Climate Disclosure Standards Board

First Steps

Corporate climate and environmental disclosure under the EU Non-Financial Reporting Directive

November 2018
cdsb.net/NFRreview

CDSB's mission is to advance and align the global mainstream corporate reporting model so that information about natural capital is equated with financial information in terms of quality and usefulness. The outcome CDSB seeks is that information about natural capital and climate change delivered through mainstream channels leads to decisions and actions that support more sustainable economic, social and environmental systems. The CDSB Framework[1] for reporting environmental and natural capital-related information draws on reporting practices that support its mission, including the Recommendations of the Task Force on Climate-related Financial Disclosures[2], relevant financial reporting standards, mandatory reporting requirements, voluntary frameworks that support natural capital/environmental reporting and the work of CDSB's Board members.

CDP is a global environmental impact non-profit working to secure a thriving economy that works for people and planet. High quality, relevant information is the fundamental basis for action and CDP helps investors, companies and cities to measure, understand and address their environmental impact. The world's economy looks to CDP as the gold standard of environmental reporting with the richest and most comprehensive dataset on corporate and city action. CDP aims to make environmental reporting mainstream and provide the detailed insights and analysis to drive the urgent action needed for a climate safe, water secure, deforestation free world. CDP recognises the important role of the TCFD in mainstreaming climate-related information and advancing the availability of financially relevant information for global markets. Therefore, CDP has aligned its information requests with the TCFD recommendations, alongside introducing a sectoral focus and adopting a forward-looking approach to climate risk disclosure.

Contents

Mardi McBrien,
Managing Director,
Climate Disclosure Standards Board

When the Non-Financial Reporting Directive was released, organisations like ourselves saw it as the culmination of the work that many of us had been doing for a decade, laying the foundation for EU-wide standardisation of non-financial reporting. The Climate Disclosure Standards Board has been advocating for mandatory reporting of climate and environmental information within mainstream reports since its inception. The Directive was a definite first step in the right direction.

There is overwhelming evidence that the inclusion of environmental and climate change information within management reports is a key part of the structure that will enable investors to make informed capital allocations. This will ultimately contribute to building a more sustainable financial system. As European countries assume a leading role in providing the building blocks for a long-term sustainable financial system, the role of this Directive is critical now more than ever.

We set out to undertake the research in this report with a clear goal in mind: to provide the European Commission, Parliament and Council with robust evidence required to understand the effectiveness of the Directive in shaping the environmental and climate reporting landscape.

Since the Directive came into force, the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) have dominated the climate and environmental reporting agenda both in Europe and globally. We believe that incorporating the recommended disclosures of the TCFD into the Directive would deliver the quality of climate-related financial information that investors need for decision-making.

The evidence in this review shows clear actions for regulators and companies to take to provide better quality information to investors and markets. In the upcoming months, we will continue to converse and collaborate with policymakers and companies across Europe to enhance the quality and level of disclosures related to climate change and environmental matters in mainstream reports, and to support the review of the Directive.

Climate change is arguably the biggest threat facing our planet. Dealing with this threat is an unparalleled challenge for our world, and banks have an important role to play. ING has been operationally climate neutral since 2007, but it's not enough to only look inwards – we know that our biggest impact is with the customers we finance.

That is why ING is focused on supporting clients in making sustainable transitions in their business models. ING therefore encourages companies to provide more transparency regarding the financial implications of climate change on their short- and long-term strategies and operations. This can improve companies' own insight of the material climate-related financial risks that they face and acts as an incentive to shift investments to low-carbon and climate-smart opportunities.

The Non-Financial Reporting Directive has been a welcome addition to the disclosure requirements of the businesses we assess and invest in. Climate-related financial disclosure alone will not implement the Paris Agreement, but it helps us to understand where our investments can have the biggest positive impact on our clients' long-term interests.

Environmental, Social and Governance (ESG) disclosure is still developing rapidly. New initiatives such as the Task Force on Climate-related Financial Disclosures bring innovative approaches to ensure that the information we receive from companies is material and fit for purpose. We welcome this review by the Climate Disclosure Standards Board and CDP, which, by proposing improvements to promote higher quality disclosures, provides useful feedback to companies and regulators alike.

Ralph Hamers,
Chief Executive Officer, ING Group

The Non-Financial Reporting Directive has been an important addition to Europe's reporting requirements, because it helped to create a baseline of transparency across the market.

At Galp, we aim to establish, maintain and reinforce a clear, transparent and continuous dialogue with our stakeholders and interested parties and the disclosure of the information about our activity, management and performance is part of Galp's commitment to establish this strong relationship.

