carbon intensities for equities, fixed income and real estate, provided in charts 2 and 3
		Mandates on and regulation of existing products and services	Increased compliance costs, write-offs, asset impairment, and early retirement of existing assets due to policy changes		• Research and company engagements help us to understand the issues and which companies are best placed for the transition. Diversification of our portfolios is also a mitigant.
	REPUTATION	Increased stakeholder concern or negative stakeholder feedback	Reduction in capital availability		• As an investor we actively consider climate change risks and opportunities as part of our investment process and provide specific climate change related solutions for investors. • We make our views public for example by signing the Global investor statement to Governments in 2019. In addition, we are an active member of Climate Action 100+ and support the Transition Pathway Initiative.
		Significant shifts on consumer preferences	Reduced revenue from decreased demand for goods/services, Reduction in capital availability		• As stated above we are active in promoting the transition as a signatory and in collaboration with industry peers. • We actively encourage our holdings to consider climate-related risks and opportunities
		Stigmatization of sector	Reduced revenue from decreased demand for goods/services		• We are transparent in our product descriptions.

Engagement with stakeholders

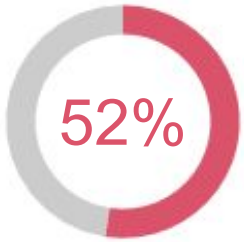
Document engagement with stakeholders beyond the organisation's operations regarding the climate change agenda.

This demonstrates to the reader that a holistic approach is being taken with regards to tackling the issue of climate change, and the extent to which the organisation is looking beyond its own operations.

Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Provide disclosure of engagement with at least one type of stakeholder.	Show that multiple stakeholders have been engaged with.	Improve the narrative to provide high levels of detail concerning the initiatives which have been disclosed.

Of the FTSE 100 companies we reviewed:



Engage with **multiple stakeholders** on the subject of climate risk

"We like how Unilever provides a detailed description of industry groups they engage with and global initiatives they lead/ take part in.

Unilever Website 2020

Business Ambition for 1.5°C

Business Ambition for 1.5°C is an urgent call to action, led by a coalition of UN agencies, business and industry leaders. Countries are asked to set a deadline for ending their contribution to climate change, in the form of a legally binding net zero target. Businesses are asked to set science-based targets to reduce their targets on the same trajectory. We were one of the first companies to commit to and set a science-based target for reducing emissions in line with the 1.5°C ambition of the Paris Agreement.

At the UN Secretary General's Climate Action Summit, Unilever CEO, Alan Jope, was honoured with an Ambitious Climate Leader Award by Lise Kingo, Executive Director of the UN Global Compact, for making this commitment. Companies and countries making this commitment are also considered part of the Climate Ambition Alliance, launched by the Chilean government as part of the UN Climate Change Conference COP25 meeting, which took place in late 2019.

We Mean Business

We support the advocacy work of We Mean Business, a coalition of business groups including the World Business Council for Sustainable Development (WBCSD), BSR, Ceres, B Team, HRH The Prince of Wales's Corporate Leaders Group, CDP and The Climate Group and supported by other networks. As a Corporate Advisory Group member of We Mean Business, we are helping to engage a record number of businesses around the world in committing to take action on climate change.

World Business Council for Sustainable Development (WBCSD)

The WBCSD is a CEO-led organisation of nearly 200 companies committed to sustainable business. We're taking part in the WBCSD's Low Carbon Technology Partnership Initiatives (LCTPi) to find business solutions to climate change. If implemented, the LCTPi could contribute 65% of the emissions reductions needed by 2030.

One such project is being run by the LCTPi REScale group, which is looking at how to scale the use of renewable energy. We have supported the development of a WBCSD guide to help businesses achieve 100% renewable energy sourcing through purchase power agreements.

United Nations Global Compact (UNGC)

We are a member of the UNGC's Caring for Climate Campaign and we have implemented the UNGC's Business Leadership Criteria on Carbon Pricing. We believe that carbon pricing is a fundamental part of the global response to climate change, and without it the world is unlikely to meet its GHG reduction targets. We also support the UNGC's Guide to Responsible Engagement in Climate Policy, which calls for companies and trade associations to ensure their lobbying aligns with their public position on climate change.

LSEG Sustainability Report 2019, pg. 46

Engagement with Stakeholders and Shareholders

The Board views clients, regulators and employees as key stakeholders. Here we provide a brief commentary on our engagement with these stakeholders in 2019. More information on our stakeholder engagement can be found in the Annual Report on pages 51–52.

