AECOM Delivering a better world

An assessment of climate-related reporting by large UK private companies

Research conducted by:
AECOM

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Contents

Summary

The Task Force on Climate-related Financial Disclosures (TCFD) recommendations are designed to allow organisations to disclose consistent and decision-useful information on their exposure to transition and physical climate risks, and the strategy of organisations to mitigate these risks.

This report summarises the scope, approach, and outcomes of an assessment of climate-related reporting by large private UK registered companies. This research was conducted by AECOM on behalf of The Department for Business, Energy, and Industrial Strategy (BEIS) during February and March 2021. The assessment was conducted in two parts. In Part 1, the extent to which UK private companies make climate-related risk disclosures was assessed. Part 2 focused on exploring the opportunities and barriers to reporting.

Methodology

A desk-based review of corporate disclosures was undertaken with a selected sample of 150 large UK private companies using predefined assessment criteria. Structured interviews with 38 companies followed, to seek views and understand the activity across the TCFD recommendations, and companies' perceptions of the barriers, drivers, and benefits associated with disclosure.

Headline Findings

- Only 27% of companies were assessed as having a 'Reasonable' or 'Strong' alignment with the TCFD recommendations in their disclosures. In contrast, 56% of the companies had little or no disclosure on climate-related matters.
- 'TCFD' as a keyword search, was only found in the disclosures of 8 companies in the sample, of which 6 were at the parent level, indicating that disclosure explicitly linked to TCFD is uncommon amongst UK Limited companies (or parent companies reporting on their behalf).
- Larger companies (as defined by reported turnover) were disclosing more information that was aligned with TCFD recommendations than smaller companies.
- Where the disclosure was made at a parent level it was also better aligned to the TCFD recommendations than when the disclosure was made at UK Limited company or subsidiary levels.

- The TCFD recommendations for which the greatest level of alignment was identified were ‘Governance’, and ‘Metrics and Targets’.
- Four barriers to corporate climate reporting were frequently raised regardless of size, sector, or maturity of reporting: (i) lack of time and resources, (ii) cost associated with disclosure, (iii) data collection issues, and (iv) insufficient internal expertise or knowledge.
- Key benefits for making TCFD disclosures raised by interviewees included improved governance and integration of climate into strategy and decision making; reputation benefits; and helping raise climate change at senior leadership and/or Board level.

Figure 1: The extent to which disclosure by companies in the 150 company sample aligned with TCFD recommendations

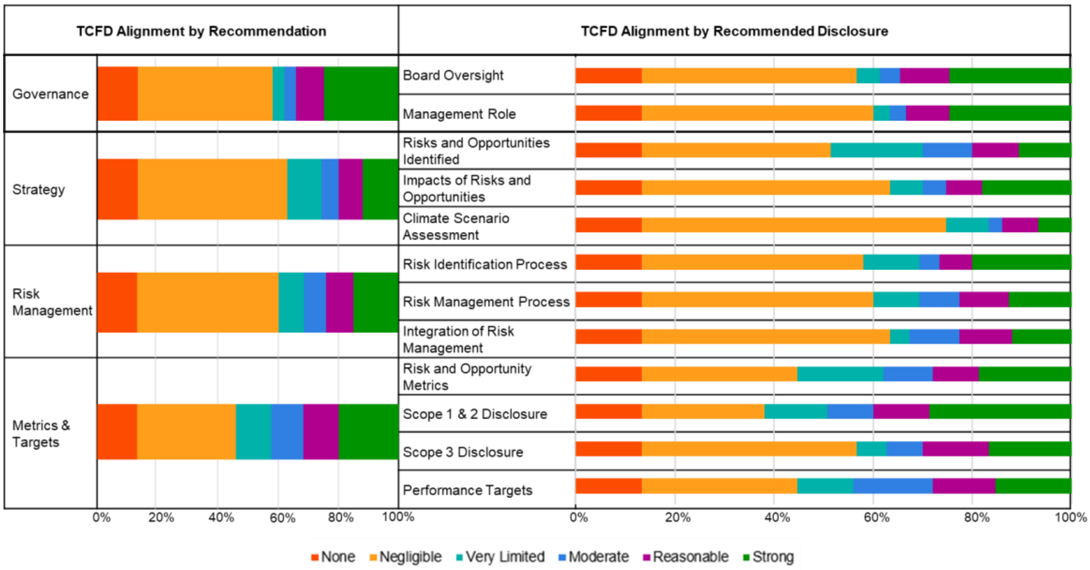
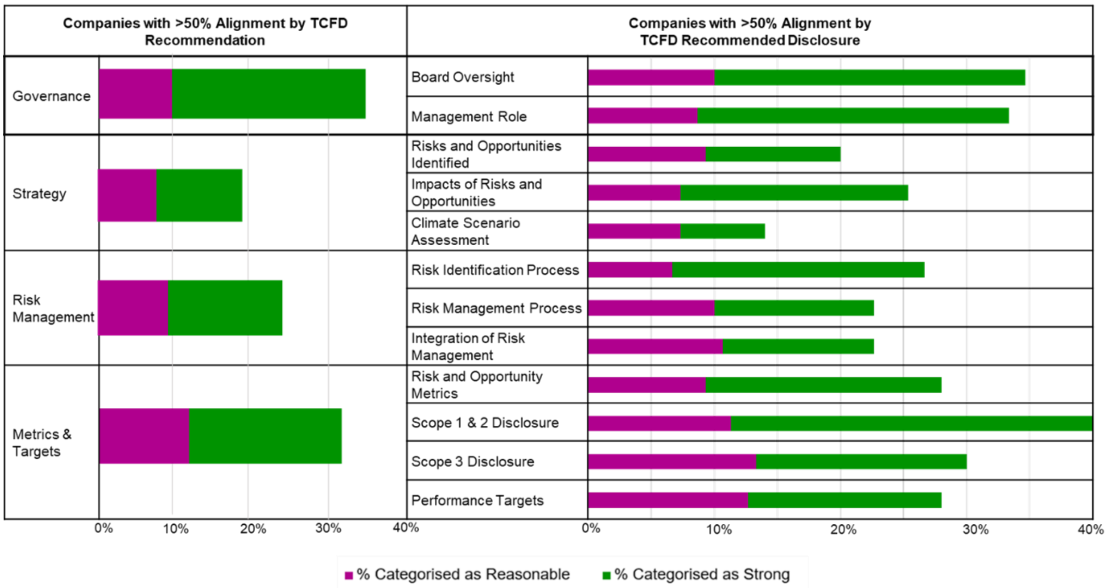


Figure 2: Chart indicating the extent to which companies demonstrated >50% alignment to TCFD recommendations



Key Outcomes from Part 1

The sample comprised 150 companies, categorised by sector and size. 19% of the companies were standalone businesses, 24% were holding companies, with the remaining 57% being part of larger businesses having a UK or overseas parent company. 89% of companies with a parent made disclosures at the parent level.

Of the companies researched, 27% were assessed as having a ‘Reasonable’ or ‘Strong’ alignment with the TCFD recommendations in their disclosures. 43% of companies had ‘Negligible’ disclosure on climate-related matters, while ‘Non-Reporters’ (13% of the sample) do not mention climate-related terminology in their publications. Those companies categorised as ‘Negligible’ included some recognition of climate-related risk and commitment to climate action but minimal additional information.

To be fully aligned with TCFD, climate-related information should be reported in mainstream annual financial filings. A large majority of companies in the sample, whether disclosing at parent or UK limited company level were not disclosing all climate information in these filings. The disclosed information also tended to be contained in several publications.

Size of companies was identified to be a factor in the quality of reporting. For example, 39% of companies sampled in the largest turnover category (>£1.25bn) had ‘Reasonable’ or ‘Strong’ alignment compared to only 18% with a turnover of £0.5 – 0.75bn. Where companies in the sample disclosed at parent level (49%) the disclosure was also more aligned to the TCFD recommendations than when the disclosure was made at UK Limited company or subsidiary levels. This may be explained by the larger size of parent organisations, and hence greater resource, but also, a reasonable proportion of the parent companies were publicly listed and are therefore more likely to have higher quality disclosures due to other existing mandatory reporting requirements.

Stronger disclosure was identified for the areas of ‘Governance’ and ‘Metrics and Targets’ than for ‘Strategy’ and ‘Risk Assessment’. Disclosure associated with Scope 1 & 2 emissions had the highest levels of alignment with the TCFD recommendations. Analysis showed that overall, 32% of the companies sampled recorded at least a ‘Reasonable’ level of reporting against the TCFD requirements related to ‘Metrics and Targets’. This could be attributed to companies being covered by the UK’s mandatory Streamlined Energy and Carbon Reporting regime, which requires reporting of Scope 1 & 2 emissions. The lowest level of alignment was associated with climate scenario assessment where only 14% of companies met at least 50% of the TCFD’s requirements in their disclosures.

Significant variation in the alignment of disclosures with the TCFD recommendations was identified when analysing by sector. However, caution is required when looking at sector specific analysis in this research due to the small number of companies in some of the sector samples.

Key outcomes from Part 2

For the second part of the research, qualitative interviews were conducted with 38 of the 150 companies reviewed in Part 1. The interviews captured a range of company sizes, a variety of levels of disclosure alignment and at least one company from each of the sectors researched in Part 1. These interviews were held with individuals in a range of roles including corporate reporting, sustainability, investor relations, communication, legal and governance.

In general, interviewees demonstrated a higher level of confidence when discussing the TCFD recommended disclosures that were assessed to be well aligned in the desk-based review. Similarly, interviewees appeared less familiar with those TCFD recommended disclosures that were found to be less well aligned in the desk-based review.

Participants stated that key benefits associated with climate disclosure were improved internal governance within the company; integration of climate into strategy and decision making; reputational benefits from disclosure; and helping to raise climate change at senior leadership and/or Board level. Good governance of climate-related issues was identified as critical in companies' decision making to enable corporate change. Encouragingly, a gradual increase, in senior level and Board buy-in on climate related issues was reported by the interviewees which was linked to wider engagement on climate change and which had become particularly prominent over the last year.

In general, interviewees identified that understanding and integrating climate risk into their business strategy was key in developing effective internal processes to identify, manage and monitor climate risk and opportunities. Once these processes were in place, the practice of disclosure became less burdensome. Four barriers were raised by interviewees regardless of size and maturity of reporting: (i) lack of time and resources, (ii) cost of disclosures (iii) issues around data collection and (iv) insufficient internal expertise or knowledge.

Most companies with disclosures that were well aligned to the TCFD recommendations had assessed both physical and transitional risks as well as opportunities. Whilst the assessment of physical risks was identified to be easier to undertake than for transition risks (for example, due to alignment with existing site-level risk assessments), transition risks were reported as more often being integrated into strategy and business plans than physical risks. This was attributed to transition risks being more closely related to traditional business planning and strategic decisions on product development, R&D, and customer demand. Integration of transition risks into business strategy was particularly prevalent in those sectors that may be directly affected by the transition to a low carbon economy.

Experiences and practices around risk management appear varied. Some interviewees reported that it has been straight-forward to integrate climate risk into existing risk management processes. Others indicated that climate risk is still managed separately to business risk.

In relation to ‘Metrics and Targets’, Scope 3 reporting was raised to be of particular concern specifically due to issues with the availability of data and boundaries for reporting. Alignment of targets to the Science Based Targets Initiative[1] appear to be an increasingly common approach for companies to taken when setting targets. Concern around translating climate matters into financial disclosures was highlighted as an issue, which was specifically linked to a perceived difference in companies’ ability to accurately quantify climate-related disclosures in financial terms, compared to traditional financial disclosures. The uncertainty relating to the impacts of climate change heightened these concerns.

Finally, companies with disclosures well aligned to the TCFD recommendations raised concerns about the complexity of reporting, variation in requirements, and challenge associated with reporting across different geographies and jurisdictions, as well as the plethora of different guidelines and standards that originate from the different reporting systems, such as CDP[2], SASB[3] and GRI[4].

Recommendations

Several areas for follow up research have been identified. Some are associated with specific limitations identified during this study and are recommended to enable more nuanced analysis or increase confidence in certain trends identified. Others are linked to specific barriers or concerns and are recommended as areas that would support greater quality in climate related disclosure.

[1] Science Based Targets. [viewed 27 April 2021]. Available from: https://sciencebasedtargets.org/
[2] CDP. [viewed 27 April 2021]. Available from: https://www.cdp.net/en
[3] Sustainability Accounting Standards Board. [viewed 27 April 2021]. Available from: https://www.sasb.org/
[4] Global Reporting Initiative. [viewed 27 April 2021]. Available from: https://www.globalreporting.org/

Introduction & Background

The Task Force on Climate-Related Financial Disclosures (TCFD) recommendations[5] are designed to solicit consistent and decision-useful information on corporate exposure to transition and physical climate risks, and the strategies of organisations to mitigate these risks and capitalise on opportunities.

This report presents the research outcomes of an assessment of climate-related reporting by large private UK companies conducted by AECOM Limited (AECOM) on behalf of BEIS.

The UK Government's 2019 Green Finance Strategy[6] includes an expectation that all listed companies and large asset owners will disclose in line with TCFD by 2022. In November 2020, the UK joint TCFD Taskforce, comprising government departments and regulators, published an Interim Report and Roadmap[7] outlining how TCFD disclosures will be required across large sections of the UK economy by 2025. This roadmap included plans to mandate TCFD aligned reporting for large UK registered companies, including those that are not listed ('private companies'). A Government consultation document has since been published to seek views on the scope, mechanism, obligations, timing, and guidance around these disclosure requirements. Of note is the proposal to require disclosures from private companies with more than 500 employees and a turnover of more than £500m[8].

Recognising that private companies generally have a lower reporting burden than listed companies, BEIS commissioned this project to better understand the quantity and quality of climate-related risk reporting currently provided by large, private UK companies. This research, undertaken during February and March 2021, was intended to generate data to inform policy-making and the development of disclosure requirements for private companies. It was also intended to better understand potential barriers and enablers for disclosing climate-risk in accordance with the TCFD recommendations across major sectors of the UK economy.

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[5] TCFD Recommendations. [viewed 27 April 2021]. Available from: https://www.tcfdhub.org/recommendations/

[6] Department for Business, Energy & Industrial Strategy, 2019. Green Finance Strategy. [viewed 27 April 2021]. Available from: https://www.gov.uk/government/publications/green-finance-strategy

[7] HM Treasury, 2019. Interim Report of the UK's Joint Government-Regulator TCFD Taskforce. [viewed 27 April 2021]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933782/FINAL_TCFD_REPORT.pdf

[8] Department for Business, Energy & Industrial Strategy, 2021. Mandatory climate-related financial disclosures by publicly quoted companies, large private companies, and LLPs. [viewed 27 April 2021]. Available from: https://www.gov.uk/government/consultations/mandatory-climate-related-financial-disclosures-by-publicly-quoted-companies-large-private-companies-and-llps

The project sought to assess the reporting of a heterogeneous sample of companies, with companies of different sizes, broadly representative of UK registered private companies in the proposed scope of TCFD reporting requirements.

Furthermore, given the importance of private companies in the UK economy, this work is relevant to the UK Government's Ten Point Plan for a Green Industrial Revolution, the COP26 Private Finance Agenda, and UK government's efforts to transition the economy to Net Zero carbon emissions by 2050. It will also help policymakers to understand the resilience of the economy to climate risk.

Scope & Approach

The project comprised two parts; firstly, an initial desk-based review of the corporate disclosures made by a selected sample of 150 large UK private companies. This was followed by interviews with a sub-set of 38 companies selected from the original sample to seek views and gain an understanding of the activity across the TCFD recommendations, and companies' perceptions of the barriers, drivers and benefits associated with disclosure.

Part 1: Desk-based Screening

In Part 1, the extent to which sampled UK private companies provide climate-related risk disclosures aligned with the TFCD recommendations was assessed through critically reviewing and assessing the quantity and quality of the most recent public disclosures of a selected sample of 150 companies against the 11 TCFD recommended disclosures.

Part 1 Objectives: using a sample of UK-registered private companies with more than 500 employees and more than £500m turnover:

To establish: what proportion of large UK private firms provide quality climate-related risk disclosures, as defined by the TCFD framework?

To establish: how does the above climate-related risk reporting change, depending on companies' characteristics? For example, by sector and firm size?

This was achieved through the following methodology.

Part 1: Establishing the Stratified Sample

BEIS provided a list of 708 relevant companies from the FAME database[9]. This list included all UK active registered private limited companies that have more than 500 employees and a turnover greater than £500m, subject to the exclusions below.

The research was focused on 1) private companies, and 2) the company within a group that was the highest UK-registered company within the corporate structure. Due to BEIS policy proposals that companies that are required to make TCFD disclosures would report at the group level – and the proposal that public interest entities including listed companies would be subject to a lower threshold of only having 500 employees[10] – companies were excluded from the sample if they had:

1. a parent company that was listed, UK-registered and with more than 500 employees, or
2. a parent company that was private, UK-registered, and with more than 500 employees and more than £500m turnover.

AECOM used the company registration number provided by BEIS to categorise the companies according to their Standard Industry Classification (SIC) Section (referred to as 'Sector'), as listed in **Table 1**[11].

The 708 companies in the long list supplied by BEIS were categorised according to SIC sector and turnover[12] (**Table 2**). The relative numbers of companies in each category were used to determine the number, sector and turnover of companies required for a smaller sample of 150 large UK private companies representative of the 'long list'. The 150 companies were selected randomly to provide the stratified sample of companies for review in Part 1. To avoid duplication of sampling within the screening process, where two companies were identified as having the same parent company, one of them was replaced with another randomly selected company within the same sector and turnover category.

[9] The FAME (Financial Analysis Made Easy) database contains information on public and private companies across UK and Ireland.
[10] BEIS Consultation on requiring mandatory climate-related financial disclosures by publicly quoted companies, large private companies and Limited Liability Partnerships (LLPs).
[11] Where <10 companies existed in a SIC section, they were re-categorised to "Other Activities". This encompassed companies with the following SIC sections : Agriculture, Forestry and Fishing; Water Supply, Sewerage, Waste Management Remediation Activities; Accommodation and Food Service Activities; Real Estate Activities; Human Health and Social Work Activities; Public Administration and Defence Compulsory Social Security; Arts, Entertainment and Recreation; and' Other Service Activities'.
[12] *Note that the turnover categories were aligned to the best split in values for the dataset rather than any standard industry definitions to allow for the most appropriate sampling.

Table 1: List of SIC Section categories

SIC Section Code	SIC Section Name
B	MINING AND QUARRYING
C	MANUFACTURING
D	ELECTRICITY, GAS, STEAM AND AIR CONDITIONING
F	CONSTRUCTION
G	WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES
H	TRANSPORTATION AND STORAGE
J	INFORMATION AND COMMUNICATION
K	FINANCIAL AND INSURANCE ACTIVITIES
M	PROFESSIONAL, SCIENTIFIC, AND TECHNICAL ACTIVITIES
N	ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES
	OTHER ACTIVITIES*

Table 2: Turnover categories used to define the representative sample of companies

Turnover categories	
A	£0.5bn to 0.75bn
B	£0.75bn to £1.25bn
C	> £1.25bn

Part 1: Screening of corporate climate risk related disclosures

Published company information for the selected 150 companies was screened via a two-stage process:

- Screening stage 1: a rapid 'direct search' of company websites using Google; and for reports and published information using defined search terms, and the search and find functions (where available) to identify if there was relevant material to review, and;
- Screening stage 2: a qualitative review of the available disclosure against the TCFD recommendations.

For the rapid screening (Screening stage 1), eight key terms were searched for: 'TCFD'[13], 'climate', 'carbon', 'GHG', 'greenhouse gas', 'global warming', 'weather' and 'COP'. For each company, the terms were searched for in the following six types of corporate publication, in the following order, where available:

- Annual Reports and Accounts.
- Sustainability reports.
- Corporate website pages.
- Sustainability website pages.
- Bond Prospectus.
- Climate Disclosure Project (CDP) reports[14].

During this stage, only the publications of the large UK private companies were searched, unless there was no publication at all available, in which case a search of the parent company or subsidiary publication was undertaken, as relevant. Publications were systematically searched; firstly, searching all publications for 'TCFD', then all publications for 'climate' if 'TCFD' was not found, and then all publications for 'carbon' if 'climate' was not found. If none of these three search terms were found in the above publications, the search was repeated using the following terms: 'GHG', 'greenhouse gas', 'global warming', 'weather' and 'COP'. If none of these words were found, then the company was assigned to the 'Non-Reporter' category. Although categorised as 'Non-Reporters', these companies are included in the remainder of the study to evaluate and determine the reasons why they are not disclosing in line with TCFD, and to provide a representative picture across the sample of 150 companies.