Since 2016, Galp publishes an integrated report, reinforcing our belief that the creation of economic, environmental and social value has to come together. The merge of financial and non-financial reporting in one piece discloses our processes and performance in a transparent and accurate way, as well as its results and corporate governance practices. At the same time, the use of international standards and monitoring tools guarantees that the information collected and published in our reports is reliable and useful and also represents our commitment to continuous improvement in the adoption of best practices.

Taking this into account, Galp readily recognised the importance of the Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures (TCFD) recommendations as a transparent, consistent and comparable way to provide climate-related financial information in a low carbon transition economy.

By aligning our report with the TCFD's main guidelines, we expect our performance can be assessed in an integrated way, whilst establishing the appropriate connections between our strategy, our business and governance model, and our operational and financial performance, considering relevant external factors.

Analysis, such as this report, gives businesses valuable feedback on their journey, helping them build strong relationships with their investors and other stakeholders.

Carlos Costa Pina,
Chief Sustainability Officer
and Chief Risk Officer, Galp

Executive Summary

This review assembled evidence of reporting practices on environmental matters in the first year of reporting under the EU Non-Financial Reporting Directive (NFRD). The review further explored opportunities for incorporating relevant aspects of the Task Force on Climate-related Financial Disclosures, (TCFD) recommendations into the NFRD and associated guidance so that reporting practices that serve both sets of requirements are consolidated. Both the NFRD and TCFD recommendations offer authoritative requirements on environmental and climate-related reporting through the mainstream financial report. The Commission is undertaking a fitness check of the corporate reporting framework in Europe, with findings expected in summer 2019. This review should also inform the new Parliament and Commission as they set priorities for 2020 and beyond.

Initial corporate disclosures of information related to environmental matters under the NFRD

The research looked at the management reports of a core sample of 80 companies to assess whether they have disclosed information "to the extent necessary for an understanding of the undertaking's performance, position and impacts of its activity" relating specifically to environmental matters under five "Content Categories" of the NFRD.

The findings showed several differences in disclosures of environmental and climate-related information. More companies (70%) made disclosures on environmental or sustainability policies than on climate-related policies (20%). Moreover, only 23% had a clear statement in their management report that climate or environment was integrated into their overall due diligence processes.

Over twice as many companies disclosed how they identified, assessed and managed climate risks (35%) in comparison to environmental risks (15%). There were also multiple approaches to disclosing outcomes of policies related to environment and climate.

There is an exemption in the NFRD to include non-financial information outside the management report so long as it had been published not exceeding 6 months after the balance sheet date. This was taken up by German companies in the sample following on from its national transposition.

First responses to the NFRD and TCFD alignment

2018 afforded an opportunity for companies globally to consider their initial responses in their management reports to the voluntary TCFD framework. Four core elements in the TCFD, governance, strategy, risk management, metrics and targets, also feature in the Content Categories of the Directive. While both require disclosures to be made in the management report, the NFRD exception to disclose outside the management report is by choice – differentiating it from the TCFD. Some areas of the TCFD, such as scenario analysis and financial linkages of climate-related risks and opportunities, are not covered by the Directive. The NFRD could be enhanced by embracing the concept of forward-looking information and encouraging the identification of opportunities arising for the business from natural capital and climate change.

Less than half of companies (49%) disclosed both board oversight and management's role in assessing and managing environmental or climate change matters, with higher disclosures of board oversight of environmental (60%) than climate-related information (15%). This may be attributable to the mandatory obligation in the Directive compared to the voluntary TCFD approach.