Clients
We engage with our clients across our business in a number of different of ways. In 2019, some examples of this engagement on sustainability topics have included our transition bond roundtable (page 16) and the launch of the FTSE Custom Developed Ex Korea SDG Aligned Index, developed following close collaboration between FTSE Russell, Pensioenfonds Detailhandel and BlackRock (page 19). Further examples are outlined earlier in this report in the Our Markets and Our Services sections.

Regulators
LSEG is engaged on an ongoing basis with global policy makers and regulators on sustainable finance, including the UK, EU, North America and in Asia. In the last year LSEG has submitted evidence to a number of inquiries, including: the Treasury Select Committee's inquiry into the 'Decarbonisation of the UK Economy and Green Finance inquiry', where we outlined the importance of public markets in meeting the challenge of transitioning; and IOSCO's consultation into 'Sustainable finance in emerging markets'.

As part of LSEG's Sustainable Finance and Investor Summit in October 2019, we held a panel discussion with experts from a range of sectors to debate what the future is of regulation to drive the transition to a sustainable economy.

UK Climate Financial Risk Forum
LSEG is a member of the Climate Financial Risk Forum (CFRF), an industry forum that is jointly convened by the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) to build capacity and share best practice. Since its inception in March 2019, the CFRF has set up four technical working groups on disclosure, scenario analysis, risk management and innovation. CFRF is due to publish the conclusion of these working groups in Spring 2020.

UK Green Finance Institute
LSEG is a member of the Green Finance Institute and is represented on its Advisory Group by Nikhil Rathi, CEO of LSE plc and Director of International Development. The purpose of the Institute is to bring together the UK's existing offering on sustainable finance and create new related business opportunities as well as communicate these initiatives to the wider market is in this area.

EU Technical Expert Group on Sustainable Finance
In July 2018, the European Commission established a Technical Expert Group on sustainable finance (TEG) to assist in the development of a unified classification system for sustainable economic activities; an EU green bond standard and methodologies for low-carbon indices and metrics for climate-related disclosure. LSEG is a member through Borsa Italiana. The TEG's mandate covers four areas:

- EU taxonomy – to determine whether an economic activity is environmentally sustainable;
- an EU Green Bond Standard;
- methodologies for EU climate benchmarks and disclosures for benchmarks and
- guidance to improve corporate disclosure of climate-related information.

The TEG, with significant input by LSEG, has delivered recommendations on these four workstreams. The mandate of the TEG has been extended until 30 September 2020 to allow it to conclude its technical work and retain the expertise before the future platform on sustainable finance is established.

Employees
Employee engagement continues to be of paramount importance to the Group, and we are committed to acting on the results of our regular 'Have Your Say' global employee surveys. Details of how we have engaged with our people in the year can be found in the Our People section of this report on page 24.

Shareholders
The Company maintains an active shareholder engagement programme, managed through the Group's Investor Relations (IR) function. The IR programme provides regular opportunity for the Board to have contact with existing and potential shareholders. In 2019, the IR team held over 550 investor meetings.

> We like how LSEG provide clear labelling of the different stakeholders they engage.

Land Securities Sustainability Report 2020, pg. 39

Principle	Landsec's approach	Find out more
	Strategy, governance & engagement	
Implementing the Ten Principles into Strategies & Operations	Landsec's purpose is to provide the right space for our customers and communities so that businesses and people can thrive. We aim to be a sustainability leader by anticipating and responding to the changing needs of our customers, communities, partners and employees. To deliver this we've set 12 long-term sustainability commitments, covering each of our three priority areas: creating jobs and opportunities, efficient use of natural resources and sustainable design and innovation. The goal of our sustainability approach is to create long-term financial, physical and social value for our shareholders and society. Sustainability is embedded across Landsec. Our Sustainability Committee is the main forum for overseeing the sustainability strategy and targets for the Group. The Committee is chaired by the Chief Executive and is attended by the Group Corporate Affairs & Sustainability Director and Group HR Director together with our Sustainability Director, and senior representation from the property and development teams. The Sustainability Committee meets quarterly and is the senior forum for determining our sustainability strategy and reviewing performance, ensuring its integration with the Group's overall strategy. Furthermore, the Board receives an annual update on our sustainability programme, which includes discussion of performance in relation to our commitments. Landsec recognises that our responsibility extends into our value chain. Consequently, our supplier engagement on sustainability covers supplier selection and management of our operational suppliers. We also encourage innovation with service partners to reduce climate impacts of products and services. Moreover, we support our customers with sustainability-related issues, e.g. helping to drive down their costs through creating energy data insights, seeking opportunities for improvement and helping customers to carry out energy efficiency projects. Working with customers in this way benefits them, but also creates a bottom-line benefit and value to society. Furthermore, Landsec is dedicated to working with the real estate industry and government to tackle global environmental and societal problems. We are active members of the UK Green Building Council and Better Buildings Partnership, working with our peers to help the entire industry improve, and we use our expertise to help tackle specific sustainability problems. In addition, we support legislative solutions around sustainability, for instance supporting the Department for Business, Energy and Industrial Strategy (BEIS) with public policy on operational energy and carbon ratings within the commercial property sector.	Sustainability strategy Sustainability Charter for suppliers Working with our su[illegible]ners Su[illegible]ty Brief

> We like how Landsec provides a description of supply chain and industry group engagement.