[13] Note that 'TCFD' was only searched as an acronym and was not expanded to 'Task Force on Climate-related Financial Disclosures', therefore companies that did not use the acronym will not have been captured.
[14] The CDP report was only searched if the company specifically referenced it in the Annual Report, Sustainability report, or website, or if the CDP response was publicly available (i.e., could be obtained without having to log in to CDP).

Following the rapid screening, each company's corporate structure (

Table 3) was reviewed to establish the relevant reporting entity, including whether the disclosure was found at the parent, limited or subsidiary level (**Table 4**). If no or very limited disclosure was found at the limited company level and there was a parent company providing more information, outcomes were recorded for the parent company. In these instances, the parent company was only searched if it held more than a 50% ownership of the subsidiary company in the stratified sample. Furthermore, in the case of holding companies, if a company in the stratified sample reported no or limited information, and the reader was directed to a subsidiary for climate related information, this direct subsidiary was searched[15] and if that provided more information, the outcomes were recorded for the subsidiary instead. The level at which the company was searched was recorded to allow analysis of instances where:

- Large UK-registered private companies provided TCFD related disclosures themselves, or one of their subsidiaries did; and,
- Companies where their parent company provided TCFD related disclosure (i.e. where the capability to make a TCFD disclosure exists within the corporate group, but disclosures are not currently being made by the UK-registered large private companies or their subsidiaries)

Table 3: Business structure categories used to determine the relevant reporting entity of companies within the research sample

Business Structure Categories	
1 & 2	UK limited company without parent company
3	Holding company
4	UK limited company but sits under a UK Parent Company
5	UK limited company but sits under a non-UK Parent Company

[15] The subsidiary of a holding company was only checked where they have provided a direct reference within the sources reviewed during 'rapid screening'.

Table 4: Corporate classification of screening levels

Screening levels	
P	Disclosure found at parent company level (above the limited company in the structure)
L	Disclosure found at limited company level
S	Disclosure found at subsidiary company level (below the limited company in the structure)

Where a positive outcome was identified through rapid screening, the company was taken to a second, more detailed qualitative review. Furthermore, where a company that had no returns during the rapid screening but was found to report at parent or subsidiary level following the rapid screening, that parent or subsidiary was also taken to the more detailed qualitative review stage.

For this review, a standard list of questions was developed and applied covering the 11 supporting TCFD recommended disclosures to enable a systematic review of disclosure. In addition, preliminary questions were developed for 3 of the 4 pillars of the TCFD recommendations. These preliminary questions were developed to enable qualitative assessment of companies that had some climate disclosure, but not relating to specific requirements as defined in the TCFD recommended disclosures.

The preliminary questions and those covering the 11 TCFD recommended disclosures (found in **Appendix A: Research Questions for Part 1**) were informed and developed using information derived from the following sources:

- Task Force on Climate-Related Financial Disclosures (TCFD) (2017) Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures;[16]
- Climate Disclosure Standards Board (CDSB) (2019) TCFD Implementation Guide;[17] and

[16] TCFD, 2017. Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures. [viewed 27 April 2021] Available from: https://assets.bbhub.io/company/sites/60/2020/10/FINAL-TCFD-Annex-Amended-121517.pdf

[17] Climate Disclosure Standards Board, 2019. TCFD Implementation Guide. [viewed 27 April 2021]. Available from: https://www.cdsb.net/sites/default/files/sasb_cdsb-tcfd-implementation-guide-a4-size-cdsb.pdf

- Financial Conduct Authority (2020) Climate Financial Risk Forum Guide 2020.[18]

The method applied for Part 1 screening of corporate climate risk related disclosures is outlined in **Figure 3**.

A scoring system (**Appendix B: Scoring Criteria for Part 1** Research) was developed to enable categorisation of the assessed disclosure, focusing on the quality of the disclosure and alignment with TCFD recommendations. Categories run from ‘0’ (Non-Reporter) for companies with no mention of climate related terminology in the initial rapid screening, ‘1’ (Negligible) for companies with some mention of climate in their disclosure but no evidence of disclosure related to the TCFD recommendations through to ‘5’ (Strong) for those most aligned and demonstrating best practice. The outcomes of this screening are presented in **Outcomes from Part 1: Screening**.

Figure 3: The approach taken to screen and score the quantity and quality of the 150 company sample for climate related disclosures held within their publicly available reports and on their websites

Step 1: Rapid screening was undertaken to identify key climate related words within the company’s publications, to gauge whether there was any acknowledgement of climate within their reports, and where this information was disclosed.

Step 2: Starting with the document which returned the result from the rapid screening, the screening level was recorded to detail whether the documentation searched was at the company, parent, or subsidiary level.

Step 3: Questions were worked through and scored against the criteria. The document hierarchy was followed during the searches unless the company had already been categorised as ‘Strong’ for all categories before the search is complete; once categorised as ‘Strong’, no further searches were undertaken on that theme.

Step 4: The documentation in which disclosure was located was recorded, as well as the proportion of information that was found within the annual report. The reason behind this is that the TCFD recommendations state that climate-related financial disclosures **should be** made in **the annual reports** (for reasons including that the target audience for TCFD is investors, and that it makes the disclosures more significant for companies as annual reports are signed by Corporate Directors and audited).

[18] Financial Conduct Authority, 2021. Climate Financial Risk Forum. [viewed 27 April 2021]. Available from: https://www.fca.org.uk/transparency/climate-financial-risk-forum

The 7 TCFD principles that were considered during the assessment to assess the quality of the climate-risk related information disclosed:

- Disclosures should present relevant information
- Disclosures should be specific and complete
- Disclosures should be clear, balanced, and understandable
- Disclosures should be consistent over time
- Disclosures should be comparable among organizations within a sector, industry, or portfolio
- Disclosures should be reliable, verifiable, and objective
- Disclosures should be provided on a timely basis

Taken from: TCFD, Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, June 2017 (https://www.fsb-tcfd.org/publications/).

Part 2: Interviews

Following on from Part 1, Part 2 consisted of interviews with 38 companies sampled within Part 1 to identify the drivers for disclosure, the barriers to reporting (for example, having adequate resources and skills, or concerns about first mover disadvantages in making disclosures ahead of their competitors), actions that could be taken to mitigate barriers, and opportunities arising from conducting climate-related risk assessment and reporting. The interviews also sought to explore aspects of disclosure for each of the four TCFD pillars, as well as a picture of the company's understanding of forthcoming climate-related risk reporting requirements and the types of resources and or support they thought would be useful to improve disclosures in the future.

Part 2 Objectives: using a sample of 38 UK-registered private companies with more than £500m turnover and more than 500 employees:

To establish: what are the barriers, costs and opportunities for UK private business providing climate-related risk disclosures?

To establish: how does this change dependant on companies' characteristics? For example, sector and firm size?

Interview questions were drafted in collaboration with BEIS. Two standard question sets were developed (see **Appendix C: Interview Questions for Part 2**), one for companies with disclosures that were well aligned to TCFD recommendations, categorised as 'Moderate', 'Reasonable' and 'Strong' during the screening, and another set for companies that were less well aligned, categorised as 'Non-Reporter', 'Negligible' and 'Very Limited'. The key question topics for each question set are shown in **Table 5**.

Table 5: Interview question topics covered during the 38 interviews carried out during Part 2 of the project.

Question topics for well aligned companies	Question topics for less well aligned companies
Understanding the drivers behind climate risk disclosure	Understanding the ESG reporting process
Understanding perceived benefits of reporting	Identifying whether climate change has been identified as a business risk
Understanding how climate-related reporting is undertaken and the costs involved in preparing the disclosure	Identifying awareness of TCFD and reporting requirements
Governance: Identifying if there is a disconnect between what is/is not reported, and what happens in practice and identifying challenges in mainstreaming climate-related issues into senior management business decision-making.	Governance: Identifying disconnects between what is reported and practice and identifying challenges in mainstreaming climate-related issues into senior management business decision-making
Strategy: Identifying any disconnect between what is reported and happens in practice and identifying challenges in mainstreaming climate-related issues into business strategy.	Strategy: Identifying disconnects between what is reported, and practice and identifying challenges in mainstreaming climate-related issues into business strategy
Risk Management: Identifying if there is a disconnect between what is/is not reported, and what happens in practice.	Risk Management: Identifying disconnects between what is reported and practice

Metrics and Targets: Identifying if there is a disconnect between what is/is not reported, and what happens in practice.	Metrics and Targets: Identifying challenges in mainstreaming climate-related risk metrics into financial metrics
Understanding the barriers to reporting, whether any disadvantages have been identified and how barriers to reporting have been overcome	Understanding the barriers to climate risk assessment, management, and reporting
To identify if there is an understanding of forthcoming reporting requirements and determine what guidance or resources might be required	To determine what guidance or resources might be required

The purpose of the two question sets was to allow questions to be more targeted to each company's disclosure status. In addition, prompts were included within the questions to allow the interviewer to fully explore the aspects most relevant to each company's disclosure.

To book interviews, all companies within the sample were contacted via email, phone, website messages or LinkedIn. The interview process captured companies for all sectors and turnover categories contained within the original sample of 150 companies used in the Part 1 research.

Interviews were booked in 45-minute time slots and undertaken by one member of the AECOM team. Before the interview, the interviewer familiarised themselves with the company's research findings and categorisation from Part 1 and used this to prioritise the questions to be explored in more detail. Whilst responses were not recorded as verbatim transcripts, detailed notes were taken and recorded in a pre-formatted template during the interview. Company details were removed to retain anonymity. In addition, to enable more thematic analysis across all 38 interviews, an anonymised summary of the conversation was transposed into the project Repository under a series of predetermined headings, corresponding to each question posed to allow for better collation and analysis.

Methodological Limitations

The following limitations should be noted when reviewing the outputs of the research:

- The sample of 150 companies, taken from the 708 large UK limited companies listed in the FAME database, was stratified to account for company size and sector and to be broadly representative of the original list. It was not designed to be exactly representative of all large UK-registered private companies. Due to the variation of numbers of companies within the stratified groups –with some sector groupings having fewer companies than others – care must be taken when interpreting results according to sector as some may be too small to show statistically significant outcomes.
- The research and interviews were undertaken during February and March 2021. Due to the nature of sustainability reporting, further disclosures and developments within companies may now have occurred for some companies reviewed. This research should be taken as a snapshot in time.
- The desk-based research focusses on information that companies are willing to publicly disclose. Insight from the qualitative interviews shows that companies may be doing more internally in terms of climate-related actions, which they are not sharing publicly. Therefore, it is important to note that the desk-based research does not capture what is going on behind the scenes in a company.
- Given the variety of different professions and levels of seniority of the interviewees, participants may have been biased towards particular topic areas. There may therefore be some gaps between activities that companies are undertaking, those discussed at interview, and those reported in their disclosures. Efforts were taken during the interviews to cover overall disclosure, rather than just the interviewee's role in the disclosure.
- As the qualitative interview list was relatively small (38 out of the 150 company sample), there is a strong possibility that the findings from the interviews are not representative of industry as a whole. Conclusions could be explored further if the list of interviewees was expanded in future follow up research.

Outcomes from Part 1: Screening

Sample Composition

The sample reviewed comprised 150 companies selected in accordance with the presented method. The number of companies falling into each sector and turnover category is shown in **Table 6**.

Table 6: Number of companies screened during Part 1 within each turnover category, per sector

SIC Section	£0.5 - 0.75bn	£0.75 - 1.25bn	>£1.25bn	Total
Wholesale and retail trade; Repair of motor vehicles and motorcycles	11	9	9	**29**
Financial and insurance activities	12	5	6	**23**
Professional, scientific, and technical activities	7	4	10	**21**
Manufacturing	6	7	7	**20**
Administrative and support service activities	3	8	3	**14**
Mining and quarrying	2	1	2	**5**
Information and communication	3	2	4	**9**
Transportation and storage	5	1	3	**9**
Construction	2	4	1	**7**
Other activities	3	5	2	**10**
Electricity, gas, steam, and air conditioning supply	1	0	2	**3**
Total	**55**	**46**	**49**	**150**

Figure 4 shows that different sectors had varying numbers of companies within each turnover category. Some sectors (such as 'Information and Communication') had a roughly even split of companies in each turnover category, but for other sectors there

were some turnover categories containing a higher number of companies than others.

For the large private companies within the 150 company sample, whilst 27 (18%) were standalone businesses, the remainder were part of larger groups. Eighty (60% of the sample) had a UK or overseas parent company, with the majority of these being overseas parent companies. The remaining 33 (22%) were holding companies (**Figure 5**). Sectors containing companies with the largest proportion of overseas parents in the sample were Manufacturing (90% of the 20 companies) and Information and Communication (78% of the 9 companies). Sectors with the smallest proportion of overseas parent were Transport and Storage (33% of the 9 companies) and Construction (14% of the 7 companies).

Figure 4: Number of companies reviewed in Part 1 screening, per sector and turnover category

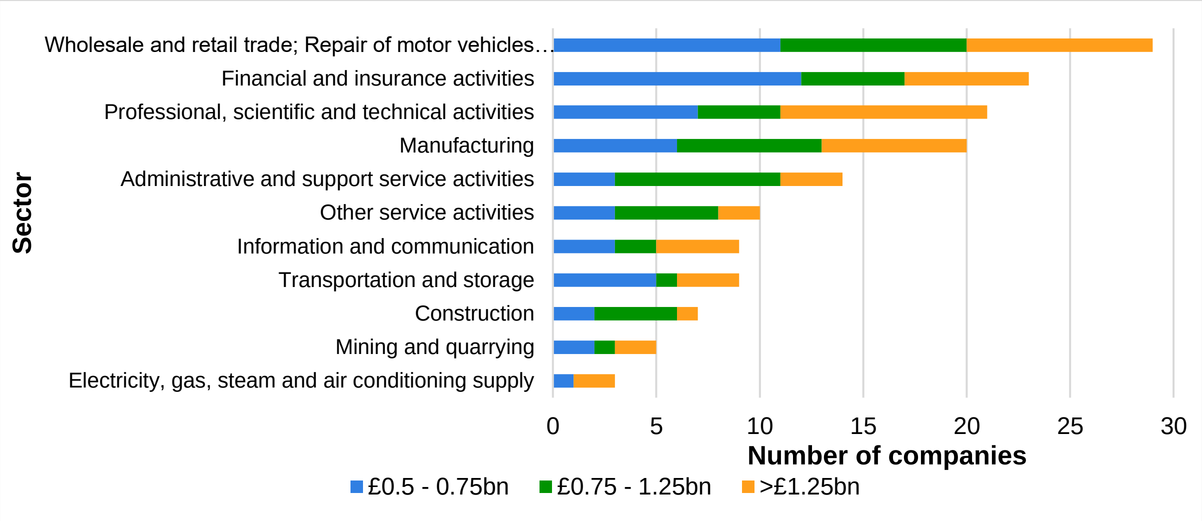
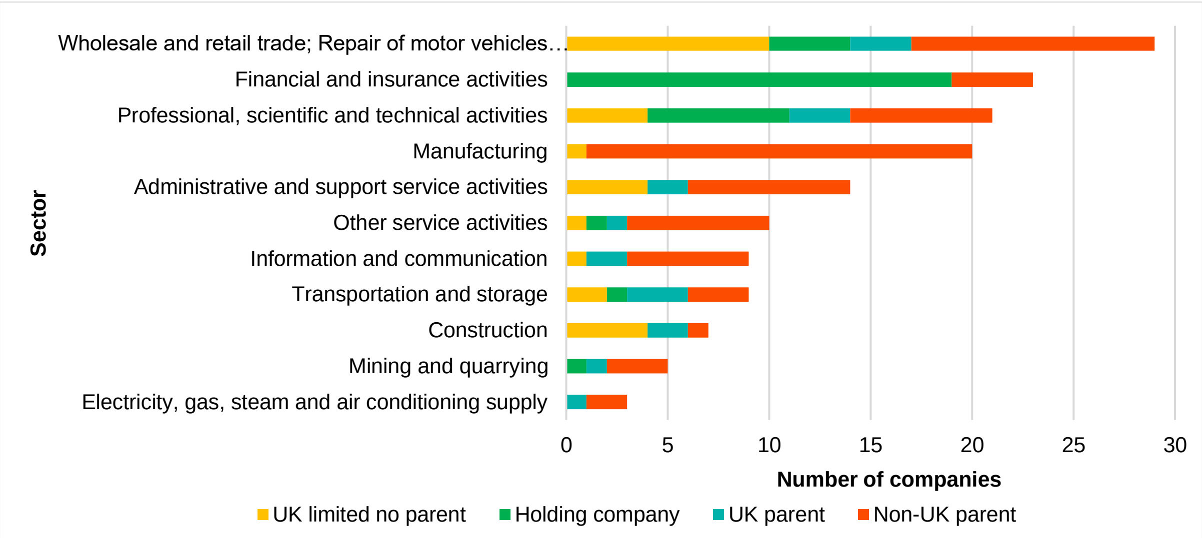


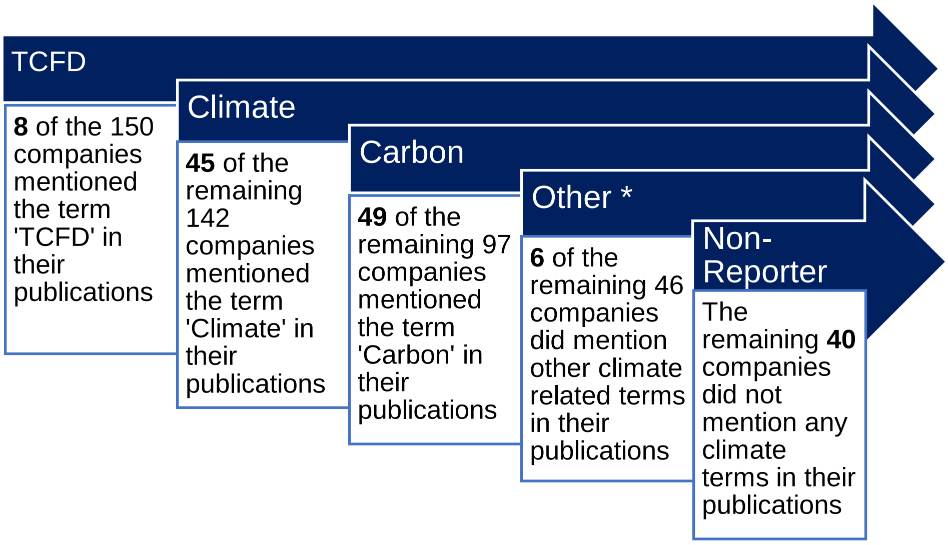
Figure 5: The Part 1 sample of 150 companies, broken down by sector and corporate structure (i.e. holding company, UK limited company without a parent, or a company with either a UK or overseas parent)



Overall Sample Outcomes

Based on the initial rapid (word search) screening, 'TCFD', the first term in the search term hierarchy, was found only 8 times, demonstrating that disclosure explicitly linked to TCFD is uncommon amongst UK Limited companies. The extent of word search successes through the hierarchy is shown in **Figure 6**.

Figure 6: Rapid screening outcomes from the 150 company sample: a breakdown of single word search terms found according to the search hierarchy.



* Other refers to 'GHG', 'greenhouse gas', 'global warming', (extreme) 'weather' or 'COP'

The initial rapid screening provided an immediate insight into the limited mentions of 'TCFD' in UK Limited Company reports (and by parent companies when there were no publications available from the companies themselves). During this initial screening, 42 companies (28% of the 150 company sample) made no mention of any of the climate related terms. For these 42 companies, the disclosures of their parent company were also searched at the beginning of the detailed qualitative review. This showed that a further 20 companies disclosed at parent level, and 13% of the 150 company sample made no disclosures at either company or parent company level. These companies were categorised as 'Non-Reporters'.

Table 7 shows the overall disclosure categorisations for the research sample. Most companies were categorised as 'Negligible' (43%), meaning that they used some climate-related terms but not in a manner that is aligned with the TCFD recommendations and therefore may not be of use for decision makers. When the 'Non-Reporters' are added to this, 56% of the sample had little or no disclosure on climate related matters. Only 27% of the sample were identified as having a 'Reasonable' or 'Strong' alignment with the TCFD recommendations in their disclosures.

Table 7: Summary of the research sample's disclosure level, ranked from Non-Reporter, through to Strong reporter.