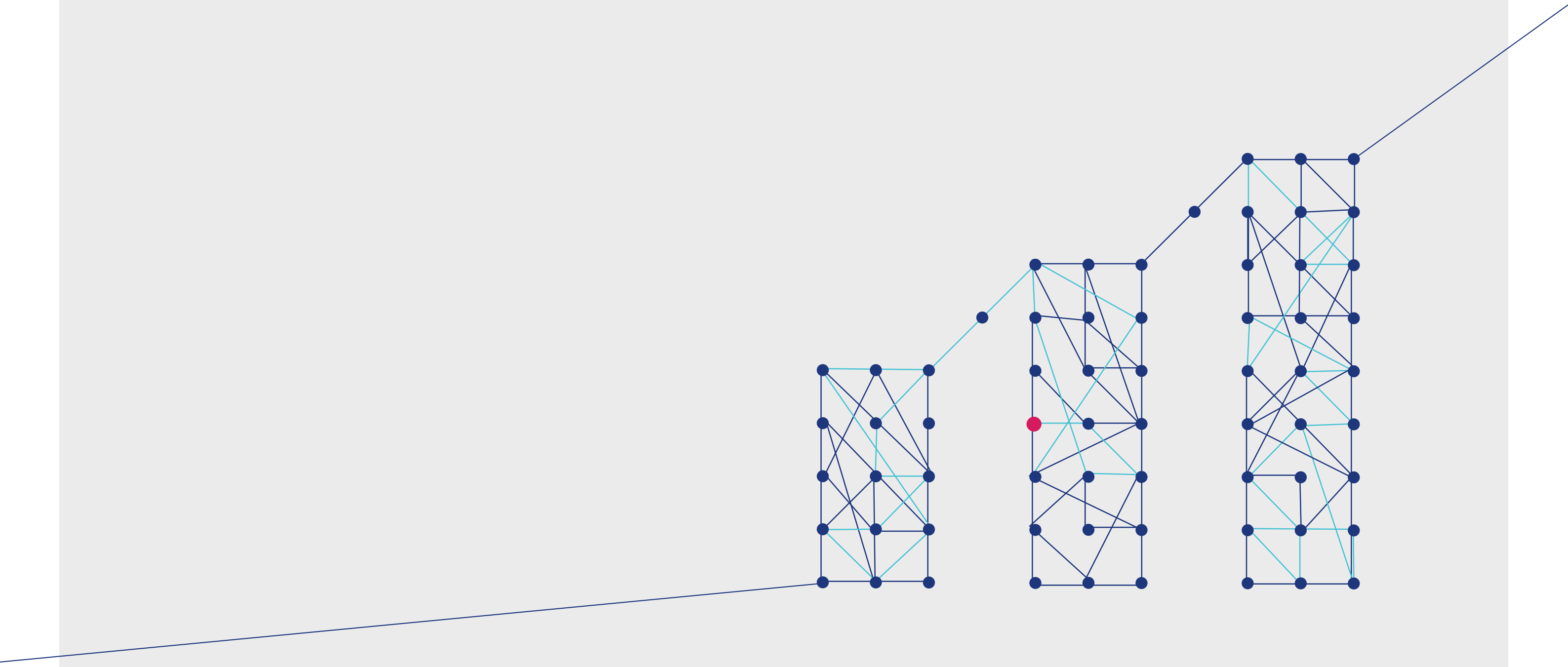
For companies, it is possible to make first steps at implementing the TCFD recommended disclosures as they consider their disclosure obligations under the NFRD. This review found that 30 companies in the sample (38%) mentioned the TCFD recommendations, however, at this early stage, first steps by a company in the TCFD journey may or may not include actual disclosures.

We also found no direct evidence from companies that the Commission's guidelines accompanying the Directive were being used or having a positive effect on NFRD or TCFD-aligned disclosures. It would be helpful for the Commission as part of its review to assess the extent to which these guidelines are being used by report preparers and referenced in national implementing legislation and related guidance.

If the TCFD and NFRD are to be effective mechanisms for achieving their desired outcomes of generating information to better inform allocation of capital in support of a more sustainable economic system, this will require a significant step change not only in the uptake but in the effectiveness of reporting. To achieve this at the scale required, mandatory implementation of the 11 TCFD recommended disclosures is needed.

Recommendations

1) Make disclosure of climate-related information explicit in the Accounting Directive.
2) Remove the exception in the Directive allowing for material information required for the non-financial statement to be reported outside the management report.
3) Align corporate governance disclosure requirements in the NFRD and the TCFD recommendations, exploring how conformance with one could be treated as satisfying the requirements of the other.
4) Incorporate the TCFD strategy core element's recommended disclosure on resilience and scenario analysis in the Accounting Directive and require use of a 1.5°C scenario based on the science presented by the UN Intergovernmental Panel on Climate Change.
5) Ensure Member State competent authorities supervise reporting on environment and climate-related matters, thereby generating the feedback necessary for enhancing corporate disclosures on climate-related and environmental information.
6) Consider how to promote greater use of the information contained in the guidance to the Directive, exploring means for better assimilation of the Commission's guidelines into national corporate reporting frameworks.
7) Incorporate all 11 TCFD recommended disclosures and consider how better linkages between financial and non-financial information can be made in the Directive, drawing on the essential approach of the TCFD.