Integration with current risk process

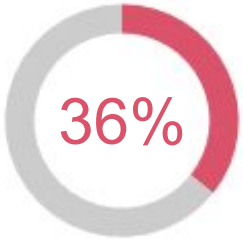
Disclose how the climate-related risk (CRR) management process is integrated into the overall risk management process.

This illustrates how the issue of climate risk is now considered an integral part of the overall risk management process.

Tips to make your reporting more effective:

Basic	Intermediate	Advanced
If applicable, disclose the operational linkage of climate-related risk management into the overall risk management process.	Include a narrative explaining how this integration took place.	If applicable, ensure that it is detailed that there is full integration into the overall risk management process, including on a financial level.

Of the FTSE 100 companies we reviewed:



Integrate climate-related risk into the overall risk-management process

> We like how RBS includes climate risk alongside its other top and emerging risks.

RBS Annual Report 2019, pg. 44

Top and Emerging Risks

RBS employs a continuous process for identifying and managing its top and emerging risks. Top and emerging risks are those that could have a significant negative impact on its ability to operate or meet its strategic objectives.

External	
Economic & Political Risks	As a UK-focused bank, RBS is exposed to the economic and political risks facing the UK including risks from a sustained period of low economic growth and low interest rates. A range of complementary approaches is used to inform strategic planning and risk mitigation. This includes active management of portfolios and adjustment of risk appetite, scenario planning and stress testing. In addition, RBS has implemented plans to prepare for the loss of access to the European Single Market and continues to monitor domestic political risk including developments in relation to a second Scottish independence referendum, as well as geopolitical risks. In the longer term, demographic change, high levels of debt and financial inequality in the UK could all have financial impacts and, as a result, are closely monitored with strategic plans adapted as appropriate.
Climate Related Risks	Accelerating climate change may lead to heightened financial risks and faster-than-anticipated impacts on RBS and the wider economy. These include financial loss as a result of deterioration in credit quality, market risk exposure and operational risk. The operation and business strategy continues to be adapted to mitigate the direct and indirect physical risks of climate change and the transition to a low carbon economy. In addition, climate-related financial risk is being integrated into the risk management framework.
Cyber Threats	Cyber-attacks continue to increase in frequency, sophistication and severity. There is a risk that a catastrophic cyber-attack damages the ability to do business and/or compromises data security. RBS operates a multi-layered approach to its defences and continues to invest in a multi-year programme to build resilience and cybersecurity capabilities. Cyber-attacks may also threaten the supply chain, reinforcing the importance of due diligence and close working with the third parties on which RBS relies.
Competitive Environment	Target markets are highly competitive, with changes in technology, regulation, customer behaviour and business models continuing to accelerate competitive pressure. RBS monitors the competitive environment and adapts strategy as appropriate, remaining focused on innovating to evolve the business model to deliver compelling propositions for customers. This includes the launch of new digital retail and business offerings, Bó and Mettle.
Regulatory, Legal & Conduct Risk	RBS continues to face stringent regulatory and supervisory requirements, particularly regarding conduct, financial crime, the use of models, and capital and liquidity management. A strong and comprehensive risk and compliance culture continues to be embedded. RBS engages with regulators to implement new regulatory requirements and incorporates the implications of proposed or potential regulatory activities in its strategic and financial plans.
LIBOR transition	UK and international regulators are driving a transition from the use of interbank offer rates (IBORs), including LIBOR, to alternative risk-free rates. Uncertainties around the transition represent a number of risks including elevated legal and conduct risks. While a programme to manage the transition is underway, there is a risk that this may not be done effectively.