	Non-Reporter	Negligible	Very Limited	Moderate	Reasonable	Strong
Overall Category	13%	43%	10%	7%	10%	17%

For those companies categorised as 'Negligible', the preliminary questions (as explained in **Part 1: Screening of corporate climate risk related disclosures**) were used to gain insight into information that was being reported (i.e. the reasons why these companies were using climate related terminology determined by the rapid screening, but showing no alignment to TCFD recommendations). The outcomes are displayed in **Table 8**. The preliminary questions covered the 'Governance', 'Strategy' and 'Risk Management' TCFD recommendations as these aspects require a large step change between no reporting and TCFD alignment.

In total, of the 66 companies categorised as 'Negligible', 24 companies did not disclose any of the information in the preliminary questions posed, demonstrating that these companies provided only very generic statements on climate related topics in their publications. The preliminary question with the most responses was the question on whether the company discloses a policy or commitment to action on climate change; 33 of the companies had such a policy or commitment. No companies categorised as 'Negligible' mentioned alignment with TCFD disclosures, while only 3 companies categorised as 'Negligible' disclosed information on the topics of board oversight of climate-related risks and financial loss relating to climate change.

The outcomes in **Table 8** show that there is some recognition of climate-related risk amongst the companies categorised as 'Negligible', particularly when it comes to companies committing to climate action, however there is still very limited disclosure on aspects within each TCFD pillar, particularly on board oversight (Governance) and financial impacts of climate change (Risk Management), demonstrating that improvement will be required across the board for this group of companies to meet TCFD reporting requirements.

Table 8: The outcomes of the preliminary research questions on Governance, Strategy and Risk Management for companies categorised as 'Negligible' TCFD alignment, expressed as a percentage of the total number of companies categorised as 'Negligible'

TCFD Recommendation Pillar	Preliminary Research Question Posed	Number of Companies disclosing
Governance	Is there mention of a corporate responsibility/ sustainability board? A special employee group within the company?	12
	Is there any information about the board's oversight of climate-related risks and opportunities?	3
Strategy	Does the company explain how climate-related issues are integrated into their business objectives and strategy?	14
	Is there a mention /statement of alignment with climate related disclosures produced by TCFD?	0
	Does the company have a policy (or equivalent) commitment to action on climate change?	33
Risk Management	Is climate change described as a potential risk to, or significant issue for the company?	9
	Does the company mention any potential or actual financial loss related to climate change?	3

Total companies: 66

Location of Disclosures

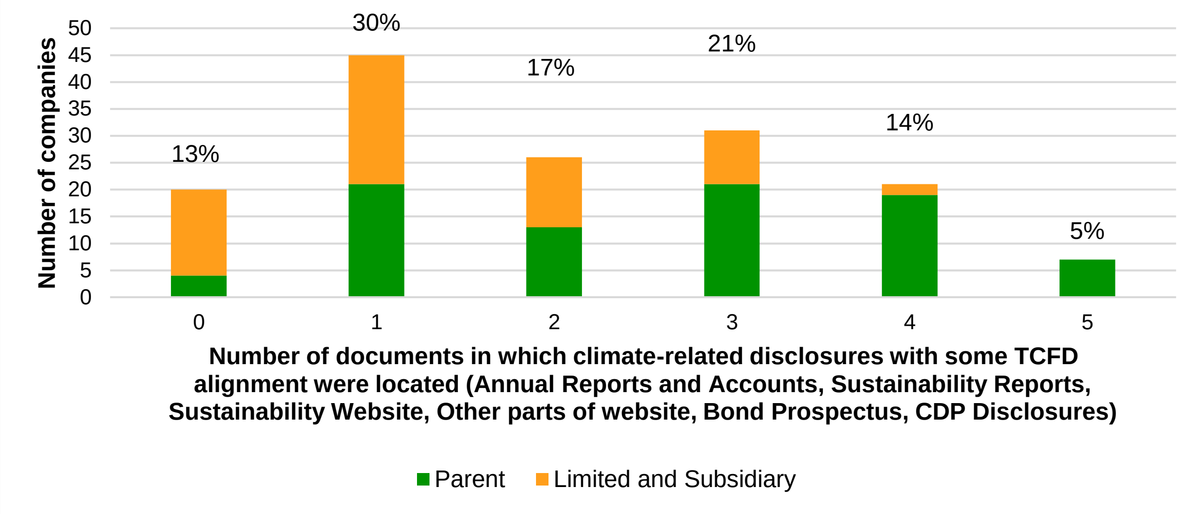
To be fully aligned with the TCFD recommendations, climate-related information should be reported in mainstream annual financial filings, i.e. Annual Report and Accounts. Information disclosed by companies in our sample shows that at present, the majority of companies are not disclosing all climate information in these filings - whether they are disclosing at parent or UK limited company level.

Climate-related disclosure with some alignment to the TCFD recommendations tended to be found across multiple reports rather than in a single location. Whilst the detailed location and nature of the disclosure varies across the sample, information related to either the ‘Governance’ or ‘Strategy’ TCFD recommendations was more likely to be found in Annual Report and Accounts, whereas disclosures relating to either ‘Risk Management’ or ‘Metrics and Targets’ recommendations was typically found within Sustainability Reports. In a number of cases there was duplication across the different publications, which was particularly the case for the ‘Metrics and Targets’ where information was often included in both Annual Report and Accounts and corporate or sustainability webpages. Additionally, some companies were found to have standalone TCFD or Climate-related Disclosure reports. As it is not a specific requirement of TCFD to have a stand-alone TCFD report, the exact number of companies disclosing in this way was not captured as part of this research.

Looking at the extent of disclosure by publication type, only 9 companies (6% of sample) were found to locate more than 75% of their TCFD-aligned information in Annual Reports (as suggested in the TCFD recommendations). By contrast, nearly a quarter of the total 150 company sample (21%) included less than 25% of the TCFD information that is disclosed in the Annual Report and Accounts, opting to disclose via Sustainability Reports and websites instead.

As shown in **Figure 7,** companies reporting at parent level more commonly disclosed climate-related information across a larger number of publications than companies reporting at limited level or below e.g. 19 parent companies were found to report climate-related information across 4 different company publications, while this extent of reporting was only the case for 2 companies reporting at limited level or below. As different stakeholders tend to look at different types of company disclosure, having information in different sources can cater to different audiences. However, it can also be more difficult for stakeholders to get a clear understanding of overall climate-related financial risks and opportunities, and the company’s strategy to manage these factors.

Figure 7: Number of publications where TCFD-aligned disclosure was found for each company in the 150 company sample during the Part 1 screening process, and indicating whether information was found at parent company level or below in the corporate structure.



Disclosures According to TCFD Recommendations

Companies were assessed as having a spread of alignment with the TCFD recommendations; with at least 12% of companies categorised as 'Strong' in all four of the TCFD pillars. However, the most common categorisation was 'Negligible', with the exception of Scope 1 & 2 emissions.

Top three disclosures (those with the highest proportion of companies in the 150 sample categorised as 'Strong'):

Scope 1 & 2 emissions

Board oversight

Senior management's role

Bottom four disclosures (those with the lowest proportion of companies in the 150 sample categorised as 'Strong'):

Climate scenario assessment

Risks and opportunities identified

Risk management process

Integration of risk management

Scope 1 & 2 emissions was the only recommended disclosure where two fifths of companies were categorised as being well aligned, with 60 of the 150 companies (40%) being assessed as having greater than 50% alignment with the TCFD recommended disclosures. For large UK-registered private companies this could be attributed to these companies likely being in scope of the UK's mandatory Streamlined Energy and Carbon Reporting regime, which has made reporting of Scope 1 & 2 emissions mandatory.

The greatest level of alignment was found for the TCFD pillars of 'Governance' and 'Metrics and Targets'. **Figure 8** displays the overall alignment to TCFD across the 150 company sample, while **Figure 9** shows the extent of companies within the 150 company sample with greater than 50% alignment to TCFD recommendations.

Figure 8: The extent to which disclosure by companies in the 150 company sample aligned with TCFD recommendations

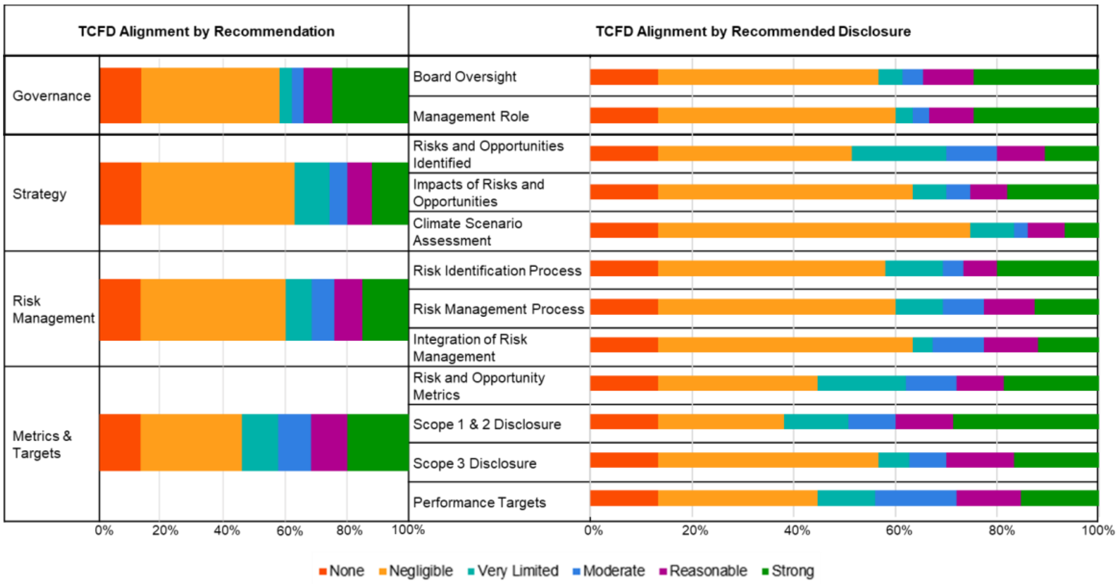
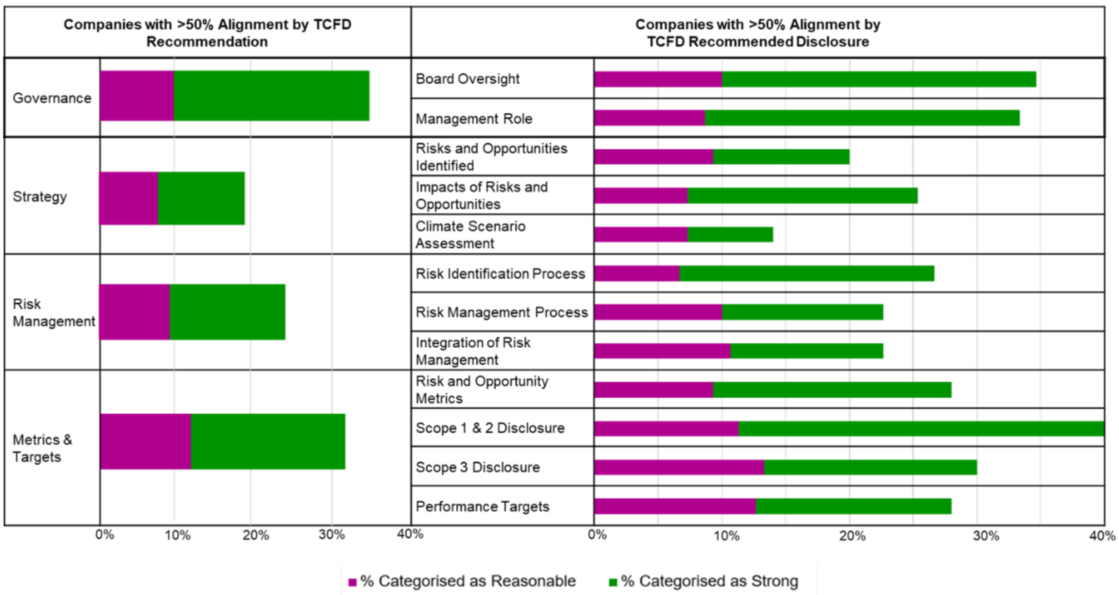


Figure 9: The extent of companies within the sample of 150 companies showing Reasonable and Strong alignment (>50%) to TCFD recommendations and recommended disclosures



Governance

Within ‘Governance’, there are two recommended disclosures:

1. describe the board’s oversight of climate related risks and opportunities; and
2. describe management’s role in assessing and managing climate related risks and opportunities.

The level of disclosure found within the 150 company sample was broadly the same across both recommendations, with 36 companies (25% of the sample) assessed as having strong disclosure (>75% alignment).

Strategy

TCFD recommendations have three recommended disclosures in relation to Strategy:

1. describe the climate related risks and opportunities the organisation has identified over the short, medium, and long term;
2. describe the impact of climate-related risks and opportunities on the organisation’s businesses, strategy, and financial planning; and
3. describe the resilience of the organisation’s strategy, taking into consideration different climate related scenarios, including a 2°C or lower scenario.

The lowest level of alignment with the TCFD recommendations was found for the ‘Strategy’ pillar where only 30 companies (20% of the sample) disclosed information assessed as being greater than 50% aligned with the TCFD’s recommended disclosures, and 102 companies (68% of the sample) were found to have very limited alignment, negligible alignment or no climate disclosure at all.

Risk Management

For ‘Risk Management’, the TCFD recommendations present three recommended disclosures:

1. describe the organisation’s processes for identifying and assessing climate related risks;
2. describe the organisation’s processes for managing climate related risks; and
3. describe how processes for identifying, assessing, and managing climate related risks are integrated into the organisation’s overall risk management.

In total, 36 companies (24% of the sample) were assessed as having greater than 50% alignment to the recommended disclosures across 'Risk Management'. Within this, greater alignment was typically found in terms of a company's ability to describe the process of identifying climate risk (with 27% of the 150 company sample showing >50% alignment). The process for managing or integrating climate-related risk as part of an organisation's overall risk management was assessed to have slightly lower levels of alignment (23% of the 150 company sample showing >50% alignment). Disclosures on scenario analysis were less common, with only 20% of companies assessed as having >50% alignment to TCFD's recommended disclosure for climate scenario assessment. This recommended disclosure was assessed as having the lowest level of alignment across the sample.

Metrics and Targets

The TCFD recommendations have three recommended disclosures in relation to 'Metrics and Targets':

1. disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management;
2. disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks; and,
3. describe the targets used by the organisation to manage climate related risks and opportunities and performance against targets.

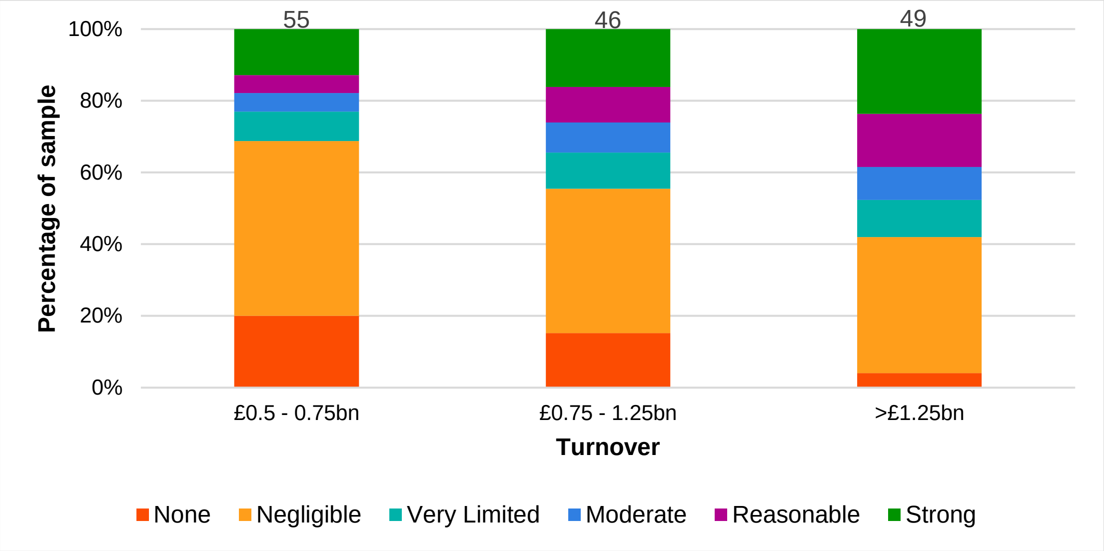
For the purposes of this assessment, the Scope 1 & 2 and 3 recommended disclosure was split to consider Scope 1 & 2 separately to Scope 3.

The quality of reporting for Scope 1 & 2 disclosure was the highest in this pillar (with 29% of companies categorised as having 'Strong' alignment, compared to an average across all recommended disclosures of 20%). Companies categorised as 'Strong' for Scope 3 disclosure made up 17% of the sample, while for performance targets it was 15%. This strong alignment for Scope 1 & 2 compared to the other recommended disclosures within 'Metrics and Targets' is possibly driven at least in part by Streamlined Energy and Carbon Reporting (SECR) and other GHG reporting requirements.

Disclosures According to Size

Analysis shows that company size (assessed by reported turnover) affects the quality of disclosure. On average larger companies disclosed information that was better aligned with TCFD recommendations than companies in smaller turnover categories (**Figure 10**).

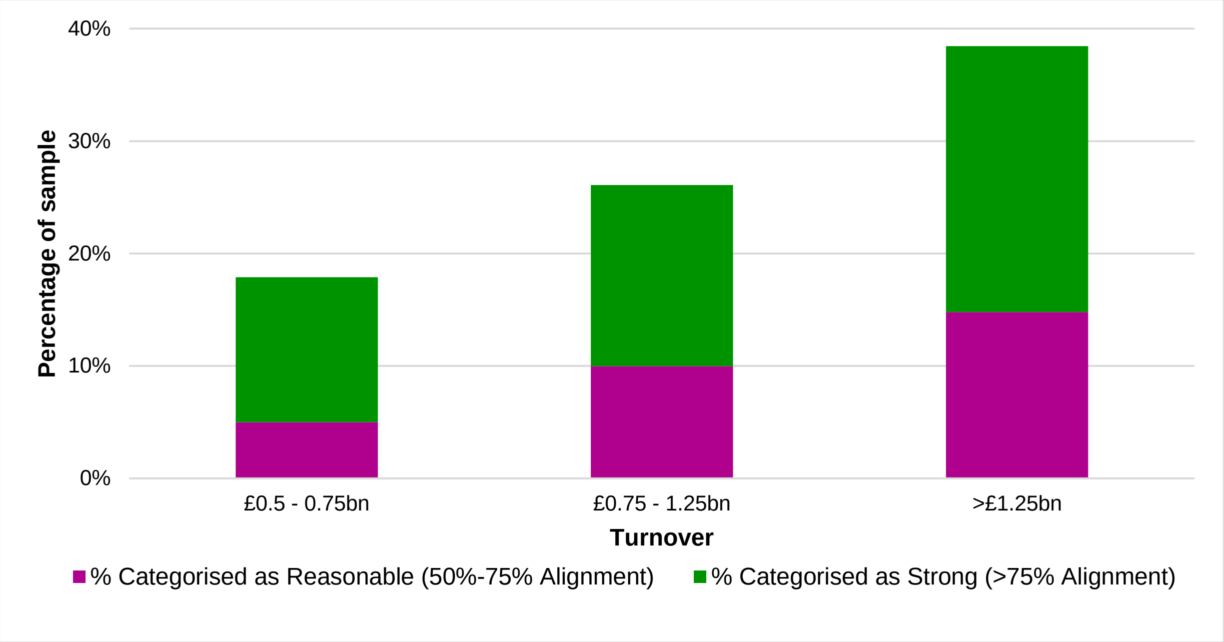
Figure 10: Proportion of companies within the 150 company sample by turnover category. Labels above the bars denote the number of companies in each turnover category.



This finding applies when considering all companies in the sample (**Figure 11**) and also when only looking at those who disclose at or below Limited company level in the corporate structure. This can be seen more clearly by just comparing those companies with a 'Reasonable' or 'Strong' alignment with TCFD recommendations in **Figure 11**. When considering the 150 company sample:

- 39% of companies with the largest turnover (>£1.25bn) were categorised as having 'Reasonable' or 'Strong' overall alignment with TCFD recommendations.
- Only 18% of companies in the £0.5 – 0.75bn turnover range were categorised as having 'Reasonable' or 'Strong' overall alignment with TCFD recommendations.
- 69% of companies with a turnover of £0.5 – 0.75bn were categorised as 'None' or 'Negligible', indicating reporting little or no information on climate related matters.
- 42% of companies with a turnover of >£1.25bn were categorised as 'None' or 'Negligible'.