Introduction

This review examines how a sample of companies has responded to specific disclosure requirements of the NFRD pertaining to environmental matters. In particular, it reviews responses by sample companies to the requirement in Articles 19a (Non-financial statement) and 29a (Consolidated non-financial statement) for management reports to include non-financial statements containing information relating to environmental matters. The review considers how information about environmental matters is reflected in the information companies are required to provide about their business model, environmental policies, outcomes of policies, principal risks and key performance indicators. The review also explores synergies between the NFRD obligations pertaining to environmental matters and the recommendations of the TCFD, and whether/how companies are preparing disclosures to respond to both.

History of the NFRD

On 5 December 2014, the European Union (**EU**) Directive 2014/95/EU[3] (the **NFRD**) amending the Accounting Directive[4] (Directive 2013/34/EU), also known as the Non-Financial Information or Non-Financial Reporting Directive, entered into force. EU member states were required to transpose the Directive into national law by 6 December 2016. The obligation is for certain entities to disclose non-financial information for the financial year commencing on or after 1 January 2017. In some jurisdictions, such as the UK and France, elements of the NFRD were already enshrined in national law and therefore impacting reporting practice.

The NFRD affects approximately 6,000 undertakings, notably larger companies[i] and groups across the EU, and its requirements are embedded in the broader corporate reporting framework of the Accounting Directive. It mandates inclusion of a non-financial statement in the management report containing information on environmental, social and employee, human rights and bribery and anti-corruption related-issues. Articles 19a(4) and 29a(4) offer an exemption to this obligation to disclose in the management report.

The disclosures required on these matters are "to the extent necessary for an understanding of the undertaking's development, performance, position and impact of its activity relating" to these matters (Article 19a(1) of the Accounting Directive (as amended)[4]). Companies within the NFRD's scope are also required to disclose their business model, related non-financial policies and the outcomes of such policies, as well as principal risks related to such matters and business-relevant non-financial key performance indicators (**KPIs**). The NFRD is accompanied by non-binding guidance (the **Guidelines**[5]), prepared by the Commission to facilitate "relevant, useful and comparable disclosure of non-financial information by undertakings" (Article 2)[3].

Alignment between the NFRD and TCFD

In 2018, the EU High-Level Expert Group on Sustainable Finance (the **HLEG**) released its final report entitled *"Financing a Sustainable European Economy"*[6] (the **HLEG Report**), providing a comprehensive sustainable finance strategy for the EU. Amongst its recommendations, the HLEG prioritised the need to "upgrade Europe's disclosure rules to make climate change risks and opportunities fully transparent." The HLEG Report further recommends that the EU "endorse the [Task force on Climate-related Financial Disclosures (**TCFD**)] guidelines and implement these recommendations at the EU level". The HLEG acknowledges that the review of the NFRD, as required under Article 3[3], by the European Parliament and Council affords a "unique opportunity to explore how the NFRD requirements could be better aligned with that of the TCFD". According to Article 3, the European Commission (the **Commission**) will publish its report to the Parliament and Council by 6 December 2018 on implementation and effectiveness of the Directive, including its scope and the level of guidance and methods provided.

[i] The term company is used interchangeably with other terms in the report and refers to the group, company, organisation, undertakings or entities for which the management report is prepared, including, where appropriate, subsidiaries and jointly controlled entities and operations (Climate Disclosure Standards Board (2018) CDSB Framework for Reporting Environmental Information and Natural Capital: Advancing and Aligning Disclosure of Environmental Information in Mainstream Reports. [PDF]. Available from: https://www.cdsb.net/sites/default/files/cdsb_framework_2.1.pdf)

In response, the *European Commission Action Plan: Financing Sustainable Growth*[7] (the **Action Plan**) determined that "the Commission will revise the guidelines on non-financial information" by the second quarter of 2019 to "provide further guidance to companies on how to disclose climate-related information, in line with the [TCFD]." The Action Plan's ambitions are grounded in an understanding that "an increase in the world's temperature of 2 degrees Celsius could have destabilizing effects on Europe's economy and financial system". The Commission notes that half of the "exposure of Euro area banks to risk is directly or indirectly linked to risks stemming from climate change"; yet both environmental and climate risks are "currently not always adequately taken into account by the finance sector".

Purpose of this review

Both the NFRD and TCFD recommendations offer authoritative requirements on environmental and climate-related reporting through the mainstream financial reporting model. Therefore, they are aligned with both CDSB and CDP's missions.