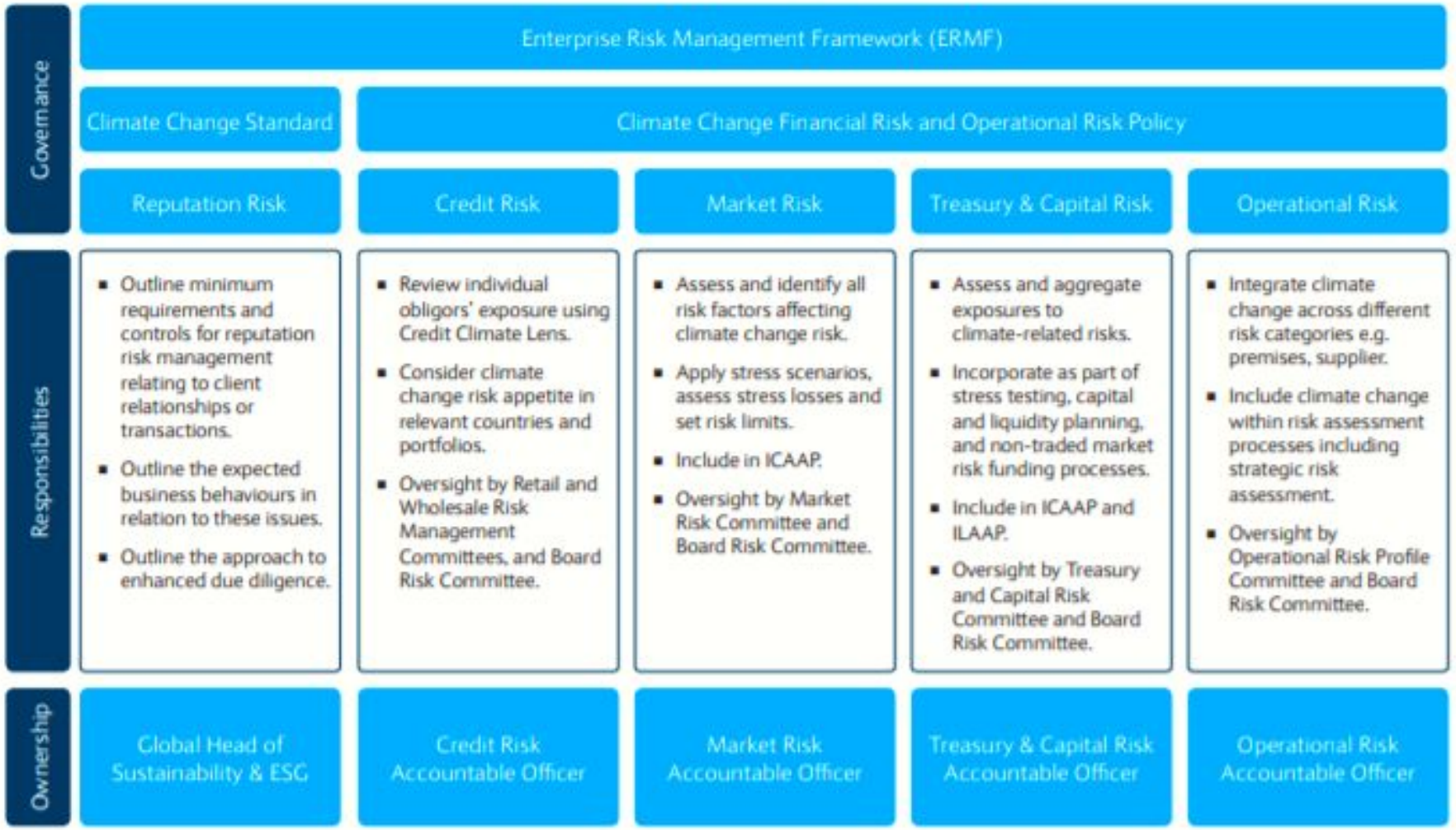
Barclays ESG Report 2019, pg. 52

CLIMATE-RELATED FINANCIAL DISCLOSURES

Risk management

> We like how Barclays clearly shows how climate risk is integrated into the Enterprise Risk Management Framework, with oversight across multiple parts of the bank, led by Risk Officers who have responsibility beyond climate risk.

During 2019, we further embedded climate change risk into the Group's Enterprise Risk Management Framework (ERMF) and recognised that climate change, and the associated risks described above, can impact a number of principal risks the Group faces.



4

Metrics and targets

Key findings from metrics and targets scoring

In 2017, the TCFD recommended that companies disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Of the FTSE 100 companies that we assessed, almost all reported at least Scope 1 and 2 Greenhouse Gas Emissions. Many report performance against targets they have set. However only a third of companies have developed sophisticated metrics assessing the full value chain or linking metrics to financial performance.