Figure 11: Proportion of companies within the 150 company sample with Reasonable or Strong TCFD alignment (>50%) by turnover category



Overall, companies with a turnover of >£1.25bn were assessed as having a greater level of alignment to TCFD (>50% alignment) across all recommended disclosures compared to other turnover categories. This trend remains if those companies where reporting is happening at the parent level (84 companies) are removed from the analysis**,** suggesting that size of business is a significant factor in extent of alignment with TCFD disclosure.

Disclosures According to Sector

Due to the sample size used in this research only sectors with greater than 20 companies in the sample have been analysed in more detail. Reference is made to sectors with a smaller sample size for comparative purposes only (**Figure 12**). Caution is therefore required when looking at any sector specific information, particularly those with very small numbers of companies in the sector samples. Further research on a larger sample would be required for more analysis in the other sectors to be meaningful.

Figure 12: Overall TCFD disclosure alignment categorisation by sector (highlighted bold bars represent sectors with a sample size of 20 or over, and the overall status of the 150 company sample)

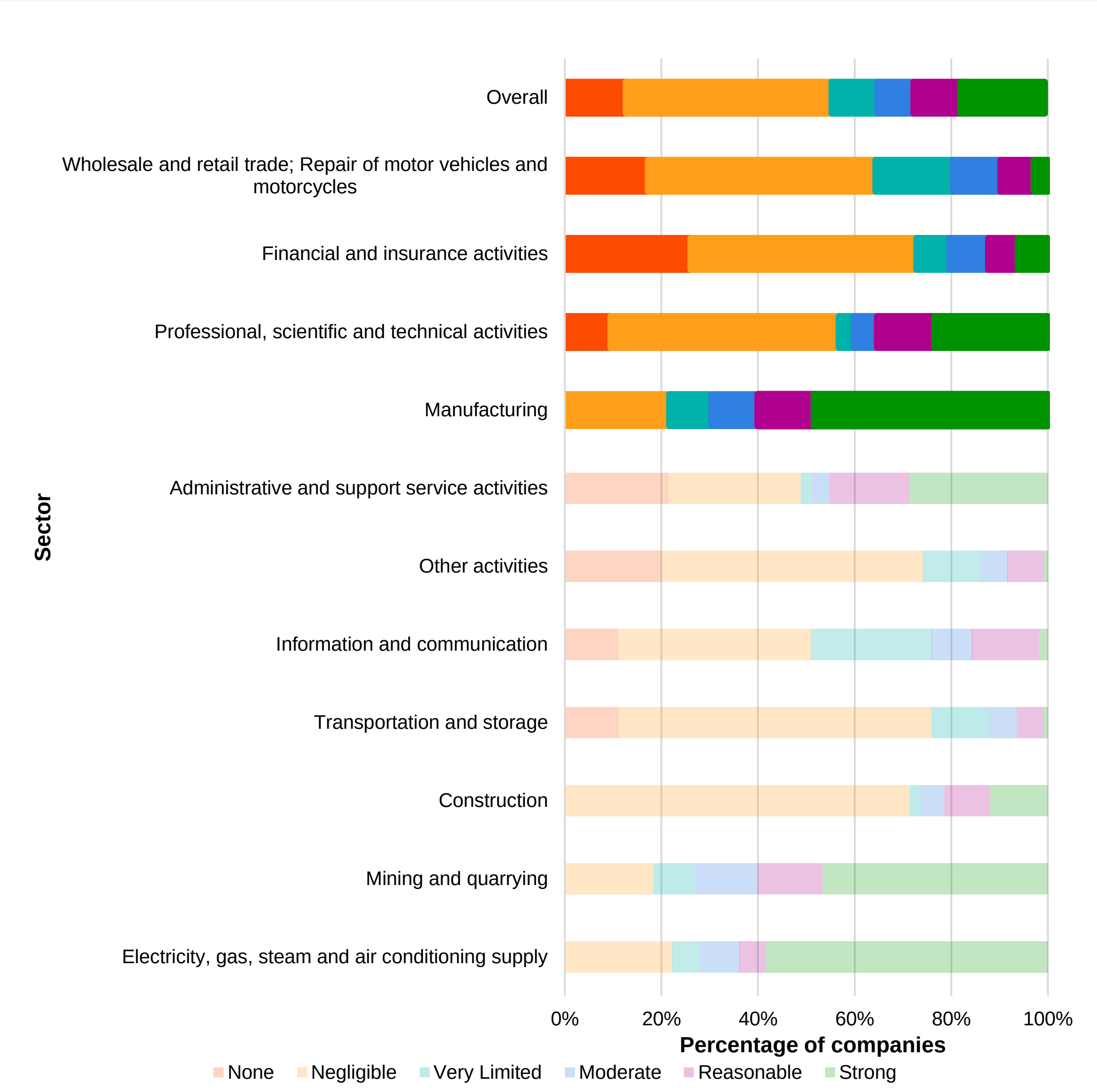
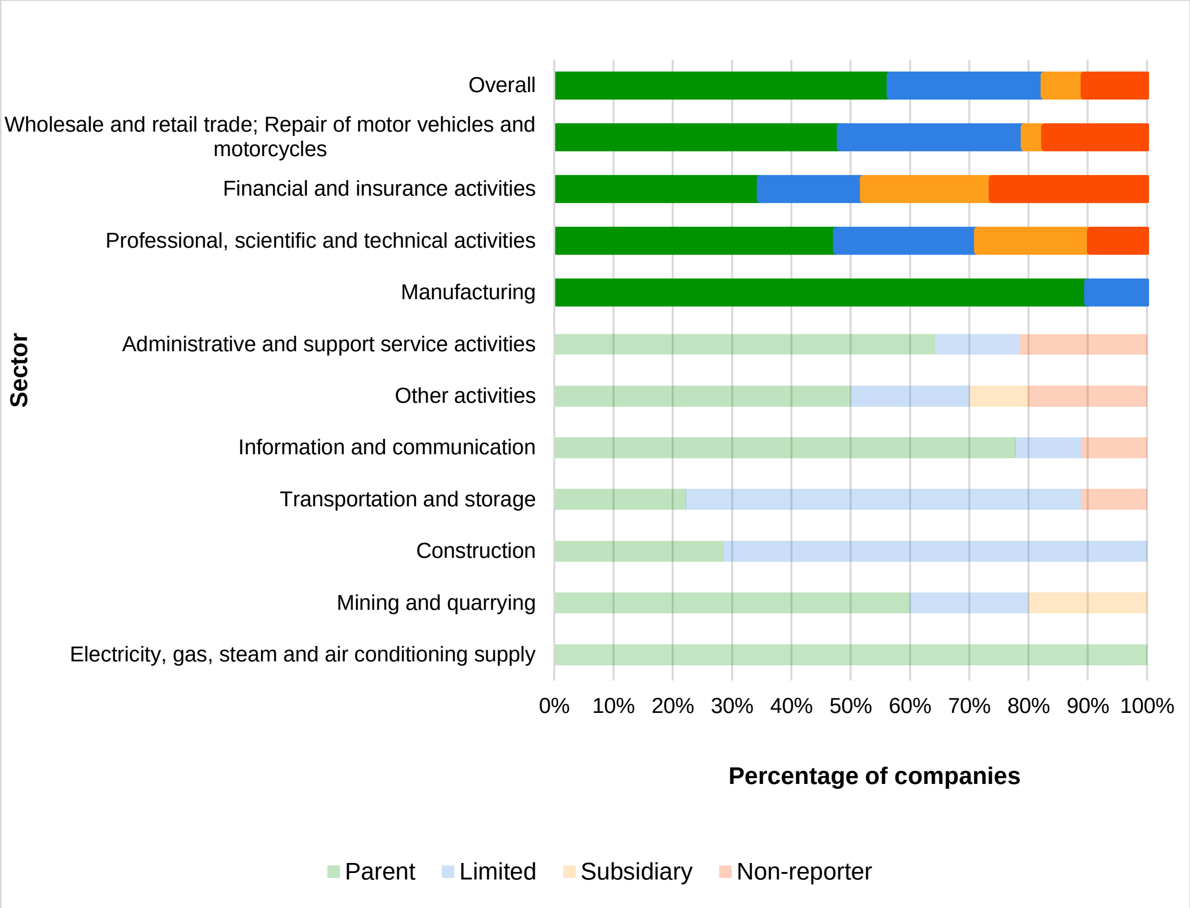


Figure 13 shows the corporate level at which climate disclosure has been identified. Generally, the proportions of information found at parent level versus limited company level or below for specific sectors is consistent with the overall picture, with between 30 – 50% disclosing their climate related information via parent company reports and websites. The exception was the Manufacturing sector, which was identified as having a higher proportion of disclosure occurring at a parent level than the other sectors. Further trends and analysis behind the different outcomes from the Manufacturing sector is discussed below.

Figure 13: Level at which companies are reporting climate related information aligned to TCFD by sector (highlighted bold bars represent sectors with a sample size of 20 or over, and the overall status of the 150 company sample)

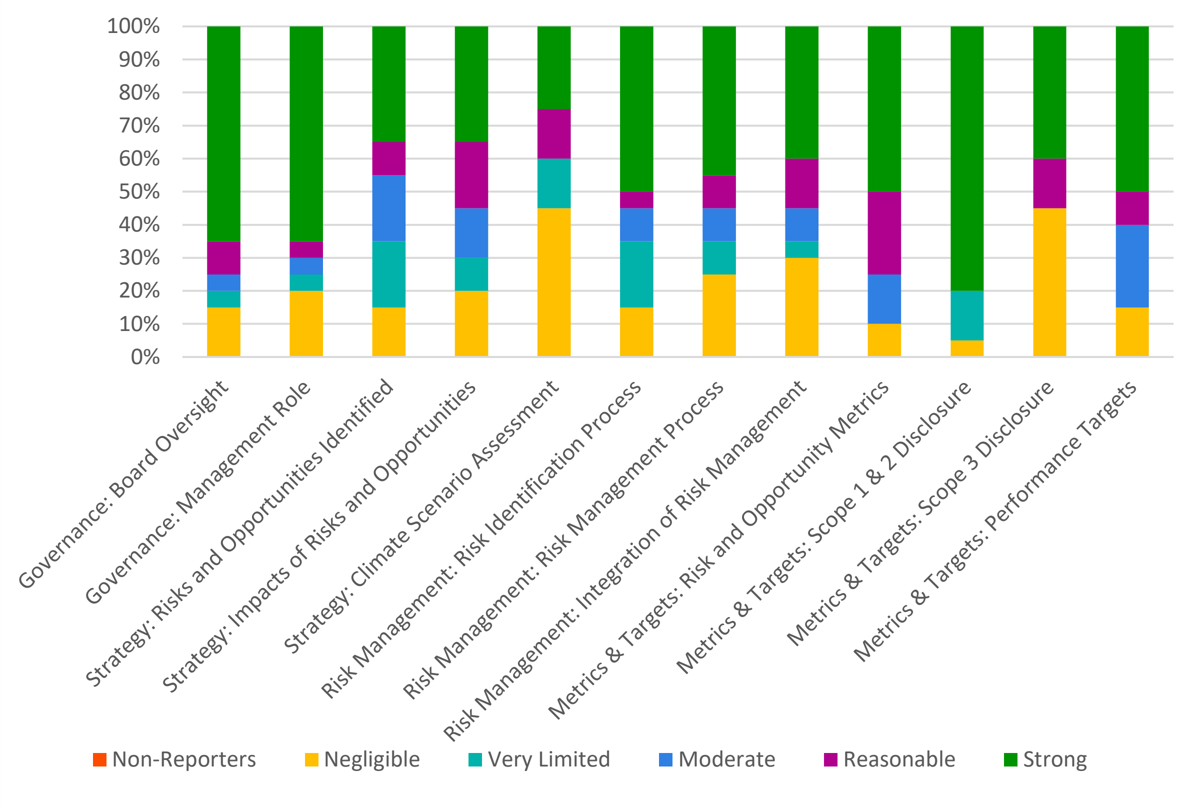


When company disclosure was reviewed against the TCFD recommended disclosures (**Figure 13**), the Electricity, Gas, Steam and Air Conditioning Supply, Mining and Quarrying and Manufacturing sectors demonstrated a stronger disclosure compared to the overall sample and the other sectors analysed here.

For the Manufacturing sector (**Figure 14**), 60% of companies were assessed to have 'Reasonable' or 'Strong' alignment across the 11 recommended disclosures compared to 31% in the whole sample. There were no 'Non-Reporters' in this sector. The Manufacturing sector also aligned particularly well to the Scope 1 & 2 recommended disclosure, with 80% of companies categorised as 'Reasonable' or 'Strong'. It also aligned consistently well with the 'Governance' pillar, with over 70% of companies categorised as 'Strong' for both recommended disclosures.

Of note for the Electricity, Gas, Steam and Air Conditioning Supply sector (comprising just 3 companies within the 150 sample) was that all companies were assessed as 'Strong' for 'Metrics and Targets'. Similarly, for the Mining and Quarrying sector (5 companies within the sample), all companies were assessed as 'Strong' for board oversight (under 'Governance').

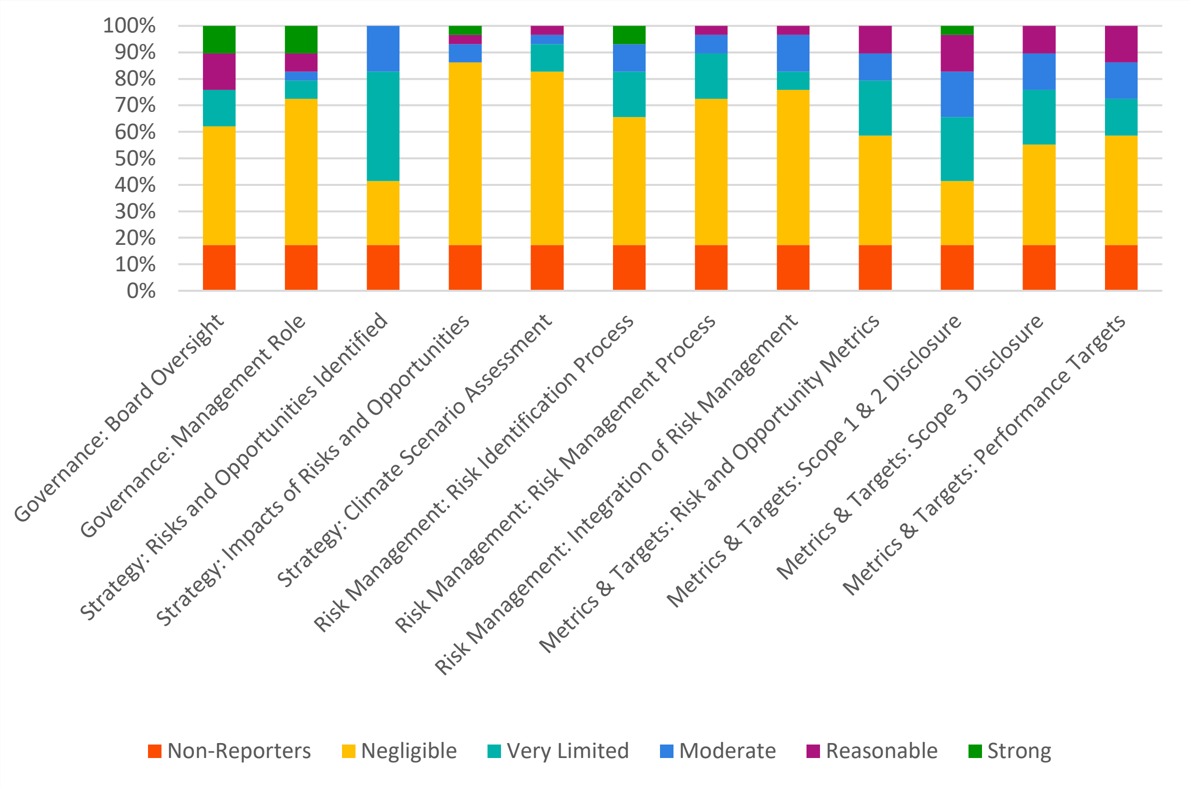
Figure 14: Alignment to each TCFD recommended disclosure for the Manufacturing sector (20 companies)



Compared to the 150 company sample average of 55%, these three sectors had higher proportions of disclosures coming from the parent company (**Figure 13**) perhaps explaining their good performance. 90% of Manufacturing companies did not disclose at the limited company level, with their parent companies disclosing on behalf of their wider group. This was also the case for 100% of Electricity, Gas, Steam and Air Conditioning supply companies and 60% of Mining and Quarrying companies, where parent companies disclosed on behalf of the wider group.

Sectors demonstrating the least alignment to TCFD recommended disclosures included the Transportation and Storage and Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles. For the Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles sector **(Figure 15)**, 65% of the 29 companies were assessed to be 'Non-Reporters' or show 'Negligible' alignment, while only 3% were categorised as 'Strong' overall. Companies in this sector were least well aligned to the 'Strategy' recommendation. As in the overall sample, Scope 1 & 2 was the recommended disclosure with the highest level of alignment, however only 3% of companies in this sector were categorised as 'Strong'. 10% of companies in this sector were categorised as 'Strong' for the 'Governance' recommendations, however these recommendations also saw a relatively high number of companies categorised as 'Non-Reporter' or 'Negligible'. The quality of disclosure being made at the parent level for the Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles sector was similar to the sample average. This suggests that this sector could have other barriers to reporting that cannot be as easily overcome by having a large parent, therefore further research is recommended to establish the reasons for the limited alignment within the sector.

Figure 15: TCFD alignment to each recommended disclosure for the Wholesale and retail trade, repair of motor vehicles and motorcycles sector (29 companies)



In the Transportation and Storage Sector (comprising 9 companies within the 150 sample), 88% of companies were assessed to be ‘Non-Reporters’, ‘Negligible’ or ‘Very Limited’ disclosers. Disclosure against the ‘Risk Management’ recommendation was noted as having a very low level of alignment; in addition, only one company was categorised as higher than ‘Negligible’ for the ‘Governance’ recommendation. A potential reason for Transportation and Storage being less aligned could be that only 22% of disclosures occurred at parent company level, which is less than the sample average. Importantly, as this sector only had 9 companies in this sample these trends must be taken with caution.

Looking at the remaining sectors containing more than 20 companies in the sample, disclosure by the Finance and insurance activities **(Figure 16)** sector has less alignment to TCFD then the sample average, with 12% of the sample being categorised has having ‘Reasonable’ or ‘Strong’ alignment, while disclosure by Professional, scientific and technical services **(Figure 17)** sector was more aligned than the average, with 35% ‘Reasonable’ or ‘Strong’. This signals a high level of variation in disclosure between sectors, however further research is required to confirm these trends and to explore the underlying reasons.