The purpose of this review is to:

- Generate an evidence base of corporate reporting practices on environmental matters in the first year of reporting under the NFRD. This could also serve as a baseline for measuring changes in reporting practices and in future assessments on the state of European corporate reporting of non-financial information; and
- Examine opportunities for incorporating relevant aspects of the TCFD's recommendations into the NFRD and associated guidance so that reporting practices that serve both sets of requirements are consolidated.

This review comes at an opportune time as the Commission is undertaking a review of the NFRD and its related guidance as part of a fitness check of the current corporate reporting framework in Europe[8]. The fitness check's findings, expected in summer 2019, will be influential as the new Parliament and Commission embark on priority setting for 2020 and beyond. It is hoped that this review can contribute positively to the emerging evidence base on corporate reporting practice in these areas.

Structure of this report

1. Non Financial Reporting Directive

- Business Model
- Policies and due diligence
- Outcomes of policies
- Principal risks; and
- Non-financial KPIs

2. First Responses to the TCFD

- NFRD and TCFD alignment
- Insights into TCFD adoption
- Governance; and
- Forward-looking information

Conclusions

- Recommendations

This report is based on a detailed review of 80 companies' disclosures (the **Core Sample**) from across Europe (predominantly from the UK, France and Germany – for more details on the geographic scope and sectors of the companies see Appendix 2). Where possible, disclosures by the Core Sample are tested against a review of 500 companies' disclosures (the **Control Sample**).

The report is organised into two parts:

Part 1 examines how the Core Sample companies have responded to Articles 19a and 29a of the NFRD. In particular, it reviews whether companies disclose information in the following "Content Categories" necessary for an understanding of their performance, position and impacts relating specifically to environmental matters.

Content Categories:

- the **business model**;
- policies, including **due diligence processes** implemented;
- **outcomes of policies**;
- **principal risks** linked to its operations and the **management of such risks**; and
- business-relevant **non-financial key performance indicators**.

For each Content Category, Part 1 of this report:

- Describes the NFRD obligations as they relate to environmental matters;
- Identifies the research question(s) on which the review is based;
- Summarises key findings from the review of Core Sample companies' disclosures;
- Provides extracts from management reports illustrating how some Core Sample companies have approached disclosures in the Content Categories in the first year of reporting under the NFRD; and
- Where possible, offers further insights based on a wider review of Control Sample reports.

Part 2 explores how current NFRD reporting practices satisfy aspects of the TCFD's recommendations. The four core elements of the TCFD recommendations on: governance; strategy; risk management; metrics and targets are considered, with particular attention paid to **board oversight and management role**. Research results pertaining to current corporate practices and intentions on disclosing the TCFD's recommended disclosure on the resilience of the company's strategy, taking into consideration different **climate-related scenarios** (including a 2°C or lower scenario), are presented. The report then provides evidence of support for the TCFD and examples of disclosures made in response to the Task Force's recommendations by 30 companies in the Core Sample mentioning TCFD in their management reports. It then analyses the state of current **first-year NFRD corporate disclosures on environmental and climate matters** and considers how **current NFRD reporting practices align with, and offer a foundation for, implementing the TCFD recommendations**. It also makes recommendations about how guidance and practice could evolve in support of the NFRD and TCFD's objectives.

Part 1

Environmental disclosures under the NFRD

Business model

The review sought to answer the following research question: *Does the description of the organisation's business model include information relating to environmental and climate change matters?*

What does the NFRD ask for?

- Organisations must include a 'brief description of their business model' (Articles 19a and 29a of the Accounting Directive, as amended by the NFRD[4]).

Key findings from the review

- No standardised approach to describing business models;
- 83% describe their business model (See Figure 1);
- 44% explain how their business models are affected by environmental matters or climate change;
- 25% disclose all five elements of the business model suggested in the Guidelines;
- More (87%) Non-Financial Sector companies[ii] make business model disclosures on environmental or climate matters than Financial Sector companies[iii] (72%); and
- More French companies (57%) refer to climate or environment in business model descriptions than German (44%) or UK (31%).

Figure 1: Percentage of Core Sample companies disclosing business model and elements of business model suggested in the Guidelines

Proposals for policymakers

- Elaborate the definition and content requirements of a business model, for example, by adopting or referencing definitions offered by the International Integrated Reporting <IR> Framework[10] or OECD;
- Reference practical tools for business model design, such as Business Canvas[11] in the Guidelines; and
- Elaborate on the connection between business model and principal risk disclosures.