Disclosing climate-related metrics

Of the FTSE 100 companies we assessed:

- **Three quarters** reported Scope 1,2 and 3 emissions
- **One third** identified and reported climate-related metrics that were not GHGs
- Best performing industry group: **Transportation**
- Worst performing industry group: **Agriculture, Food, and Forest Products (including FMCG)**

Setting climate-related targets

Of the FTSE 100 companies we assessed:

- **One third** disclosed targets linked to broader strategic targets such as Net Zero or the company's strategy
- Best performing industry group: **Transportation**
- Worst performing industry group: **Materials and Buildings**

Reporting on performance

Of the FTSE 100 companies we assessed:

- **Half** described the performance of the company on climate, using comparatives
- Best performing industry group: **Agriculture, Food, and Forest Products (including FMCG)**
- Worst performing industry group: **Financial Services**

Disclosing climate-related metrics

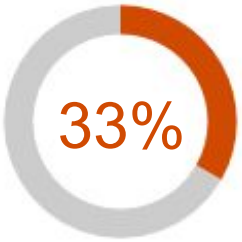
Disclose a range of climate and sustainability-related metrics, including GHG emissions.

This will provide the reader with the quantitative detail of the company's impact on the environment and climate, as well as showing how this has changed through time.

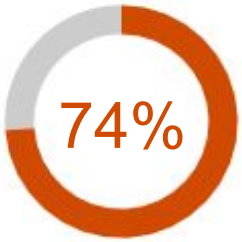
Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Report predominantly straightforward metrics such as Scope 1 & 2 emissions and those relating to the direct operations of the company.	Increase the sophistication of the metrics reported by providing comparatives, normalised metrics and Scope 3 emissions data.	Incorporate metrics concerning the wider supply chain and provide a financial context, for example, by using cost-related metrics.

Of the FTSE 100 companies we reviewed:

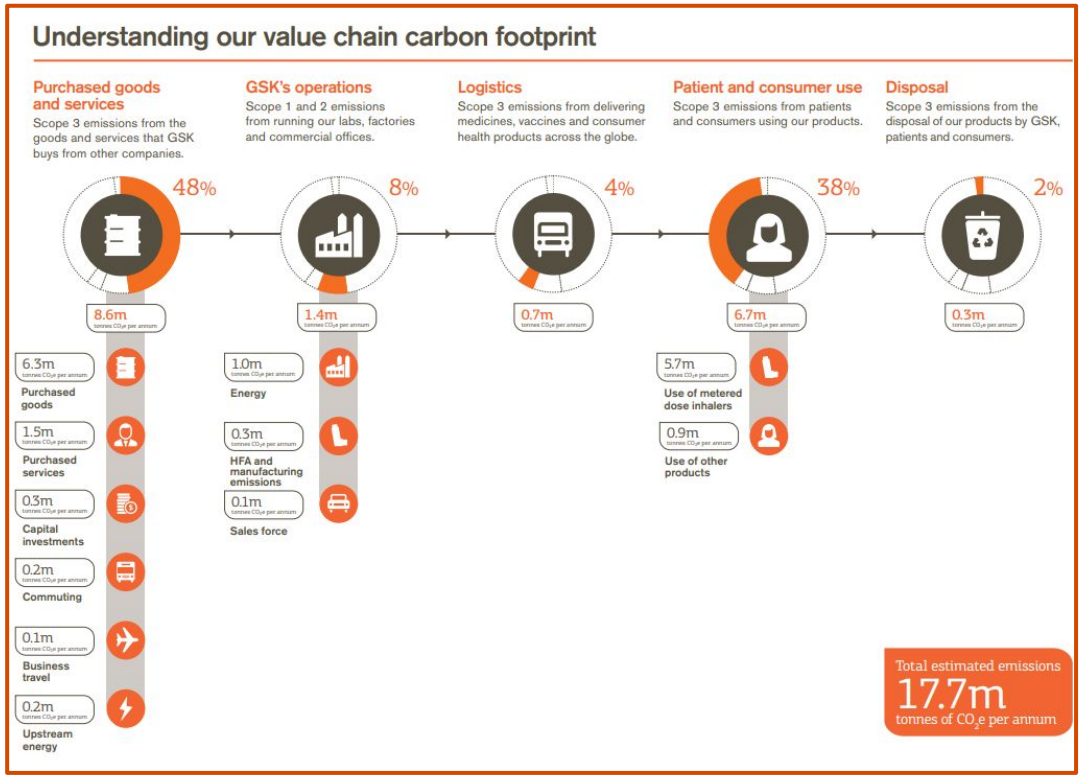


Report sophisticated **non-emission climate-related metrics,** including supply-chain, normalisations, financial metrics



Disclose **scope 1, 2 & 3 emissions**

GSK Website 2020



We like how GSK visually represents their scope 1, 2 & 3 emissions across the value chain.