Figure 16: TCFD alignment to each recommended disclosure for the Finance and insurance activities sector (23 companies)

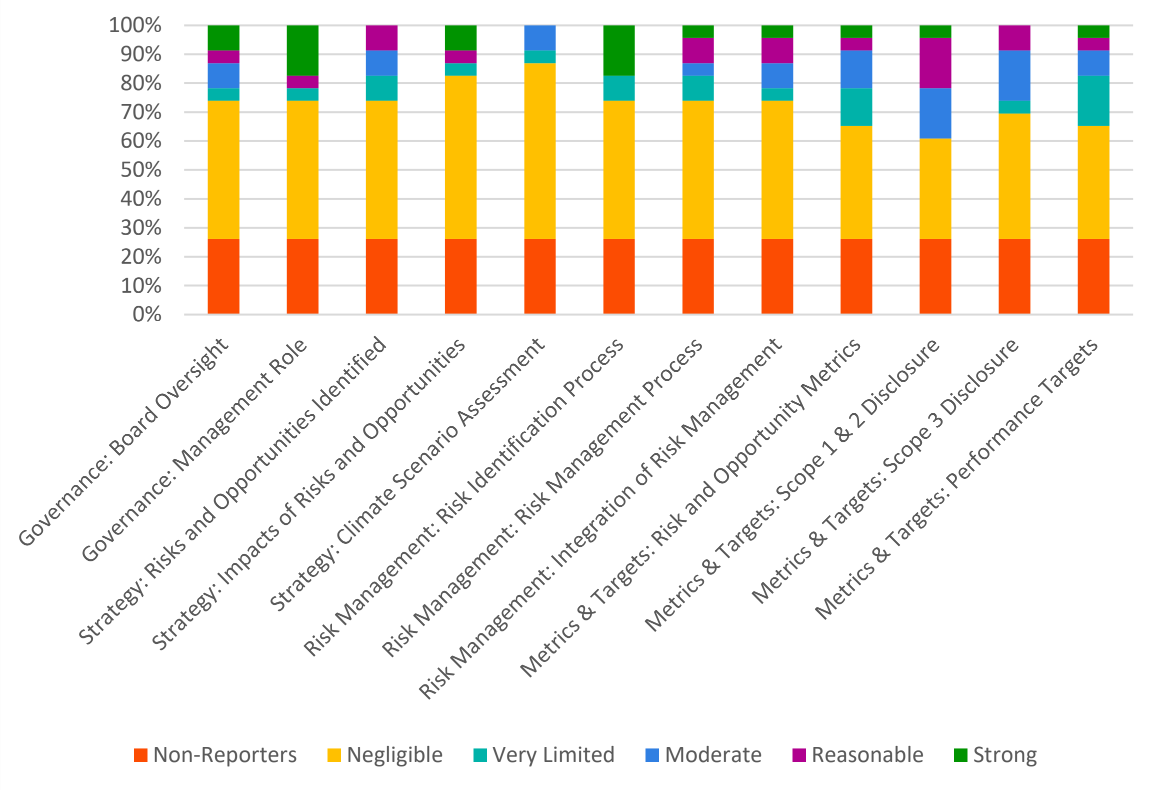
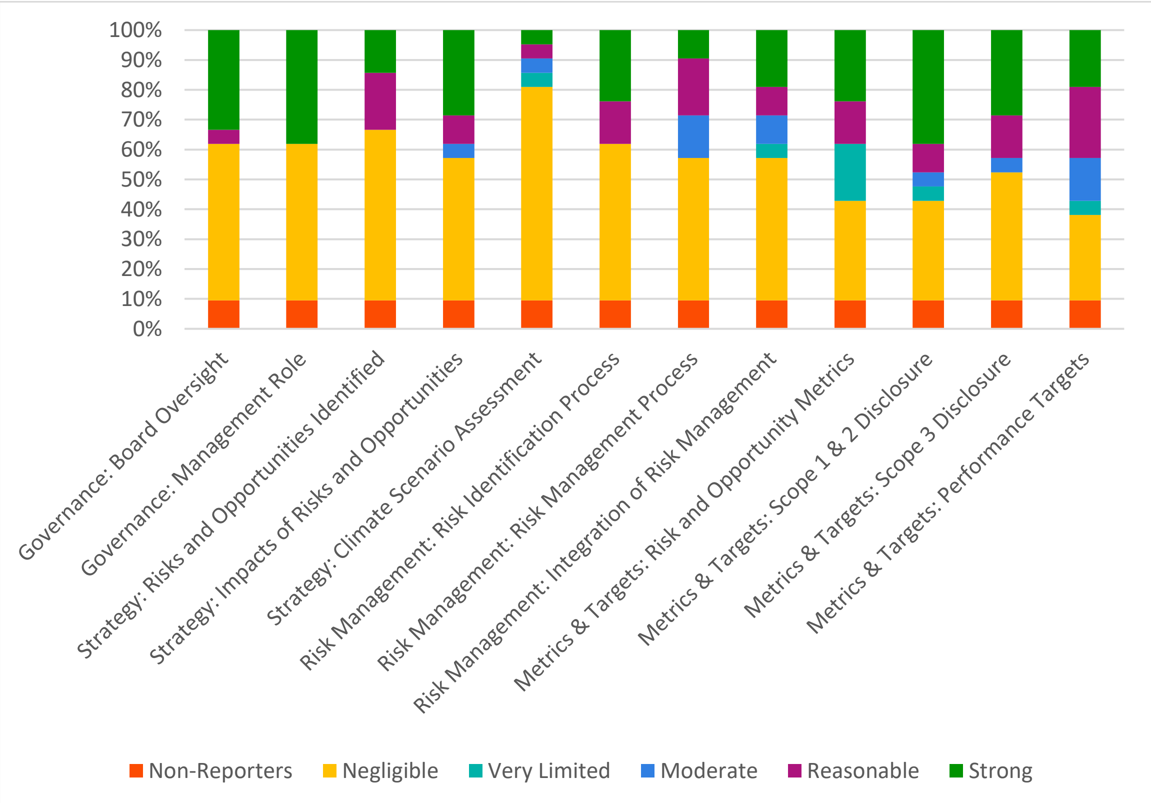


Figure 17: TCFD alignment to each recommended disclosure for the Professional, scientific, and technical services (21 companies)



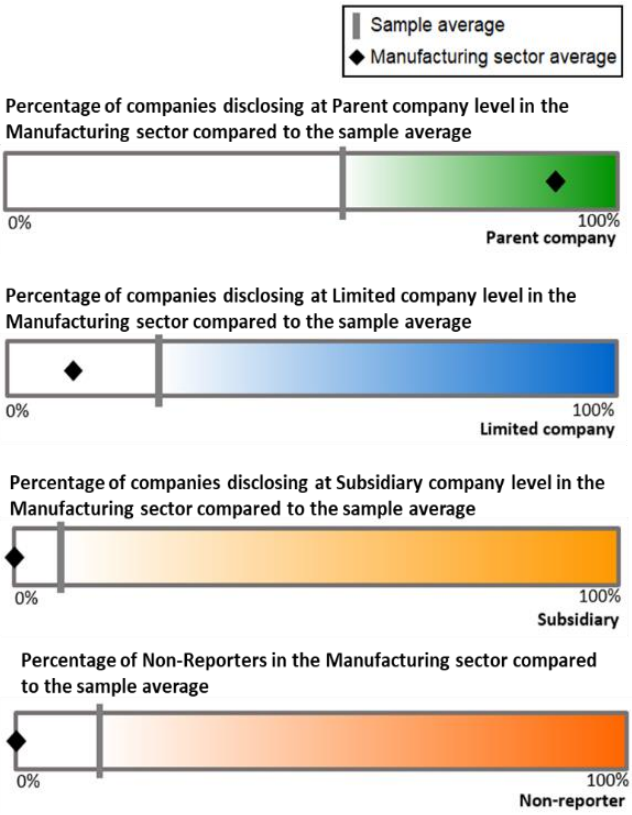
As the Manufacturing sector stood out as being particularly well aligned, it has been explored further in a case study below.

Manufacturing sector

The activities of the 20 companies in the Manufacturing Sector consist of manufacturing motor vehicles, electrical equipment, paper products, food products, and metals services according to their SIC major industry group numbers. Overall, 12 of these 20 companies (60%) had either Reasonable (12%) or Strong (48%) alignment with TCFD.

As shown in **Figure 18**, 90% of disclosures were published by the parent company, which is above the sampled average of 55% across all sectors. The remaining 10% of companies disclosed at the limited company level. The higher proportion of alignment with TCFD in this sector could be associated with 18 of the 20 companies (90%) already reporting to CDP Climate Change primarily at parent company level, with 9 out of 20 of the company's latest CDP scores being A or A-.

Figure 18: Heat maps showing how the level of disclosure for companies in the Manufacturing sector compares to the overall sample

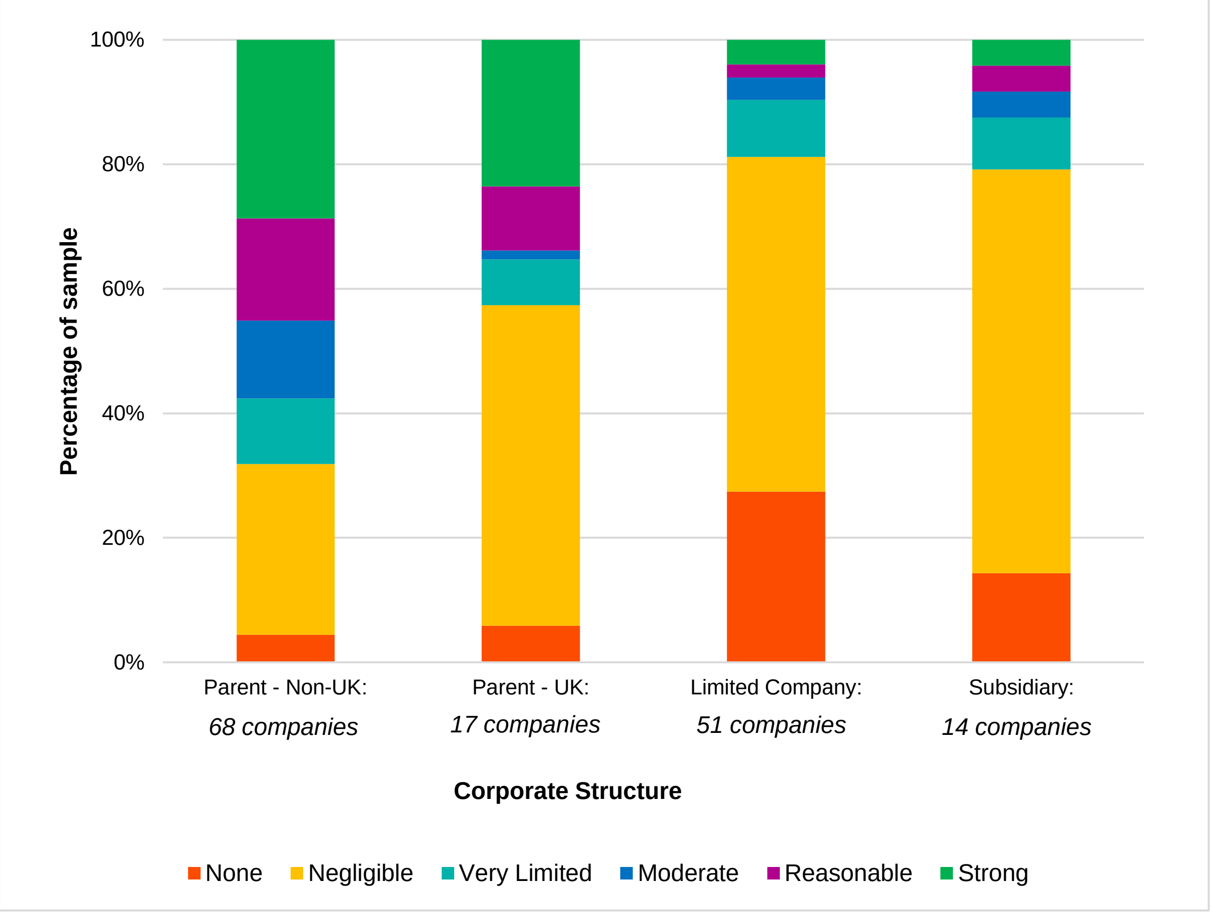


Whilst further research on a larger sample is recommended, the differences in trends for manufacturing could be explained by the higher proportion of parent companies, who may already report TCFD publicly, have more resources to put towards detailed disclosure and already report against related disclosures such as CDP. Equally, as the two companies reporting at company limited level still disclosed in line within the average range of the overall sample, it could also be a feature of the sector itself that drives disclosure, such as consumer demand and reputational factors.

Disclosures According to Corporate Structure

From the sample of 150 companies, 85 companies (57% of the sample) only disclosed their TCFD aligned information at parent company level[19], with 68 (80% of the 85 companies) of these being overseas based. Companies disclosing at parent level have disclosure that is better aligned to TCFD recommendations than those disclosing at UK Limited company level or subsidiary level (**Figure 19**) regardless of whether the parent is based in the UK or overseas. Disclosure by overseas parents was assessed to have stronger disclosures (45% of companies with overseas parents had >50% alignment to TCFD compared to 34% for companies with UK parents).

Figure 19: Extent of TCFD aligned disclosure by corporate structure across the 150 company sample



[19] Where searches of the UK Limited Company publications yielded no results, the parent company was researched. This process captured 85 companies that did not report any TCFD aligned information at Limited company level but did report it at parent level. It does not capture the information reported by parents if their Limited companies were already reporting some TCFD aligned information in their own publications.

This observation may be explained by the relative size and hence resources of multinational companies with overseas parent companies, relative to companies with UK parents. It should be noted that only 16 of the companies disclosing at a parent level were UK-based versus the remaining 68 being overseas; this variation in relative sample size may be skewing the outcomes.

Furthermore, 57 of the companies of the 150 company sample researched have publicly listed parents, making them more likely to have dedicated sustainability and reporting teams at the parent company level than private parent companies.

Outcomes from Part 2: Interviews

This section presents the overall findings from Part 2 of the research. It outlines the key findings from the interviews across the four pillars of TCFD (Governance, Strategy, Risk Management and Metrics and Targets) as well as exploring specific drivers, barriers and benefits associated with climate disclosure.

Details of Interview Sample

The interview sample of 38 companies included companies from across the sector types and company size, shown in **Figure 20, Figure 21 and Figure 22** below. The companies selected for interview also reflected a range of overall disclosure level, as assessed in Part 1 of this research, from those classified as 'Non-Reporters' through to those with disclosure strongly aligned with the TCFD recommendations. This enabled the interviews to explore a broad range of perspectives.

As far as possible, interviews were held at the same company level as the disclosure review in Part 1, e.g. if a parent company was evaluated in Part 1 then the interview was held at the parent company level. However, 4 interviews (11% of the interviews) were at a different level to the disclosure review in Part 1, where the review was at group or parent company level, but the interviewee represented the UK entity only. When requesting interviews, individuals with specific sustainability and/or reporting roles were targeted in the first instance (e.g. sustainability/EHS roles, investor relations and company secretaries). The individuals with whom interviews were held were in the following roles: sustainability or environmental (70%), accounting or finance (11%), reporting or communications (5%), investor relations (3%), and other (11%, including legal, company secretary, operations and administration and ISO auditor).

Figure 20: Companies in the interview sample categorised by financial size

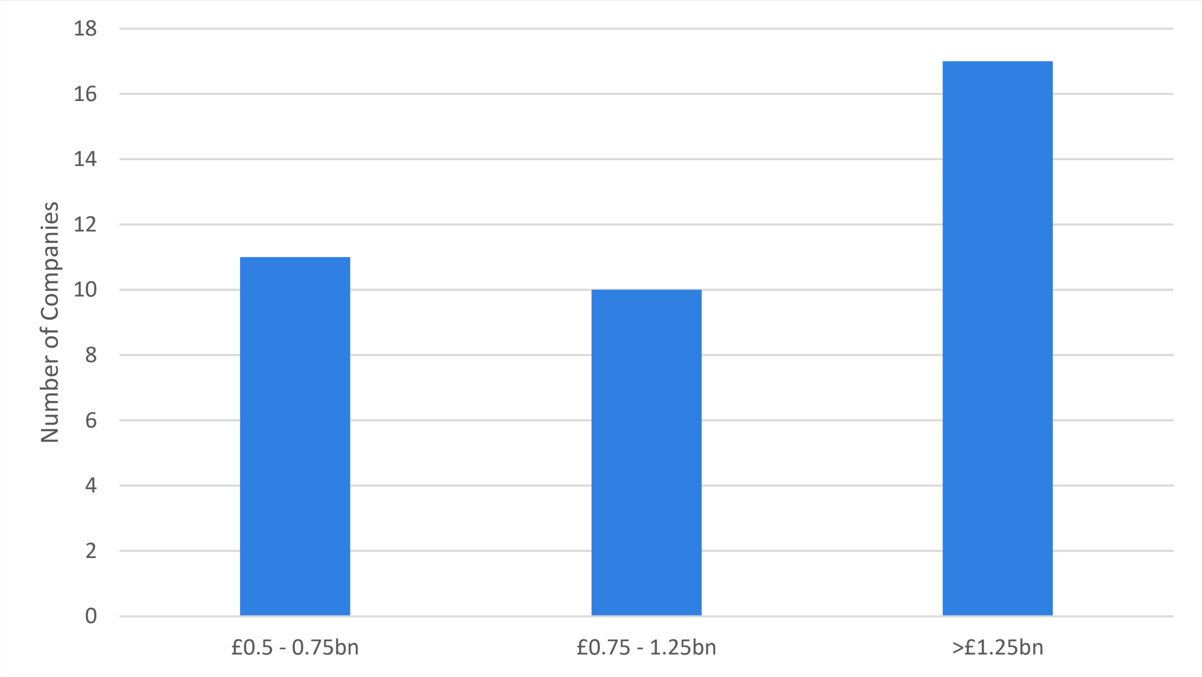


Figure 21: Companies in the interview sample categorised by sector

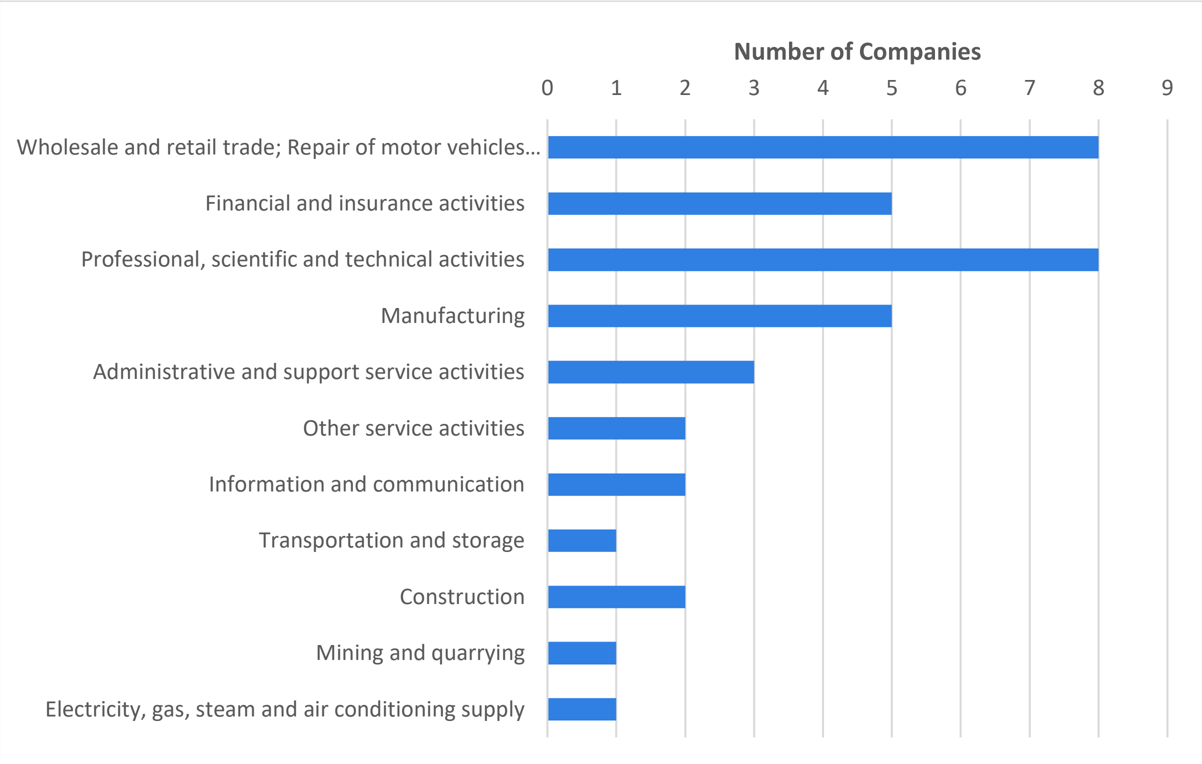
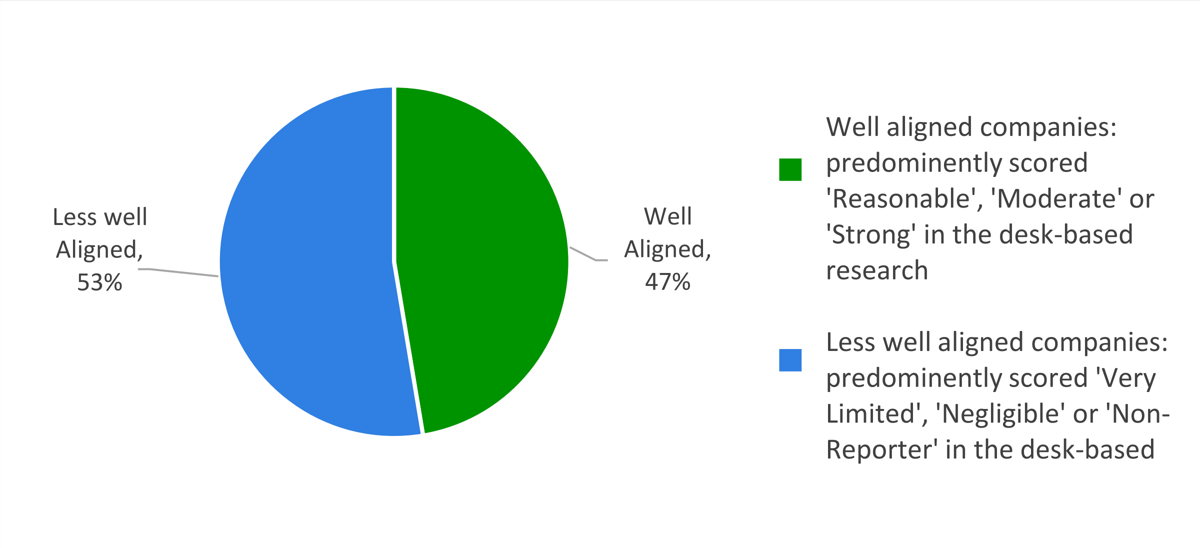


Figure 22: Companies interviewed broken down by alignment to TCFD recommendations



Interview Outcomes Related to TCFD Recommendations

The research outcomes in Part 1 indicate that the disclosures of the sample companies had a greater level of alignment with the TCFD recommended disclosures on 'Governance' and 'Metrics and Targets', than disclosures against the other two TCFD pillars ('Strategy' and 'Risk Management'). The interviews conducted in the second part of the research sought to provide insight into these findings. The key findings across the four TCFD pillars are summarised below. Given the small sample size, these findings should be taken as broad indicators only. Additional research with larger sample sizes would be required to draw more robust and nuanced findings.