Guidance for companies

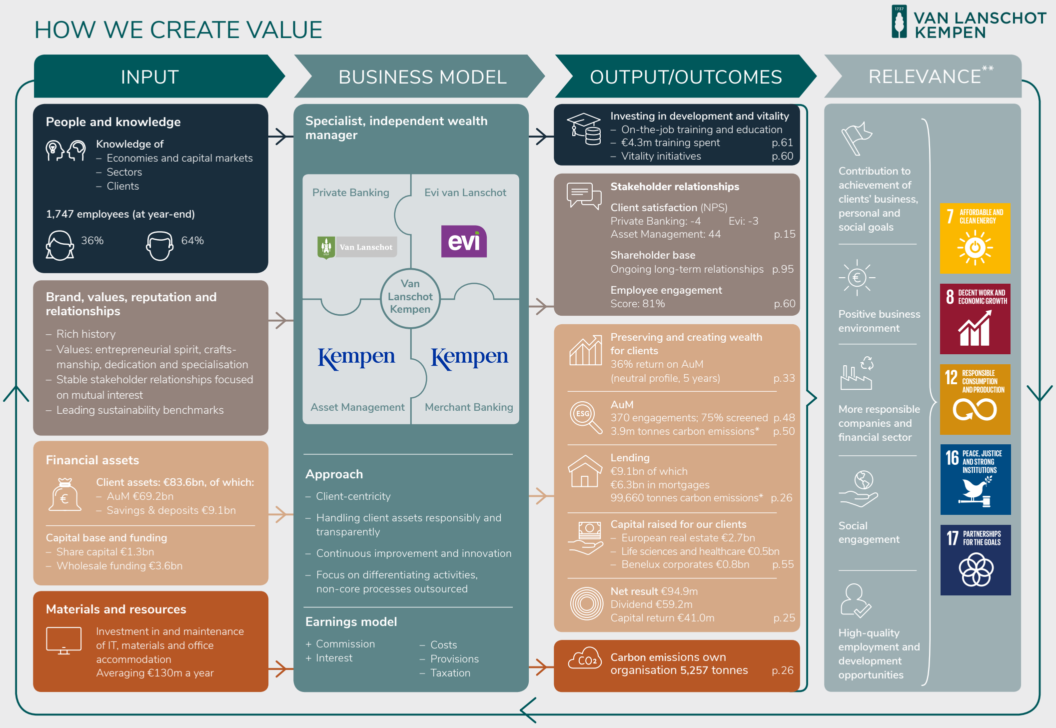
- Consider following the IIRC's guidance[12] on the business model; and
- Refer to the Principles and REQ-04 (Sources of environmental impact) and REQ-06 (Outlook) of the CDSB Framework[1].

[ii] The four Non-Financial Sectors identified in the TCFD supplemental guidance: Energy; Materials and Buildings; Transportation; Agriculture, Food and Forest Products.

[iii] The four Financial Sectors identified in the TCFD supplemental guidance: Banks; Insurance; Asset Owners and Asset Managers (Task Force on Climate-related Financial Disclosures (2017) Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures. [PDF]. Available from: https://www.fsb-tcfd.org/wp-content/uploads/2017/12/FINAL-TCFD-Annex-Amended-121517.pdf).

Example of reporting practice: Business Model

An extract from Van Lanschot Kempen's 2017 Annual Report[9] illustrates how it has approached the NFRD obligation to provide its brief business model description. It uses a diagram aligned with the International Integrated Reporting Council's (IIRC) International <IR> Framework[10]. The <IR> Framework defines the business model as the organisation's chosen system that *"draws on 6 types of capitals (financial, manufactured, intellectual, human, social and relationship, and natural) as inputs and, through its business activities, converts them to outputs (products, services, by-products and waste)"* and outcomes that aims to fulfil the organisation's strategic purposes and *"create value over the short, medium and long term"*. The business model diagram helps to convey visually the different capitals as inputs, outputs and outcomes and connects these to relevant overarching Sustainable Development Goals (SDGs)[iv].



2017 figures.

Source: Van Lanschot Kempen 2017 Annual Report

[iv] For more on how to align addressing sustainable development issues within business model and strategy disclosures, see: Adams, C. (2017) The Sustainable Development Goals, integrated thinking and the integrated report, IIRC and ICAS. ISBN 978-1-909883-41-3. [PDF]. Available from: https://www.icas.com/technical-resources/new-approach-for-aligning-doing-business-to-the-sustainable-development-goals

Policies pursued in relation to environmental matters and related due diligence

The review sought to answer the following research questions: First, *does the report describe the policies related to environmental and climate change matters*? Secondly, *does the report describe the due diligence processes implemented in relation to environmental and climate change matters*?