United Utilities Annual Report 2019, pg. 76-77

> We like how United Utilities discloses a large number of climate-related metrics, both relating to GHG emissions and otherwise.

United Utilities' greenhouse gas emissions

		Current year	Previous years		Baseline Year
		2019/20 tCO_2e	2018/19 tCO_2e[2]	2017/18 tCO_2e	2005/06 tCO_2e
Scope 1 Direct emissions					
Direct emissions from burning of fossil fuels		17,129	16,809	14,324	17,638
Process emissions from our treatment plants – including refrigerants		84,048	88,136	91,456	125,032
Transport: company owned or leased vehicles		15,739	14,409	11,803	7,514
Total Scope 1 Direct emissions		116,916	119,354	117,583	150,183
Scope 2 Energy indirect emissions					
Grid electricity purchased – generation	Market-based[1]	11,789	18,503	28,287	
	Location-based	164,521	187,171	230,167	357,660
Total Scope 2 Energy indirect emissions		11,789	18,503	230,167	357,660
Scope 3 Other indirect emissions					
Business travel (public transport and private vehicles)		2,123	2,236	2,504	2,374
Emissions from sludge and process waste disposal		27,410	26,186	23,048	42,712
Grid electricity purchased – transmission and distribution	Market-based[1]	1,005	1,577	2,644	
	Location-based	13,967	15,955	21,520	33,088
Total Scope 3 Other indirect emissions		30,538	29,999	47,072	78,174
GROSS GHG EMISSIONS[2]		159,243	167,856	394,822	586,017
Avoided emissions from renewable electricity exported		(3,979)	(3,434)	(2,303)	(1,597)
Avoided emissions from biomethane exported		(9,302)	(8,446)	(8,577)	–
Avoided emissions from renewable electricity purchased	Location-based	–	–	(173,876)	–
Total avoided emissions		(13,281)	(11,880)	(184,756)	(1,597)
NET GHG EMISSIONS[3]		145,962	155,976	210,066	584,420

(1) Market-based figures for electricity purchased on a standard tariff have been calculated using specific emissions factors from published generator fuel mix disclosures.
(2) Operational emissions for 2005/06 and 2017/18 use the location-based method, 2018/19 and the current year use the market-based method.
(3) Emissions from our regulated business have been estimated using the Water Industry Carbon Accounting Workbook V13 2020 v3 which encompasses the UK Government GHG Conversion Factors for Company reporting 2019.

United Utilities' greenhouse gas emissions intensity

As in previous years we state our emissions as tonnes CO_2e per £million revenue. We also report the metric tonnes CO_2e per megalitre (using the location-based method) broken down by clean water and wastewater, as these are common metrics for our industry.

		Current year 2019/20	2018/19	2017/18
Gross emissions per £m revenue	tCO_2e	85.7	92.3	225.6
Net emissions per £m revenue	tCO_2e	78.5	85.7	121.0
Regulated emissions per megalitre of treated water	Kg CO_2e/Ml	27.19	38.22	60.43
Regulated emissions per megalitre of sewage treated	Kg CO_2e/Ml	83.80	102.43	116.75

Energy use, generation and export

	2019/20 GWh	2018/19 GWh
Energy use		
Electricity	801.3	807.8
Gas	38.3	33.0
Other fuels[1]	144.4	135.0
Total energy use	984.0	975.8
Electricity purchased		
Renewable Tariff 0g CO_2e/kWh	602.9	601.5
Supplier Standard Tariff 289g CO_2e/kWh	40.8	59.7
Total electricity purchased	643.7	661.2
Renewable energy generated		
CHP	121.5	115.7
Solar	42.5	34.6
Wind	5.7	4.8
Hydro	6.8[2]	4.6
Biomethane[3]	14.2	13.2
Total renewable energy generated	190.9	172.9
Renewable energy exported		
Electricity	18.1	13.0
Biomethane[3]	14.2	13.2
Total renewable energy exported	32.3	26.2

(1) Energy use for other fuels includes fuel used in processing and transport plus business mileage in private vehicles converted to GWh using UK Government GHG Conversion Factors for Company Reporting.
(2) Renewable energy from hydro includes Oswestry which was not incorporated into the emission reporting pending review of ROC.
(3) Biomethane generated and exported to grid is expressed as an electricity equivalent.

Emissions and energy use

This year we consumed 984 GWh of energy including electricity, gas and other fuels purchased for use on-site and for transport. We increased generation across all our renewable sources of hydro, solar photovoltaics, wind, biomethane and energy recovery using sewage sludge to power combined heat and power (CHP) generators. We generated the equivalent of 191 GWh of renewable electricity, an increase of 18 GWh on last year and though we exported 6.1 GWh more we reduced our electricity purchased by 17.5 GWh.