Governance

Analysis of disclosures in Part 1 of the project found that disclosures by companies on 'Governance' were best aligned with the TCFD. This finding was also reflected in the interviews, with board oversight and management's role in climate-related risks and opportunities being perceived as two of the 'easiest' disclosures to report on. Interviewees stated that if governance processes and procedures were in place internally, disclosing what they were doing was a relatively quick and inexpensive process of stating facts and providing details on organisational structures.

Nonetheless, interviewees felt that of the four TCFD pillars, 'Governance' was the most critical in enabling corporate change.

> "Getting Board support is crucial; this is the first step"

Senior leadership buy in, with specific responsibilities for climate change assigned at Board level, enabled people to be held to account and led to better integration and understanding of climate risks and opportunities. One interviewee stated: *"Getting Board support is crucial; this is the first step".*

Across interviewees, there was a common theme that there has been a gradual increase in senior level and Board buy-in on climate related issues. A third of interviewees identified this as a benefit of the process of developing climate related disclosures, raising the profile of climate issues internally and increasing pressure on senior levels to engage. This benefit was often linked to an increase in internal communications on climate change more generally, as part of raising awareness within the company where applicable on climate-related issues. It was also identified that improvements in senior level and Board buy-in on climate related issues had been particularly prominent over the last year.

For some companies that did not align highly to the ‘Governance’ recommendations in Part 1 of the study, it was found that climate risk was included in Board decisions and Risk Committees to a greater extent than is disclosed, although in some cases, the associated governance processes discussed were for general sustainability matters, including climate as one of a number of topics. Whilst a low proportion of the sample, it is of note that 10% of interviewees cited disinterest of senior leadership on climate issues as a key barrier to a greater level of disclosure.

Interviewees indicated that there is a link between having a dedicated Sustainability or ESG team internally to raise climate issues to Board level and having more robust climate-related governance processes. It is not clear whether one is a direct cause of the other, or that both (i.e. robust governance and a specific ESG or Sustainability team) are indicators of greater internal focus on climate issues. A link was also identified between those companies with good quality TCFD disclosures and those companies having climate as an explicit and separate aspect of their governance structure (rather than incorporating climate into other aspects such as wider ESG programs). Several companies noted that having climate as an explicit element of risk increased the attention and focus on climate related issues. This was generally found to be the case for companies with well aligned disclosure and in particular where the disclosure was at a parent company level rather than for smaller UK Limited companies

In relation to the recommended disclosure on management’s role in assessing and managing climate-related risks and opportunities, a common theme raised by interviewees was a lack of understanding and poor level of engagement within company management (i.e. those in management or leadership positions that are not at Board or executive level). Interviewees felt there was often a disconnect between Board level oversight of climate issues, and the filtering down of this to engage and educate managers and other staff across the company. Whilst no link between this issue and extent or quality of disclosure was noted, it was more commonly raised by companies with a turnover between £0.5 – 0.75bn (27% of interviewees from this sub-section identified lack of understanding, 18% identified lack of interest from management).

Strategy

Company disclosures on 'Strategy' examined in Part 1 of this research were found to be the least well aligned with the TCFD recommendations across all four TFCD pillars. The recommended disclosure around the use of climate scenarios had the lowest level of alignment of all 11 recommended disclosures. The findings from the interviews reflected this, as the use of climate scenarios was consistently flagged as an area to improve, and a *"developing area"* of knowledge that companies were still *"learning how to do".*

> "The evasiveness of knowledge is a key challenge, particularly with regards to Scenario Analysis as this is really a developing area."

Concerns associated with climate scenario analysis were raised by 42% of interviewees. The concerns were threefold: firstly, the expertise, time, and cost required to undertake the scenario analysis itself. This concern was raised by smaller organisations and organisations who had particularly diverse or complex portfolios and felt that scenario analysis would require expensive external specialist support.

Secondly, understanding how to actually make use of the scenario analysis, and make meaningful changes. Thirdly, 2 companies expressed concerns on reporting the outcomes due to the commercially sensitive nature of the information and the uncertainty around the estimates and assumptions. In addition, 18% of interviewees said they wanted more guidance to be provided on scenario analysis.

> "The process of assessing where we are against the 11 TCFD recommended dsicslosures has been healthy for the business and provided us with new insight and perspective."

For the recommended TCFD disclosure on "identification of climate-related risks and opportunities in the short, medium and long term", most companies with well aligned disclosures identified in Part 1 stated in interviews that they have assessed both physical and transitional risks from climate change, as well as climate-related opportunities. However, when it came to the recommendation on integrating risks and opportunities into business strategy, it was found that transition risks were more often integrated into strategy and business plans than physical risks (for example, energy

> "The assessment of physical risks for production sites was easier than assessing transition risks as it is aligned with existing site-level assessments such as ISO 14001 (Environmental Management System)."

companies and sectors relying on fossil fuels having strategies in place to diversify and transition to a lower carbon future). This was particularly the case in sectors that are highly exposed to the transition of the economy to Net Zero.

For companies well aligned to the TCFD recommended disclosures on strategy, a third of the interviewees stated that the process of identifying climate-related risks and opportunities for the business has increased the focus on climate change at Board level and within senior management by incorporating climate into enterprise level risk management processes. Interviewees also felt that this greater focus and engagement at Board and management level helped to support the integration of climate-related risks into strategy. For some companies, depending on their sector and exposure to climate change impacts and opportunities (e.g. sectors relying on fossil fuel industries), climate risk assessment was seen as vital to business continuity and climate change was recognised as a key financial risk.

The lack of resources and internal capacity to produce a climate risk assessment was raised in a number of interviews, in particular by 62% of the companies interviewed with less well alignment with the TCFD recommendations. Concerns were also noted around how to ‘mainstream’ climate-related issues into business strategy and risk management processes. For example, some interviewees stated that they had decreased assessment thresholds for climate risks, compared to other types of risks as otherwise *“climate risks would not be considered material”*. This suggests that some businesses or individuals could be underestimating the financial impact of certain climate risks. Specific financial quantification of risks was identified by a quarter of companies with less well aligned disclosures as a particular area of challenge, and one that they look to investigate as the next step towards improving alignment with TCFD.

Risk Management

Part 1 of this research found the level of performance for ‘Risk Management’ was relatively similar across all three specific recommended disclosures. In Part 2, comments made through the interviews were also more general about the risk management process for climate related risks rather than aligned to specific aspects of the recommendations.

A common trend across the interviews was that companies are not necessarily considering all types of risk (physical and transition) when initially identifying and assessing climate-related risks for their business; often focusing first on the aspects of climate-related risk that is perceived to affect them the most. Many companies initially focus on the physical risks, however for companies in sectors with greater exposure to risks associated with decarbonisation, transition risks tend to have been identified and assessed first.

Some interviewees amongst those with well aligned disclosure reported it has been straight-forward to integrate climate risk into existing risk management processes. The greater challenge had been in quantifying the risks and effectively managing them. In contrast, for some companies (even those with well aligned disclosure), climate risk is still seen as quite separate to business risk and optional. Additionally, 2 companies noted that the traditional risk management process does not incorporate the assessment of opportunities and there tends to be a disconnect between climate-related risk management (which is done by specific risk teams/functions) and opportunity identification which is done by strategy teams.

"Climate disclosure is more of an opportunity than a risk"

In companies with less well aligned disclosure, climate related risks appear both generally less well defined and less well integrated into existing processes. For example for one organisation, whilst climate risks were mentioned in the interview as having been factored into assessing new business cases and starting to become a part of decision making, no distinct risk assessment or management processes were reported, so the mechanisms by which climate risks are measured and managed were not clear.

Overall, interviews with those companies with less well aligned disclosure also indicated that they only report on climate-related risks when specifically asked to by stakeholders, as they do not see any other reason to publicly share this information. In general, such interviewees reported they will not report on how climate risks are identified, assessed, and managed within their business unless it is a regulatory requirement.

When considering the different levels within a corporate structure where companies manage climate related risk (e.g. Group/parent versus subsidiary), some larger companies noted a common approach to the overall process throughout both group and subsidiaries. However, the thresholds of materiality, for instance for cost implications of a risk, tend to be decreased at subsidiary level reflecting the different scales of impact. Linked to this, three interviewees identified that whilst climate risk assessments are happening and are reported, these are separate and distinctly different processes from other business risk activities, with climate risk often seen by risk managers as less important than other business-related risks.

Metrics & Targets

Out of the recommended disclosures under ‘Metrics and Targets’, it was clear from the interviews that companies are more comfortable and familiar with reporting Scope 1 & 2 emissions. This aligns with the initial research findings in Part 1, as this recommended disclosure had one of the higher levels of alignment. However, based on the interviews, a quarter of organisations reporting on Scope 1 & 2 emissions reported experiencing difficulties with reporting on Scope 3 emissions, particularly those that have diverse portfolios and/or complex supply chains. Some interviewees also expressed concerns about reporting Scope 3 emissions because of the quality of data for some Scope 3 categories; and also because the boundaries are not always as clear as for Scope 1 & 2 which may disadvantage them if being compared to peers who have defined their boundaries differently.

Specifically in relation to targets, many interviewees from companies who had not yet set a science-based target[20] also identified that this was something that they were either in the process of setting or considering. For companies with well aligned disclosure, setting science-based targets has also prompted the integration of climate related metrics into financial planning. One company within the Construction sector, stated that they were not inclined to set or report on intensity-based targets as this would reveal their revenue for specific projects when their annual report and accounts were not due to be published until later in the year (a useful insight highlighting a misunderstanding of the flexibility of the timing of reporting within the TCFD recommendations). There was concern it may impact on competitiveness when viewed alongside peers.

For companies with less well aligned disclosure, carbon metrics tend to be tracked and reported, although not necessarily split by scope or with methodologies provided, and therefore some minor anomalies have been identified with the TCFD recommended disclosures which suggests reporting in accordance with the scopes as defined in the GHG Protocol[21]. Where carbon metrics are reported, other "related" non-financial metrics such as water, waste and energy are also reported in some cases. Additionally, multiple companies stated that they monitor more metrics than they disclose.

Although the associated risks are not commonly reflected in financials or balance sheet reporting, some companies with well aligned disclosure are beginning to use, or are considering, financial metrics to report climate-related risks; however, no examples were provided by interviewees as they are still very early in the process.

> "There is a difference between being aware of one's risks and opportunities, and taking action to prepare and mitigate, versus translating these into an actual financial metric."

On the other hand, whilst a significant number of companies disclose some climate related metrics (both well aligned and less well aligned with TCFD) as identified in

[20] Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C (Available from: https://sciencebasedtargets.org/how-it-works).

[21] The GHG Protocol Corporate Accounting and Reporting Standard provides requirements and guidance for companies and other organisations preparing a corporate-level GHG emissions inventory (Available from: https://ghgprotocol.org/corporate-standard).

Part 1, some interviewees noted resistance within companies to translate these into financial disclosures in annual reporting (raised by 13% of interviewees). One reason identified for this was that the traditional financial disclosures included in annual reports and accounts are quite accurate but for climate the likely financial implications are less certain and accountants within businesses were uncomfortable with the greater degree of uncertainty. It was also mentioned by some interviewees that there would be push back from auditors reflecting a need to upskill auditors as well as financial departments of businesses to be able to cope with a wider remit of metrics.

For companies with well aligned disclosure, carbon pricing was raised by just under a third as a metric that has recently been considered or introduced within the company. In addition, three companies with well aligned disclosure raised the issue of remuneration policies for specific roles as an area they have already taken action or are looking to develop, such as by tying emissions reduction to performance review.

Interview Outcomes Related to Drivers, Benefits and Barriers

While Part 1 of the research provides an overview of quantity and quality of disclosures, the interviews provided further clarity and granularity on the drivers behind the disclosure, the benefits that companies have recognised through disclosing climate-related information, and the barriers experienced in doing so. Common themes arose from companies interviewed across each of these topics, which are summarised below.

Drivers

In response to an open question around the drivers for climate related disclosure, four reasons were identified by more than 20% of interviewees (the figures in brackets indicate the proportion of the interviews citing this driver):

- Requests from stakeholders & investors (58%);
- A perception and/or recognition that this could provide a competitive advantage/increased reputation compared to peers (37%);
- The associated processes required to enable disclosure were helping to improve internal risk management/ strategy/to identify opportunities (26%); and
- A regulatory requirement (26%).

Stakeholder and investor led requests for information involved a range of queries from specific questions about discrete data and disclosure points, through to full

TCFD questionnaires that were being sent to companies by their stakeholders. These were cited as coming from a range of stakeholder groups including customers, investors as well as the wider supply chain to support them in requests from ultimate customers. A company in the Energy sector and a company in the Finance sector reported pressure from NGOs and activists, which was noted to be more focused on carbon emissions and contribution to decarbonisation rather than wider climate related disclosure.

In many cases disclosure appears to be partly motivated by specific events such as extreme weather events resulting in subsequent CAPEX requirements for mitigation measures as well as higher insurance premiums, although this was not stated as the key driver by any interviewees.

Fewer drivers were cited by companies with less well aligned disclosure, as would be expected. Through the interviews it also appeared that companies with less well aligned disclosure were receiving fewer stakeholder queries around climate change.

Benefits

Whilst some interviewees struggled to name benefits associated with reporting - particularly those companies who were less well aligned with TCFD requirements - a number of internal and external benefits were common across sectors and size of company. Those identified by more than 20% of interviewees to an open question included the following (figures in brackets indicate the proportion of interviewees who identified this benefit):

- Improved governance and integration of climate into strategy and decision making (39%);
- Reputational benefits (33%); and
- Helping to raise climate change as an issue internally at senior leadership and/or Board level (33%).

Reputational risks and benefits are clearly a strong motivator for climate related disclosures, identified independently as both a driver by 37% of interviewees and benefit by 33% of interviewees. Such reputational benefits and improved business prospects were reported regardless of company size. It was also identified that the reporting itself often does not benefit the company, instead it is the process underlying the reporting that is most beneficial, providing better management and improved internal processes. For example, 50% of companies with a turnover of £0.5 – 0.75bn said it has helped to raise issues internally at a senior leadership/Board level.

> "internally, we've been reticent about disclosing, but we now understand it’s been really beneficial for our reputation"

> "reporting and transparency has had a positive effect on the company"

Other benefits raised, included improved business prospects, recognition of the impact of sustainability issues on the organisation's financial position (particularly by smaller companies) and achieving higher sustainability scores in tenders when bidding for contracts.

Barriers

Whilst several common barriers were raised by all interviewees, there were also some marked differences between those with well aligned disclosure, and those with less well aligned disclosure. Four issues were common across all companies: (i) lack of time and resources, (ii) cost associated with disclosure, (iii) issues around data collection (including Scope 3 emissions), and (iv) insufficient internal expertise or knowledge. One interviewee stated that *"the evasiveness of knowledge"* was a key challenge particularly with regards to climate scenario analysis as this is really a developing area.

Only 9 companies were able to provide an estimate of costs involved in the reporting process. Of these, one company stated costs were <£20,000, three companies estimated between £20,000 and £50,000, and five companies estimated a cost of over £50,000, with some larger companies quoting a 6-figure sum. Due to the small number of estimates, there were no clear trends between company size and cost of disclosure, however, it is noted that only one company with a turnover of £0.5-0.75bn was able to provide an estimate of cost, with all other cost estimates coming from those with a turnover of £0.75bn and over – reflecting the higher levels of disclosure by larger companies found elsewhere in this research.

For businesses with less well aligned disclosure, a lack of time and resource was the most commonly raised barrier and was identified by over 60% of the interviewees. Some interviewees also raised a concern in relation to reporting around the burden from multiple requirements. This was largely reported at a Group level, with one company stating that *"the greater the reporting burden, the less proactive we can be for leading climate initiatives in the group"*. In addition, two companies interviewed were 'Non-Reporters' and they joined other companies in stating that the lack of understanding of the reporting requirements is a key barrier.

For companies with well aligned disclosure, 50% of interviewees cited complexity and challenge associated with reporting across different jurisdictions with varying requirements as a barrier. The plethora of different guidelines such as TCFD, CDP[22], SASB[23] was cited as compounding this issue. Hesitancy around reporting long term scenarios by companies was also frequently reported as a barrier by those companies with well aligned disclosure.

> "there is a higher share of effort into disclosure than into driving actions"

[22] Carbon Disclosure Project(Available from: https://www.cdp.net/en)
[23] Sustainability Accounting Standards Board (Available from: https://www.sasb.org/)

Smaller companies noted that short term thinking is a barrier, with 1-5 year traditional business risk planning periods not being compatible with the longer term outlook of climate related risks. Other barriers that were noted, but by fewer interviewees, included domination of the EU Exit over company policy and direction in the short term, a lack of buy in by senior leaders, lack of financial incentive, concern over sensitive information and issues associated with quantifying potential financial impacts.

Reporting on climate risk was not generally found to raise concerns around privacy or competitive advantage, despite some concerns being raised with regard to disclosure of finances related to climate-related risk. The feedback from participants was that carbon emissions can be less controversial and sensitive to report on than subjects such as safety or diversity as it is more quantitative and less emotive. Concerns around privacy and confidentiality were more pronounced in relation to scenario analysis disclosure and translation of climate risks into financial accounting. The most risk averse companies (determined through statements made by interviewees and analysis of responses) were concerned that disclosing detailed scenario analysis to investors may affect share price and there would be a need to highlight any assumptions and limitations, especially with any forward-looking projections. This is dependent on the granularity of disclosure required.

Interviews also explored whether the main concerns and challenges were around understanding and integrating climate into mainstream business processes or in the disclosure of information. 78% of interviewees felt the greatest challenge was in the internal processes rather than explicitly with disclosure. This links to the identification of collection of quality data as a barrier across the board, and the identification of insufficient internal expertise/knowledge by 50% of large companies.

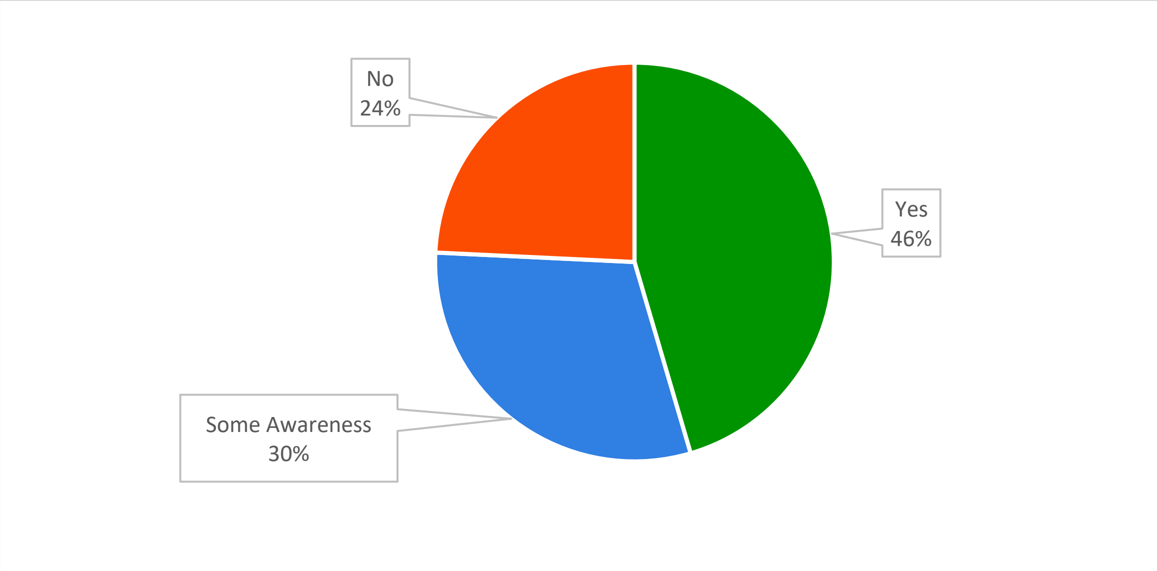
As well as exploring barriers to disclosure for those organisations with well aligned disclosure interviewees were also asked whether there were key lessons that had been learnt. Whilst the lessons learnt did vary (no single issue was raised by more than 20% of interviewees) several were raised a number of times including:

- The importance of streamlined collection of reliable data;
- Having sufficient awareness and buy in from senior management;
- Starting the process early so that sufficient teams and resources can be used from the wider business (and supply chain);
- Aligning with other reporting cycles;
- Having enough resources and time set aside; and
- Provision of training to overcome previous lack of internal understanding/awareness.