What does the NFRD ask for?

- Companies disclose the policies pursued…in relation to [environmental] matters, including due diligence of processes implemented (Articles 19a and 29a of the Accounting Directive, as amended by the NFRD); and
- While due diligence is not defined in the Directive, further direction can be gleaned from the Recitals setting out the reasons for the enacting terms in the Directive. Recital 6 offers some further advice on how due diligence could be interpreted to aid in making corporate disclosures: "The non-financial statement should also include information on the due diligence processes implemented by the undertaking, also regarding, where relevant and proportionate, its supply chain and subcontracting chains…to identify, prevent and mitigate existing and potential impacts"[3].

Key findings from the review

- Disclosure of environmental policies is common practice: 99% disclose their policy approach to at least one key non-financial aspect (Figure 2);
- Companies have different approaches to presenting information about policies. In some cases, reports label information about environmental policies by reference to specific subjects, such as climate change. In other cases, environmental policy is covered in generic sustainability policies. 20% prepare a specific climate change policy/strategy section in their management report; and 70% disclose an environmental or sustainability policy/strategy section in their management report;
- Companies are increasingly linking environmental policy information and financial impacts of environmental risks: 76% disclose the role of environmental or climate change matters in their financing and investments, or as matters affecting their balance sheet through assets, revenue and expenditure;
- Disclosures are not always clear about whether environmental considerations are integrated into wider processes on strategy, governance and risk – 23% of the companies reviewed have a clear statement in their management report that climate or environment is integrated into their overall due diligence processes;
- Disclosure about due diligence is less common – less than half (48%) disclose their due diligence processes;
- More companies (35%) disclose how they identify, assess and manage climate risks compared to environmental risks (15%); and
- Analysis of the Control Sample reports reveals that only 7% disclose a climate change policy/strategy section and 31% disclose an environmental strategy/policy section. This suggests that disclosure of information on environmental and climate policies decreases as the levels of market capitalisation of the companies decrease. When looking at the three main geographies of reports reviewed in the Control Sample, 68% of French companies disclosed a climate or environmental strategy/policy in contrast to 25% of UK and 33% of German companies.

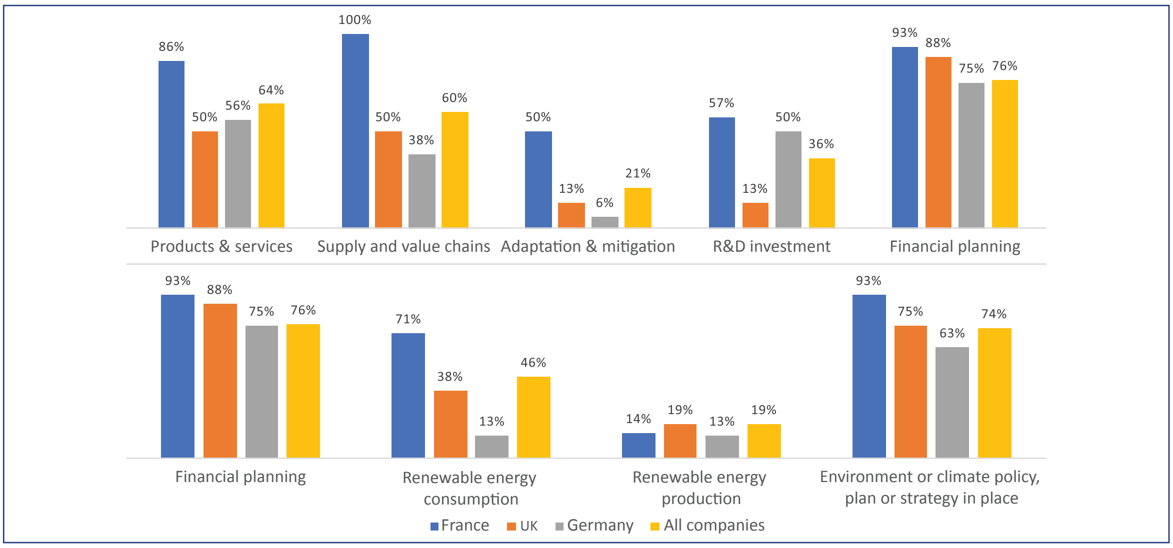


Figure 2: Percentage of Core Sample companies in the UK, France, Germany and all companies disclosing various climate and environment-related policies