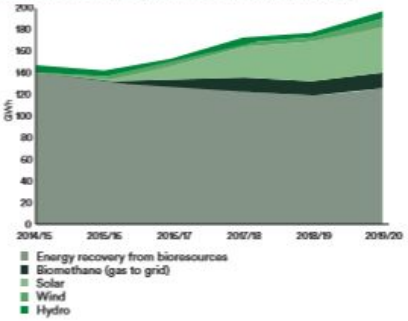
Having largely addressed emissions from electricity, it is mostly methane and nitrous oxide emissions arising from wastewater treatment that remain. Understanding and reducing these emissions forms a long-term challenge for the industry as a whole.

Energy efficiency action taken

Our energy management strategy aims to achieve an appropriate balance between managing energy consumption, use of renewables and self-generation and being smart about how we operate our assets to get best value while maintaining security of supply.

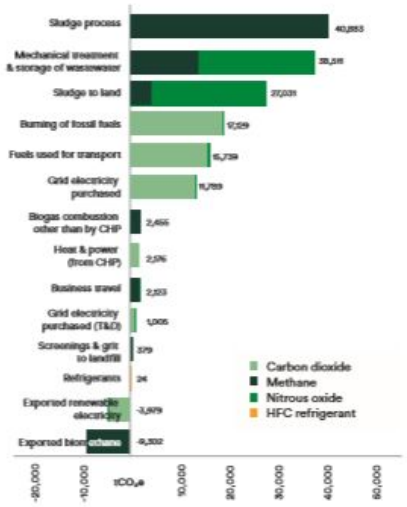
We have continued to develop our Energy Management Programme which brings together processes, asset optimisation and data analytics. We have implemented a wide range of projects to reduce consumption and drive more dynamic control of our assets to reduce energy costs. To improve data capabilities we have rolled out an innovative sub-metering solution installing over 1,200 meters. Two major solar installations were completed with a combined capacity of 11.5 MW.

Renewable energy generation by technology



In the past year we completed our Energy Saving Opportunities Scheme (ESOS) submission to the Environment Agency which includes potential opportunities for efficiency and generation improvements. We were shortlisted for the Energy Institute Energy Management Award in November 2019.

Breakdown of our 2019/20 emissions by activity and greenhouse gas



Summary: good progress – ambitious, deliverable plans

We've been focused on climate change for over 20 years and have made good progress. We have committed to playing our part in limiting climate change to 1.5°C, we aim to maintain and improve services whether the climate change is 1.5°C, 2°C or 4°C, and we have the appropriate governance, strategy, risk management and metrics to make sure this happens.

Setting climate-related targets and reporting on performance

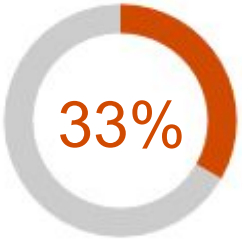
Disclose the targets (and related progress) the company uses to manage climate-related risks and opportunities.

This will provide the reader with information on how proactive the company is being with regards to reducing its climate impact, and whether they are set to reach their targets.

Tips to make your reporting more effective:

Basic	Intermediate	Advanced
Produce targets accompanied by a qualitative description of progress.	Include targets set over different timeframes, provide quantitative progress and add accompanying analysis.	Ensure that any GHG emissions reduction targets are science-based (and therefore in line with the Paris Agreement). Extend the accompanying narrative.

Of the FTSE 100 companies we reviewed:



Disclose science-based **targets** linked to climate-related risks and opportunities

Disclose **performance** against targets using quantitative comparatives

Unilever Website 2020

Progress to date

We have continued to develop products with a lower GHG impact, however the GHG impact of our products across their full lifecycle has increased by around 2% since 2010.†* This is a slight improvement from 2018, when our GHG impact per consumer use was up 6% compared to 2010.

Our perspective

The increase is due to mix effects as well as acquisitions and disposals. For example, our 2019 footprint shows reductions in GHG emissions from our increased use of renewable energy in our factories and sustainable product innovations. Portfolio changes have also reduced our GHG emissions, such as the disposal of some foods that require cooking. However, these GHG reductions have been negated by our Beauty & Personal Care Division, which has expanded in hair and skin cleansing products via acquisitions.

Our measured GHG footprint in the 14 key countries across our value chain is around 60 million tonnes CO_2e, an increase of 15% compared to 2010. However, our turnover has increased at 18% compared to 2010 – higher than our GHG emissions have grown, which is an indication of decoupling. As we make progress towards our 2030 GHG reduction commitment, we expect the extent of decoupling to accelerate.