Need for Further Guidance and Awareness

Whilst nearly half (46%) of interviewees indicated that they were aware of forthcoming reporting requirements and what it would mean for their business; just under a quarter (24%) had no awareness at all **(Figure 23)**.

Figure 23: Level of awareness amongst indicated by interviewees on with regards to the upcoming climate-related reporting requirements in response to "Are you aware of the reporting requirements on the horizon?"



When exploring what would enable improved management or disclosure of climate related issues, prescriptive, clear guidance from Government was the most common response, raised by 59% of interviewees. This included requests for a methodology and reporting template, example sector specific risk registers and definitions of various risks (physical and transitional).

Specific TCFD requirements where interviewees wanted more guidance were Scope 3 emissions (scope and boundaries) and climate scenario analysis. It is noted that perceived gaps in guidance corresponds with the recommended disclosures which were found to have the lowest levels of alignment, i.e. disclosure of Scope 3 emissions and whether companies conduct scenario analysis. A common request was that such guidance be provided well in advance of disclosure being required (18% of interviewees), with some interviewees stating that they would benefit from a 'dry run' or practice year. Phased implementation to reflect increasing levels of disclosure over time, or extended reporting timeframes were also raised as suggestions.

International companies and holding companies explicitly raised issues around requiring clarity on whether reporting at group level would be sufficient as well as the complexity of reporting across numerous jurisdictions. A common theme was a desire to see common indicators, requirements, and timing with other sustainability reporting frameworks, those raised including. CDP[24], SECR[25], GRI[26]. Other suggestions raised to make the reporting process easier included:

- Industry / sector specific guidance;
- Educational resources would be helpful for internal use and for use within their supply chain;
- Funding to cover the additional cost of reporting; and
- Government continuing to consult directly with businesses throughout the process.

Possible location for educational resources

Interviewees indicated that the places currently used by companies to obtain advice and support include:

- Industry forums/Trade associations/Trade bodies;
- External consultants;
- Peers/Competitors reporting;
- CDP/TCFD/SBT guidance;
- Government websites;
- IEMA guidance;
- Network of colleagues and contacts; and
- Financial auditors.

[24] Carbon Disclosure Project
[25] Streamline Energy and Carbon Reporting
[26] Global Reporting Initiative

Conclusions

The overall conclusions of the assessment of climate-related reporting by large private UK companies are summarised below, against each of the core research objectives. Suggested actions for improving quality and quantity of disclosures based on the research outcomes are also provided. This is followed by recommendations for follow up research.

What proportion of large UK private companies provide quality climate-related risk disclosures, as defined by the TCFD framework?

Just over a quarter of companies (27% in the sample of 150 companies) were assessed as having a ‘Reasonable’ or ‘Strong’ alignment with the TCFD recommendations in their disclosures. Furthermore ‘TCFD’ as a term was only found in the disclosures of 8 companies in the initial screening of the sample, indicating that disclosure explicitly linked to TCFD is uncommon amongst UK Limited companies.

The research found that 56% of companies in the sample had little (‘Negligible’) or no disclosure (‘Non-Reporter’) on climate-related matters. The Non-Reporters (13% of the sample) do not have any climate-related terminology in their publications. For companies with ‘Negligible’ alignment, there is some recognition of climate-related risk and commitments around climate action, however there is ‘Negligible’ alignment against all four TCFD pillars (i.e. no topic seems to be disclosed more frequently than another). This demonstrates that improvement is required across the board for those with ‘Negligible’ alignment as well as the ‘Non-Reporters’.

In general, stronger disclosure was identified during the desk-based screening in the TCFD pillars of ‘Governance’ and ‘Metrics and Targets’ rather than for the TCFD pillars of ‘Strategy’ and ‘Risk Assessment’. Interviews supported these findings, with interviewees being more confident in areas where the higher levels of disclosure were identified in the desk-based screening.

Disclosure associated with Scope 1 & 2 GHG emissions was identified to have the highest levels of alignment out of all of the recommended TCFD disclosures, with 60 of the 150 companies (40%) disclosing at least a ‘Reasonable’ level of reporting against this requirement. Despite this, interviews indicated that companies are experiencing difficulties reporting other aspects of GHG emissions i.e. Scope 3 GHG emissions. Specific issues noted in relation to Scope 3 were the quality of data available and a lack of clarity on what boundaries to apply. This latter point was raised as a concern as it was felt that using different boundaries to competitors could disadvantage them in any Scope 3 emissions performance comparison.

The good quality of Scope 1 & 2 emissions disclosure could be attributed to these companies being in scope of the UK's mandatory SECR regime, which requires reporting of Scope 1 & 2 emissions. During the interviews, 'requests from stakeholders and investors' and 'a regulatory requirement' were identified as two of the four most common drivers for companies to be reporting. **This suggests that a clear external driver for reporting, such as a mandatory requirement, will be required to significantly increase the proportion of large UK private companies providing TCFD related disclosures.**

The lowest level of alignment was associated with climate scenario assessment where only 14% of companies met at least 50% of the TCFD's requirements in their disclosures. Climate scenario assessment was consistently flagged during interviews as an area of concern and as an aspect of assessment that could be improved on, even by those with well-aligned disclosure. This was largely attributed to the expertise, time, and cost required to undertake the scenario analysis itself. **This finding suggests that of all recommended disclosures, climate scenario assessment is the one that the majority of companies could benefit from more support on to improve the quality of disclosure (and underlying understanding and management).**

To be fully aligned with the TCFD recommendations, quality climate-related information should be reported in mainstream financial filings. A large majority of companies in the sample, whether disclosing at parent or UK Limited company level, were not disclosing all climate information in these filings. Only 9 companies (6% of the sample) were found to locate more than 75% of their TCFD-aligned information in Annual Reports. The disclosed information also tended to be contained across a number of publications, which is likely to decrease the accessibility of information for third parties. **Therefore, guidance on the forthcoming TCFD reporting requirements could reinforce this point about the location of climate-related disclosure.**

How does the above climate-related risk reporting change, depending on companies' characteristics? For example, by sector and company size?

Generally, larger companies (by turnover) are disclosing information that is better aligned with TCFD recommendations than smaller companies. For example, 39% of companies in the largest turnover category (>£1.25bn) had 'Reasonable' or 'Strong' alignment compared to only 18% with turnover of £0.5 – 0.75bn.

The level at which the disclosure was occurring in the corporate structure appeared to also be a factor in determining disclosure quality. **Where the disclosure was occurring at a parent company level, it was better aligned to the TCFD recommendations than when the disclosure was at UK Limited company or**

subsidiary level. This observation may be explained by the relative size and hence resources of these parent organisations.

Significant variation in the alignment of disclosures with TCFD recommendations was identified when analysing by sector. Caution is required when looking at any sector specific information due to the small number of companies in some of the sector samples. Of the four sectors with a sample size greater than 20, the Manufacturing sector has the strongest disclosure. This sector also had the highest proportion of parents, which may in part be driving the higher quality of disclosure. However, the two companies in the sample that report at the UK limited level were also assessed to have higher quality disclosure than companies in other sectors, suggesting that there may also be other driving factors in this sector.

Sectors with a reasonable sample size (greater than 20 companies) that demonstrated a lower level of alignment to TCFD recommendations included Transportation and Storage, and Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles. The proportion of companies where disclosure was at a parent level was similar in this sector to the overall sample average, suggesting that the sector could have other barriers to reporting that cannot be as easily overcome by having a large parent, therefore **further research is recommended to establish the reasons for the limited alignment within individual sectors.**

In terms of governance, companies with a dedicated Sustainability or ESG team had more robust climate-related governance processes. A link was also identified between good quality TCFD aligned disclosure and having climate as an explicit and separate aspect of a company's governance structure (rather than incorporating climate into other aspects such as wider ESG programmes). This was generally found to be the case for companies with well aligned disclosure and in particular where the disclosure was at a parent company level rather than for smaller UK Limited companies. **This suggests that a dedicated Sustainability or ESG team and inclusion of climate as an explicit topic in an ESG programme may be key in driving higher quality disclosure.**

Companies with well aligned disclosure tended to have assessed both physical and transition risks as well as opportunities. Whilst the assessment of physical risks was identified by interviewees as generally being easier than for transition risks, transition risks were reported as more often being integrated into strategy and business plans than physical risks. This was particularly the case for companies in sectors such as Oil and Gas and Energy where there are more immediate policies and regulatory initiatives affecting their operations. The integration of transition risks being more commonly integrated into strategy can be attributed to transition risks being more closely related to traditional business planning and strategic decisions. Additionally, physical issues are more likely to affect different geographies and sites in different ways.

Under the ‘Risk Management’ pillar, no apparent connection with size, sector or any other company characteristics was identified for the relative quality of disclosure. Where disclosure was less well-aligned, climate-related risks were not as well defined or integrated sufficiently into existing processes. This group also indicated that they only report on climate-related risks when specifically asked to by stakeholders, as they do not see any reason for them to publicly share this information otherwise. **Again, this suggests that a mandatory requirement will be required to significantly increase the proportion of large UK private companies providing TCFD related disclosures.**

Regarding the awareness of the forthcoming TCFD-aligned reporting requirements that BEIS is currently consulting on[27], nearly half (46%) of interviewees indicated that they were aware of this and what it would mean for their business, 30% had some awareness and just under a quarter (24%) had no awareness at all. **For those that are aware, there is a need for guidance and support on how to align with any future reporting requirements. Similarly, for those that are not aware of the proposed regulations, greater communication and outreach is required potentially using different channels to those that have been used so far. This will help to ensure that as many affected businesses as possible are alerted to any future obligations.**

Within the ‘Risk Management’ pillar, whilst most interviewees appeared confident and comfortable with reporting Scope 1 & 2 emissions, Scope 3 reporting was raised as more challenging, particularly by smaller companies and those with diverse portfolios and/or complex supply chains. This was not surprising given some of the complexities around setting boundaries, data collection and data processing required to be able to report Scope 3 emissions. These challenges were common across any business assessing Scope 3 emissions, not just the target audience for this research, as it is a less mature area of GHG reporting.

What are the barriers, costs and opportunities for UK private business providing climate-related risk disclosures? How does this change dependant on companies’ characteristics? For example, sector and company size?

Common barriers across the companies interviewed related to lack of time and resource, cost, access to data/information and lack of internal expertise or knowledge. International companies and holding companies also explicitly raised issues around requiring clarity on whether reporting at a Group level would be sufficient as well as the complexity of reporting across numerous jurisdictions**. A common theme regardless of the company’s characteristics was a desire to**

[27] Department for Business, Energy & Industrial Strategy, 2021. Mandatory climate-related financial disclosures by publicly quoted companies, large private companies, and LLPs. [viewed 27 April 2021]. Available from: https://www.gov.uk/government/consultations/mandatory-climate-related-financial-disclosures-by-publicly-quoted-companies-large-private-companies-and-llps

see more alignment with the various different demands of other sustainability reporting frameworks including CDP, SECR and GRI.

Three quarters of interviewees identified that their main concerns and challenges were associated with understanding and integrating climate-related issues into business processes rather than explicitly about disclosure. In this regard, for companies in the £0.5bn to 0.75bn turnover category, short-term thinking is a key barrier, with the typical 1-5 year timeframe applied to traditional business risk planning not being compatible with the longer term outlook required for many climate related risks.

Of the four TCFD pillars, 'Governance' was stated to be the most critical in enabling corporate change across the majority of companies, regardless of size or sector. Encouragingly, a gradual increase in senior level and Board buy-in on climate related issues was reported by most interviewees which was linked to wider engagement on climate change that has been particularly prominent over the last year.

Reporting on climate risk was not generally found to raise concerns around privacy or competitive advantage. In fact, interviewees identified that climate disclosure can be less controversial and sensitive than subjects such as safety or diversity. The exceptions to this were associated with disclosure around scenario analysis and translating climate risks into financial accounting. For the latter, the concerns stemmed from the perceived difference in accuracy compared to traditional financial disclosures as well as the greater degree of uncertainty. **A need to upskill auditors, as well as financial departments of businesses to be able to cope with a wider remit of metrics, was raised.**

When asked about the costs associated with climate-related disclosure, the majority of interviewees were not able to provide a financial estimate. Only 9 companies were able to provide an estimate of costs involved in the reporting process. Of these,one company stated costs were <£20,000, three companies estimated between £20,000 and £50,000, and five companies estimated a cost of over £50,000, with some larger companies quoting a six-figure sum. However, due to the small number of estimates provided, no clear trends between company size or other characteristic and cost of disclosure have been identified.

As might be expected companies with disclosure better aligned to TCFD recommendations were more able to identify benefits and opportunities. Reputational benefits in particular were a strong motivator for disclosing. The process underlying the reporting was identified to be the most beneficial, particularly for companies in the £0.5bn to 0.75bn turnover category, as it has helped to raise climate issues internally at a senior leadership/board level. Other opportunities raised (particularly by companies in the £0.5bn to 0.75bn turnover category) included improved business prospects and recognition of the impact of sustainability issues on the organisation's financial position.

Recommendations for Follow Up Research

A number of areas for follow up research have been identified. Some are associated with specific limitations identified during this study and are recommended to enable more nuanced analysis or increased confidence in certain trends identified. Others are linked to specific barriers or concerns and are recommended to help increase quality in climate related disclosure.

- **Sector Specific Research:** Due to the relatively small sample size limited analysis of trends between and within sectors has been possible in this research. However, a high level of variation in disclosure between sectors was detected. Further research with a larger sample would be necessary to draw accurate conclusions regarding the trends, barriers, and opportunities between and within sectors,
- **Cost of reporting:** Another key area for follow up research relates to costs of reporting as very few companies were able to estimate this. Companies who were able to provide costs tended to be the larger ones, with more mature programmes so this could be skewing the limited results identified.
- **Accelerating the engagement of Board and executive leadership:** Engagement by the Board and executive management in companies has been identified as a key step for better climate disclosure. It was described in interviews as the most critical in enabling corporate change and led to better integration and understanding of climate risks and opportunities. Research into what drives greater engagement into climate risks by the Board and how this could be best accelerated could support better reporting.
- **Climate scenario analysis:** Climate scenario analysis is the TCFD recommended disclosure where disclosures by companies were least well aligned across the sample. It was also raised as an area of concern during many interviews and an area where guidance was explicitly requested. It is viewed as being particularly costly to address as there is a perception that it needs specialist knowledge and therefore the use of third parties. Research into relevant tools and frameworks that are publicly available and assessing how these could be used and adopted by businesses without the need for extensive external support could help build capacity in this area, enhance understanding and disclosure.
- **Scope 3 GHG reporting:** Scope 3 GHG emissions was an area raised by many interviewees as one where support and guidance is required. The assessment of disclosure across the whole sample indicates that disclosure of Scope 3 emissions lags behind that for Scope 1 & 2. Research into the guidance and tools available for Scope 3 GHG emissions, including those that are publicly available (and free to use) and which sectors they may be best suited to, could enable increased levels of Scope 3 GHG reporting.

- **Metrics for assessing climate-related risks and opportunities:** Research identifying possible metrics for risks and opportunities beyond GHG reporting may support wider performance reporting in this area. Of particular interest could be identifying how financial impacts could be incorporated and potentially mapping these metrics to key sectors and/or types of activities.

Appendix A: Research Questions for Part 1

Preliminary Questions

Governance

Is there mention of a corporate responsibility/ sustainability board? A special employee group within the company?

Strategy

- Does the company explain how climate-related issues are integrated into their business objectives and strategy?
- Does the company have a policy (or equivalent) commitment to action on climate change?
- Mention/statement of alignment with climate related disclosures produced by TCFD?

Risk management

- Is climate change described as a potential risk to, or significant issue for the company?
- Does the company mention any potential or actual financial loss related to climate change?

TCFD Screening Questions

TCFD Recommendation	Basic questions (from FCA)	Recommended Disclosure	Initial Research Question (Y/N)	Follow on Questions *Additional checks for financial companies and asset management companies where appropriate (italicised)*
Governance Disclose the organization's governance around climate-related risks and opportunities.	Is there mention of a corporate responsibility/ sustainability board? A special employee group within the company?	Describe the board's oversight of climate-related risks and opportunities.	Is there any information about the board's oversight of climate-related risks and opportunities ?	If answer to previous question is yes, does the company disclose: - The highest body or person (e.g. CEO/ Senior Executive/Board Committee) responsible for climate-related policies, strategies and information. - The processes and frequency by which the Board and/or Board Committee(s) (e.g., audit, risk, or other committees) are informed about climate-related risks and opportunities. - If the Board and/or Board Committee(s) consider climate-related risks and opportunities when reviewing and guiding key-decision making e.g. on business plans, strategy, annual budgets etc. - If and how the board monitors and oversees progress against climate-related goals and targets.
		Describe management's role in assessing and managing climate-related risks	Is there any information on management's role in assessing and managing	If answer to previous question is yes, does the company disclose: - If it has assigned climate-related responsibilities to management-level positions or committees. - Processes by which management is informed about climate-related risks and opportunities. - Management's role in monitoring climate-related risks and opportunities - Description of the associated organisational structures

		and opportunities.	climate-related risks and opportunities ?	
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such	- Does the company explain how climate-related issues are integrated into their business objectives and strategy? -Is there a mention/statement of alignment with climate related disclosures	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Does the company identify the climate-related risks and opportunities that it might face in the short, medium, and long-term?	If answer to previous question is yes, does the company disclose: - What they consider to be the relevant short, medium, and long-term time horizons (specifically, these should be aligned to climate horizons as opposed to business reporting horizons, e.g., next 5 years, 6-10 years, beyond 10 years) and if this differs for physical vs. transition risks and opportunities. - Specific climate-related risks and opportunities (physical and transition) for each time horizon. - A disaggregation of these risks by geography *Additional check:* *Banks* *Does the company disclose/ describe* *- Significant concentrations of credit exposure to carbon-related assets.* *- Climate-related risks (transition and physical) in their lending and other financial intermediary business activities.*

information is material.	produced by TCFD? - Does the company have a policy (or equivalent) commitment to action on climate change?	Describe the impact of climate-related risks and opportunities on the organization’s business, strategy, and financial planning.	Does the company describe the impact of climate-related risks and opportunities that its business, strategy, and financial planning?	If answer to previous question is yes, does the company disclose: - Any quantified financial climate-related impacts or opportunities. - How climate change is factored into its financial planning process. - Details of impacts on separate parts of the business, such as products, services, supply chains, adaptation/mitigation activities, R&D investment & operations. *Additional checks:* *Asset owners* *Does the company disclose:* *- how climate-related risks and opportunities are factored into relevant investment strategy (e.g. from the perspective of the total fund or investment strategy or individual investment strategies for various asset classes)* *Asset managers* *Does the company disclose:* *- how climate-related risks and opportunities are factored into relevant products or investment strategies.* *- how each product or investment strategy might be affected by the transition to a lower-carbon economy.*

		Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Does the company describe the resilience of its strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario?	If answer to previous question is yes, does the company disclose: - Which climate change scenario risks are assessed against (e.g. 2°C scenario) - How its strategies may be affected by climate-related risks and opportunities and how it plans to address these. -Whether the company conducts scenario analysis over at least one scenario of transition to low carbon economy consistent with 2 degrees or lower scenario -Whether the company evaluates the potential resilience of their strategic plans to the range of scenarios If yes to these questions, does the company also disclose: - The range of scenarios, inputs, assumptions, analytical methods and output (including potential business impacts and management responses to them) -The sensitivity of results to their assumptions? -Management's assessment of the resiliency of its strategic plans to climate change? *Additional Checks:* *Insurance companies* *If the company perform climate-related scenario analysis on their underwriting activities does it disclose the following information:* *- Description of the climate-related scenarios used, including the critical input parameters, assumptions and considerations, and analytical choices. In addition to a 2°C scenario, insurance companies with substantial exposure to weather-related risks should consider using a greater than 2°C scenario to account for physical effects of climate change and*

				- Time frames used for the climate-related scenarios, including short-, medium-, and long-term milestones. *Asset owners* *If the company performs scenario analysis, does it:* *- Provide a discussion of how climate-related scenarios are used, such as to inform investments in specific assets.*

Risk Management Disclose how the organization identifies, assesses, and manages climate-related risks.	- Is climate change described as a potential risk to, or significant issue for the company? - Does the company mention any potential or actual financial loss related to climate change?	Describe the organization's processes for identifying and assessing climate-related risks.	Does the company describe their process for identifying and assessing climate-related risks?	If answer to previous question is yes, does the company disclose: - How it identifies the potential size and scope of climate-related risks, including definitions of risk terminology used or references to existing risk classification frameworks used. - Whether risks are split out in to separate physical and transitional categories - Whether risks are considered in terms of the business versus the wider value chain - Whether the company considers existing and emerging regulatory requirements relating to climate change (such as limits on emissions, etc) *Additional Checks:* *Banks* *Does the company [Note that TCFD guidance states that companies should 'consider' disclosing these]:* *- Characterize their climate-related risks in the context of traditional banking industry risk categories such as credit risk, market risk, liquidity risk, and operational risk.* *- Describe any risk classification frameworks used (e.g., the Enhanced Disclosure Task Force's framework for defining "Top and Emerging Risks").* *Insurance companies* *Does the company disclose the processes for identifying and assessing climate-related risks on re-/insurance portfolios by geography, business division, or product segments, including the following risks:* *- physical risks from changing frequencies and intensities of weather-related*

				perils, *- transition risks resulting from a reduction in insurable interest due to a decline in value, changing energy costs, or implementation of carbon regulation, and* *- liability risks that could intensify due to a possible increase in litigation.* *Asset owners* *Does the company disclose:* *- where appropriate, engagement activity with investee companies to encourage better disclosure and practices related to climate-related risks to improve data availability and asset owners' ability to assess climate-related risks.* *Asset managers* *Does the company disclose:* *- where appropriate, engagement activity with investee companies to encourage better disclosure and practices related to climate-related risks to improve data availability and asset owners' ability to assess climate-related risks.* *- how they identify and assess material climate-related risks for each product or investment strategy. This might include a description of the resources and tools used in the process.*

		Describe the organization's processes for managing climate-related risks.	Does the company describe their process for managing climate-related risks?	If the answer to previous question is yes, does the company disclose: - Who is responsible for managing climate-related risks. - How it makes decisions to mitigate, transfer, accept, or control climate-related risks. - All relevant categories of climate-related risks are managed (i.e., transition risks and physical risks) - How climate-related risks are prioritised and materiality assessed - How it monitors ongoing climate-related risks across the business (including expected timing of ongoing reviews of risk and parts of the business impacted) - How it ensures that their policies in relation to climate change risk management are implemented by any external service providers *Additional checks:* *Asset owners* *Does the company disclose:* *- how they consider the positioning of their total portfolio with respect to the transition to a lower-carbon energy supply, production, and use (e.g. how it actively manages it's portfolios' positioning in relation to this transition)* *Asset managers* *Does the company disclose:* *- how they manage material climate-related risks for each product or investment strategy*

		Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Does the company describe how its processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management ?	If answer to previous question is yes, does the company disclose: - Its approach to integrating climate-related risks into a broader risk management program - If climate-related risk information undergoes the same internal controls and assurance as traditional financial risk - If the unique elements of climate risks are recognised (e.g., levels of uncertainty, time horizons) - If there is a programme to educate and build awareness of climate-related risk in the organisation
Metrics and Targets Disclose the metrics and targets used to assess and manage relevant climate-		Disclose the metrics used by the organization to assess climate-related risks and opportunities	Does the company disclose the metrics it uses to assess climate-related risks and	If answer to previous question is yes, does the company disclose: - Metrics on climate-related risks associated with water, energy, land use, and waste management where relevant and applicable. - Climate-related opportunity metrics, e.g. revenue from products and services designed for a lower-carbon economy. - Financial information attached to risks, such as an internal carbon price or renumeration policies *Additional Checks:*

related risks and opportunities where such information is material.		in line with its strategy and risk management process.	opportunities ?	*Banks* *Does the company disclose:* *- the metrics used to assess the impact of (transition and physical) climate-related risks on their lending and other financial intermediary business activities in the short, medium, and long term.* *- the amount and percentage of carbon-related assets relative to total assets as well as the amount of lending and other financing connected with climate-related opportunities.* *Asset owners/ managers* *Does the company disclose:* *- metrics used to assess climate-related risks and opportunities in each fund or investment strategy. Where relevant, asset owners should also describe how these metrics have changed over time.* *- where appropriate, metrics considered in investment decisions and monitoring.*
		Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions,	Does the company disclose Scope 1 and Scope 2 GHG emissions and related risks?	If answer to previous question is yes, does the company disclose: - Methodologies used to calculate or estimate emissions including if in line with the GHG Protocol. - GHG emissions disclosures for historical periods to allow for trend analysis. - Forward looking projections of GHG emissions *Additional check:* *Asset owners/ managers* *Does the company disclose:*

		and the related risks.		*- the weighted average carbon intensity, where data are available or can be reasonably estimated, for each fund or investment strategy.*
			Does the company disclose Scope 3 GHG emissions and related risks if appropriate?	If answer to previous question is yes, does the company disclose: - Methodologies used to calculate or estimate emissions including if in line with the GHG Protocol. - GHG emissions disclosures for historical periods to allow for trend analysis. - Evidence and reasoning for exclusion of Scope 3 GHG emissions and related risks, where this has not been disclosed - Forward looking projections of GHG emissions *Additional check:* *Asset owners/ managers* *Does the company disclose:* *- the weighted average carbon intensity, where data are available or can be reasonably estimated, for each fund or investment strategy.*

		Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Does the company describe the targets that they use to manage climate-related risks and opportunities and performance against targets?	If answer to previous question is yes, does the company disclose: - If targets are absolute or intensity-based, the time frames over which they apply, and the baseline year from which progress is measured. - Progress made against the targets - If it has or plan to develop a science-based target(s) and/or targets aligned with regulatory requirements or market constraints - If it has targets other than GHG reduction that tie back to their key climate-related risks. - If remuneration is linked to climate-related targets

Appendix B: Scoring Criteria for Part 1 Research

Scoring criteria used during the screening, to be viewed in conjunction with the research questions in Appendix B.

Scoring Category	Criteria description
5 Strong	The company has reported information aligning to TCFD recommended disclosure, which provides at least 75% of information expected of best practice disclosures. **AND** If a financial company (e.g. bank or insurance company), the company discloses at least 75% of information outlined in finance-specific recommendations. **AND** The company's disclosure is presented in a way that is entirely aligned to the 7 TCFD disclosure principles.
4 Reasonable	The company has reported information aligning to TCFD recommended disclosure, which provides 50-75% of information expected of best practice disclosures. **AND** If a financial company (e.g. bank or insurance company), the company discloses 50-75% of information outlined in finance-specific recommendations. **AND** The company's disclosure is presented in a way that is broadly aligned to the 7 TCFD disclosure principles. **OR**

	The company's disclosure meets the first two requirements for ’Strong’ apart but is only broadly aligned with the 7 TCFD disclosure principles.
3 Moderate	The company has reported information aligning to TCFD recommended disclosure, which provides 25-50% of information expected of best practice disclosures. **AND** If a financial company (e.g. bank or insurance company), the company discloses 25-50% of information outlined in finance-specific recommendations. **AND** The company's disclosure is presented in a way that is broadly aligned to the 7 TCFD disclosure principles. **OR** The company's disclosure meets the first two requirements for ’Reasonable’ but is only partially aligned with the 7 TCFD disclosure principles.
2 Very limited	The company has reported information aligning to TCFD recommended disclosure, which provides some very limited details on climate related issues that is specific to the company but less than 25% of information expected of best practice disclosures. **AND** The company's disclosure is presented in a way that is partially aligned to the 7 TCFD disclosure principles. **AND** If a financial company (e.g. bank or insurance company), the company discloses less than 25% of information outlined in finance-specific recommendations. **OR**

	The company's disclosure meets the first two requirements for ’Moderate’ but is not aligned with any of the 7 TCFD disclosure principles.
1 Negligible	Where a relevant search word was found in the rapid screening, preliminary questions may indicate some high level acknowledgement of climate change by the company in their publications, but there is no further evidence that the company has reported information that was specific to its operations or bearing any alignment to the specific TCFD recommendation questions[28].
0 Non-Reporter	Where no relevant word was found in the rapid (word search) screening

Appendix C: Interview Questions for Part 2

Information for Interviewers

Before the interview: Review the research outcomes for the company and familiarise yourself with their ESG and (if relevant) climate risk disclosure. You should tailor your phrasing of the questions to fit these outcomes.

The time allowances are to be used as a guide only. Be sure to cover all applicable lines of questioning, and if time allows, go back and drill down for further detail where answers indicated that this might be possible. Not all questions will be relevant /make sense, plan the session as it will depend on the research outcomes. Clearly note which questions you pose.

Questions in italics are prompts to assist with the line of questioning and should be used in the light of research outcomes, answers provided, and the company's understanding of climate risk, etc. e.g. Avoid TCFD terminology unless the company itself is familiar or reports in line with the TCFD.3

Terminology: If company representatives are not familiar with the Green Finance Strategy, or TCFD, these explanations can be used:

Green Finance Strategy: The UK Government launched the Green Finance Strategy in July 2019. It outlines the plan to integrate financial risks posed by climate and environmental factors into mainstream financial decision-making. Part of this plan is to make climate-related financial disclosure mandatory by 2023.

TCFD: The TCFD stands for the Task Force on Climate-Related Financial Disclosure. This is an investor led group that has consulted on and developed recommendations on how to integrate climate disclosure into mainstream financial reporting.

Introduction

Basic introductions – name, role, AECOM, etc. Calling to follow up on the email sent (Date) regarding climate risk and reporting.

Purpose	We are working with the Department for Business Energy and Industrial Strategy, on some research to understand the status of climate-risk disclosure by private companies in the UK. The brief is to understand the extent to which these companies are reporting in accordance with the TCFD recommendations - even where this is implicit, i.e. without realising that they are -

	(note: if company is categorised as ‘Very Limited’ or ‘Non-Reporter’ – might need to explain TCFD) and what barriers they face in doing this, and also, possibly, any benefits they might have experienced from doing this.
Why	The driver behind this research is the UK Government’s Green Finance Strategy, which aims to make TCFD reporting mandatory by 2023. So, BEIS is wanting to understand where Private UK companies are, on the road to this, and what needs be done to support this process.
Anonymity	The research we are doing will all be anonymous, so the results we share with BEIS will not specify any company names unless you specifically agree to share some details for the purposes of a case study.

Questions for companies categorised as having mostly Moderate, Reasonable or Strong disclosure

Obtain common understanding and initiate dialogue	We have seen that (name of company) has disclosed some information about climate-related risks and opportunities in recent disclosure. Were you involved in this disclosure? We notice that much of this information disclosed was in the Annual/ Sustainability report / on the website / in CDP (select correct option) what was the rationale for this?	5 mins
Understanding the drivers behind climate risk disclosure	What were the reasons or drivers behind the decision to disclose about climate-related risks?	10 mins

	Have climate-related risks been raised in any stakeholder dialogue? (Is the company being asked questions about the risks posed by climate change to the business? What do people want to know?) Have you received any feedback on this disclosure from stakeholders (customers, suppliers)? Has there been any experience of climate-related impacts to the company? (Extreme weather events? Opportunities?)	
Understanding perceived benefits of reporting	Do you think the company has benefitted, from undertaking disclosure around climate-related risk? Prompting: Has it improved the engagement of senior executives around issues of climate risk? Has it prompted any changes to risk management or strategy, etc? Has it prompted any action to mitigate climate-related risk? Has the disclosure exercise lead to climate being more integrated into the business strategy?	
Understanding how climate-related reporting is undertaken	How was the reporting done? Who drove the process? What is their role? Is there a standard or tool or guideline that informed how you reported on climate-related risks? (TCFD? CDP? SECR?)	

	Who else was involved? (large/small team? Internal/external?) How was it resourced? How long did it take? Who signed off on it?	
Understanding the costs involved in preparing the disclosure	Are you able to quantify the cost of doing this reporting, in terms of spend, time and resourcing? (Was it extremely burdensome? Can a figure per day/number of days be provided?)	
GOVERNANCE Identifying if there is a disconnect between what is/is not reported, and what happens in practice. Identifying challenges in mainstreaming climate-related issues into senior management business decision-making.	Note to interviewer: avoid questions that are already clearly explained in disclosure. These questions are to help identify if there is a difference between what the company discloses, or does not disclose, versus what actually happens practice. Tailor questions to this end, e.g. “We note in your annual report that …... How does this process work?” (key suggested areas to explore) Moving away from the actual reporting process……. Is there board, or senior-management buy-in around climate-related issues? (Is senior leadership engaged/“on board”?) Is there a common understanding of what climate change might mean for the company? Does the company’s board and senior management have knowledge and oversight of climate-related issues (risks and opportunities)? (what type of information reaches them and how, does the information inform decision making?)	10 mins

STRATEGY Identifying any disconnect between what is reported and happens in practice. Identifying challenges in mainstreaming climate-related issues into business strategy.	Note to interviewer: as per previous, these questions are a guide but should be adapted to suit what is known about the company. (key suggested areas to explore) Has the company undertaken an assessment to identify climate risks and opportunities? If no: Is this something that has been considered/ on the horizon? Why/why not? What is the barrier? (understanding of climate change, understanding of upcoming reporting requirements, expertise, cost, etc) If yes: Did this consider physical/ transition risks? (explain if necessary) Did this identify opportunities? (e.g. revenue from low carbon products/services) How has this knowledge informed the business? (Have the results been used as input into the planning process, or risk prioritisation? Has it been possible to quantifying financial costs?)	
RISK MANAGEMENT Identifying if there is a disconnect between what is/is not reported, and what happens in practice.	Note to interviewer: as per previous, these questions are a guide but should be adapted to suit what is known about the company. (key suggested areas to explore) Are climate-related risks are integrated into business/enterprise risk management? If yes– can you describe how?	

	What are the barriers to integrating climate-related risk into business strategy and decision-making? What does managing climate-risk cost the business? Is it quantifiable?	
METRICS AND TARGETS Identifying if there is a disconnect between what is/is not reported, and what happens in practice.	Note to interviewer – likely that “better-performing” companies do report their GHG performance metrics, and to focus here on metrics around climate-related risks and opportunities (key suggested areas to explore) Confirm what climate related metrics are reported. Have these GHG and climate metrics been translated into financial or balance sheet metrics? To what extent are the financial implications of climate change reflected in financial disclosure? E.g. valuations of assets, any balance sheet adjustments?	
Understanding the barriers to reporting, and whether any disadvantages have been identified	Note to interviewer: Explore whether key barriers are around disclosure itself, OR internal processes and systems, and/or recognition of climate as a risk or opportunity. What would you say are the main barriers experienced in reporting climate-related risks? (Time? Cost? Expertise? Data?) Does reporting about climate risk raise any concerns around privacy, or competitive advantage?	10 mins

	Are the greatest challenges to do with the reporting aspect, or are they more in understanding and integrating climate risk into mainstream? Are there any particular themes or areas that are more difficult to provide disclosure on than others? (Why? What are the specific challenges? If the company reported in line with TCFD: Which recommendations are more difficult to report against)	
Understanding how barriers to reporting have been overcome	Did you manage to overcome any of these barriers? Any lessons learnt that will make it easier going forward?	
To identify if there is an understanding of forthcoming reporting requirements	How do you think the company's disclosure on climate-related risks will look going forward? (Is there a plan to increase the level of disclosure? To assess or increase alignment to TCFD?) Are you aware of the Green Finance Strategy and what that might mean to the business in terms of reporting requirements?	
To determine what guidance or resources might be required	What would make the management and integration of climate-related risks and opportunities easier? (What guidance or resources might help? Is more external support needed, or more internal capacity?) What would make the process for reporting on climate-related risks and opportunities easier? Where do you turn to for advice? Either on sustainability or other issues – could this be a place for climate support? (Who is best positioned to help with climate risk management and reporting – government, trade associations, forums? What role should government have in assisting with reporting?)	

Questions for companies categorised as having mostly Limited or None disclosure

Obtain common understanding and initiate dialogue	Note to interviewer: Confirm and clarify your understanding of what ESG-related information is reported, and where, focusing on what IS reported, not on what is not.	10 mins
Understanding the ESG reporting process	Who is responsible for Environmental/ESG reporting? What standards or guidelines guide your environmental reporting? How many people are involved? Who signs off on it?	
Identifying whether climate change has been identified as a business risk	Is climate change considered to pose a risk to business at all? Do you think it is something that the board is concerned about? Are you aware whether any of your peers are reporting on climate-related risks or opportunities? Have stakeholders asked any questions about what climate change might mean for the company? Have there been any experience of climate-related impacts to the company? (Extreme weather events? Opportunities for low-carbon economy products/services?)	

	Is there a common understanding of what climate change might mean for the company? (if yes, how this understanding has been ascertained)	
Identifying awareness of TCFD and reporting requirements	Are you aware of the Green Finance Strategy, and the associated reporting requirements on the horizon? Do you know about the TCFD? Is there anything happening internally to prepare for these upcoming requirements?	
GOVERNANCE Identifying disconnects between what is reported and practice. Identifying challenges in mainstreaming climate-related issues into senior management business decision-making.	Note to interviewer: avoid questions that are already clearly explained in disclosure. These questions are to help identify if there is a difference between what the company discloses, or does not disclose, versus what actually happens practice. Companies may be doing more than they realise. If not clarified already: Is there board, or senior-management buy-in around climate-related issues? (Is senior leadership engaged/“on board”?) Is there a common understanding of what climate change might mean for the company? Does the company’s board and senior management have knowledge and oversight of climate-related issues (risks and opportunities)? (what type of information reaches them and how, does the information inform decision making?)	10 mins

STRATEGY Identifying disconnects between what is reported, and practice. Identifying challenges in mainstreaming climate-related issues into business strategy.	Note to interviewer: as per previous, these questions are a guide but should be adapted to suit what is known about the company. Has the company undertaken an assessment to identify climate risks and opportunities? If no: Is this something that has been considered/ on the horizon? Why/why not? What is the barrier? (understanding of climate change, understanding of upcoming reporting requirements, expertise, cost, etc) If yes: Did this consider physical/ transition risks? (explain if necessary) Did this identify opportunities? (e.g. revenue from low carbon products/services) How has this knowledge informed the business? (Have the results been used as input into the planning process, or risk prioritisation? Has it been possible to quantifying financial costs?)	
RISK MANAGEMENT Identifying disconnects between what is reported and practice.	Note to interviewer: as per previous, these questions are a guide but should be adapted to suit what is known about the company. How are environmental risks considered in financial decision-making? What is the company's experience of managing climate-related risk? If climate-related risks are integrated into business/ enterprise risk management – can you describe how this works?	

	What are the barriers to integrating climate-related risk into business strategy and decision-making? What does managing climate-risk cost the business? Is it quantifiable? If no risk management system is in place – What would managing climate-risk cost the business? Is it quantifiable?	
METRICS AND TARGETS Identifying challenges in mainstreaming climate-related risk metrics into financial metrics.	Note to interviewer – If companies reported GHG metrics, they can be encouraged that this forms part of TCFD requirements. Confirm if/what climate related metrics are monitored and reported. Are these translated into financial metrics? Reflected in balance sheet at all? If no disclosure is undertaken – Are you aware of the kind of metrics that can be used to measure exposure to climate risks?	
Understanding the barriers to climate risk assessment, management, and reporting	Note to interviewer – explore whether key barriers are around disclosure itself, or the internal processes and systems, and/or recognition of climate as an issue What would you say are the main barriers to reporting climate-related risks? Awareness and understanding around what climate change means for the company? Expertise in reporting? Lack of resourcing? Concerns around privacy, or competitive advantage?	5 mins

	Access to data?	
To determine what guidance or resources might be required	What would make the management and integration of climate-related risks and opportunities easier? (What guidance or resources might help? Is more external support needed, or more internal capacity?) What would make the process for reporting on climate-related risks and opportunities easier? Where do you turn to for advice? Either on sustainability or other issues – could this be a place for climate support? (Who is best positioned to help with climate risk management and reporting – government, trade associations, forums? What role should government have in assisting with reporting?)	