We are having more success in areas that we can directly control. Although our factory sites achieved our CO_2 reduction from energy target in 2016 – four years ahead of schedule – they are continuing to cut CO_2 emissions from energy. Compared to 2008, CO_2 emissions from energy in our factories have fallen by 65%† per tonne of production. In 2019, 85% of all grid electricity used in our manufacturing operations was generated from renewable resources.

We continue to reduce GHG emissions from refrigeration through the ongoing roll-out of climate-friendly ice cream freezer cabinets, which use hydrocarbon refrigerants rather than hydrofluorocarbon (HFC) refrigerants. We've rolled out over 2.9 million climate-friendly ice cream freezer cabinets. And, finally, in 2019 we achieved our transport target a year ahead of schedule when our CO_2 emissions intensity from transport improved by 41.2% since 2010.

We've created a detailed plan to annually assess the feasibility for Unilever to reach our target to halve the greenhouse gas impact of our products across the lifecycle by 2030. This considers both external transitions towards a net zero carbon economy as well as the latest available data and assumptions about our GHG footprint. CDP is the world's largest disclosure platform of environmental data for investors. In 2019, we achieved a place on its 'A List' for climate change and forests (which was conducted through the lens of three commodities: palm oil, soy and timber).

> We like how Unilever provides a detailed assessment of their performance relating to scope 3 product-related emissions.

RBS Website 2020

GHG Emissions	Baseline Year	Baseline Totals	2015	2016	2017	2018	2019	2020 Target	Change From Baseline (%)
Location-based CO_2e emissions (Scope 1, 2 & business travel) (tonnes)	2014	496,249	450,299	391,437	312,731	252,340	191,103	-45%	-61%
Location-based CO_2e emissions per FTE		5.07	4.91	4.34	4.08	3.56	2.87		-43%
Scope 1 * CO_2e emissions (tonnes)		30,695	27,997	28,577	25,578	29,959	20,672		
Scope 2 ** market-based *** CO_2e emissions (tonnes)		377,337	337,000	152,912	69,391	57,735	45,913		
Scope 2 location-based CO_2e emissions (tonnes)		360,201	326,709	273,822	219,979	166,179	127,730		
Scope 3 **** CO_2e emissions from business travel (tonnes)		105,352	95,592	89,037	67,174	56,203	42,701		
Energy									
Energy consumption (GWh)	2014	862	807	755	693	619	524	-40%	-39%
Business Travel									
CO_2e emissions from business travel (Scope 1 & 3) (tonnes)	2011	143,883	96,442	89,924	67,941	56,950	43,443	-50%	-70%
Water									
Water consumption (m^3)	2014	1,164,345	1,311,456	1,239,425	1,083,921	918,976	830,610	-10%	-29%
Waste									
Waste generated (tonnes)		17,539	15,036	19,724	14,768	13,955	12,822		
Percentage of waste diverted from landfill (UK)	2014	91%	92%	97%	97%	99%	100%	100%	9%
Paper									
Paper used (tonnes)	2014	13,464	12,067	10,911	8,691	10,642	7,777	-60%	-42%

> We like how RBS clearly shows annual progress from the baseline to the target year.

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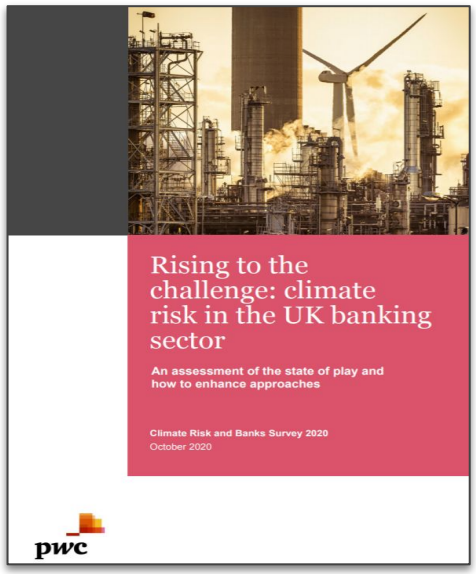
…and refer to our other relevant reporting and analysis, available online

Excellence in sustainability reporting 2020 - A review of leading UK companies

https://www.pwc.co.uk/services/sustainability-climate-change/insights/sustainability-reporting-tips.html



Rising to the challenge: climate risk in the UK banking sector

https://www.pwc.co.uk/financial-services/assets/pdf/rising-to-challenge-climate-risk-in-uk-banking-sector.pdf

TCFD 2020 Status Report and announcement

https://www.pwc.co.uk/financial-services/assets/pdf/tcfd-calls-for-further-progress-on-climate-related-reporting.pdf

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