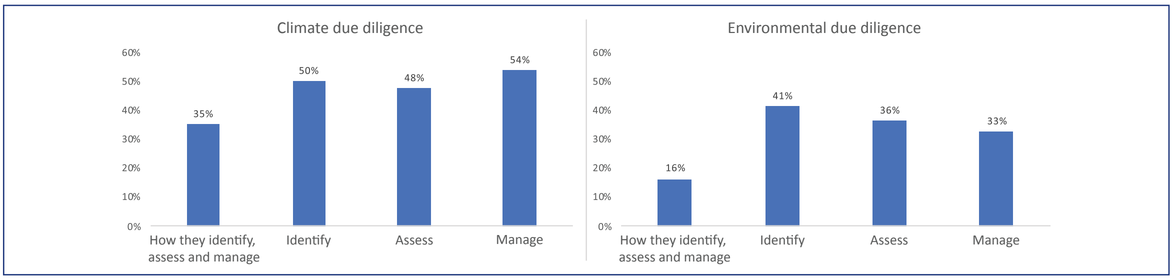


Figure 3: Percentage of Core Sample companies disclosing how they identify, assess and manage climate and environmental risks

Example of reporting practice: Policies pursued in relation to environmental matters

An example of disclosures on policies pursued in relation to environmental matters is drawn from Danone. Here, environmental matters focus on climate-related issues. In its 2017 Registration Document and Annual Financial Report[13], Danone describes its climate policy, including stating its GHG emissions targets, and the setting of intermediate targets to help assess progress towards achieving its desired outcome to be carbon neutral by 2050.

CLIMATE POLICY

Danone Zero net carbon strategy

In 2015, Danone set targets to reduce greenhouse gases and contribute to a "carbon-free" economy. In 2017, Danone stepped up its commitments, notably by participating in the 4 per 1000 initiative for regenerative agriculture, thereby making agriculture a priority of its low carbon strategy.

Climate Policy and Commitments

For Danone's entire greenhouse gas emissions scope, the target is to attain zero net carbon by 2050. This target consists of five principal objectives:

- reduce total emissions intensity by 50%, and by 30% between 2015 and 2030 scope 1 and 2 emissions in absolute;
- encourage "carbon positive" solutions;
- eliminate deforestation of the supply chain by 2020;
- strengthen the resilience of the water and food cycles;
- offer healthy and sustainable products.

Intermediary targets and recognition by the Science Based Targets initiative (SBTi)

SBTi is a coalition between CDP (formerly the Carbon Disclosure Project), the World Resources Institute, the World Wide Fund for Nature (WWF) and the United Nations Global Compact (UNGC).

In November 2017, the greenhouse gas emissions reduction targets set by the Company were officially approved by the Science-Based Targets initiative (SBTi), in accordance with the global measures required to keep global warming below 2° celsius.

In 2015, Danone set a target of zero net carbon emissions across its entire value chain by 2050. To reach this target, Danone established ambitious goals for 2030 that were approved by the SBTi: reduce emissions intensity by 50% for its full scope of responsibility (scopes 1, 2 and 3) and achieve a 30% reduction in absolute emissions on scopes 1 and 2, as defined by the GHG Protocol.

In 2017, Danone was recognized as a leader by CDP for the management of its climate change challenges ("CDP Climate change") with an A- rating.

RE100 commitment

In December 2017, Danone joined the RE100 initiative and made a commitment to transition to 100% renewable electricity by 2030, with an intermediary step of 50% by 2020. RE100 is a global and collaborative initiative that includes more than 100 influential companies committed to 100% renewable electricity.

Other Danone policies related to its Low Carbon strategy

Danone publicly discloses its policies by posting them on its website.

Proposals for policymakers

- Elaborate on 'policies pursued in relation to environmental matters' in the NFRD by adding a point akin to that in Article 1(2)(a) of the NFRD, which lists a variety of aspects to be included in a description of the diversity policy. Here, further information could be listed of which aspects of environmental and climate policy could be added. The list of environmental matters contained in 4.6 of the Guidelines could be supplemented with further aspects specifically related to physical and transition risks of climate change to ensure that a greater spectrum of environmental and climate matters is considered and disclosed, where material;
- Elaborate in the Guidelines on how to make disclosures about policies related to environment and climate change in situations where they may be integrated into other company policies;
- Provide illustrative examples in the Guidelines of good practice in linking companies' policies and other non-financial information, such as policy outcomes, business model, principal risks and non-financial KPIs;
- Require disclosure of the links between the financial impacts of environmental and climate change matters, policies and risks, where material within the NFRD. This will help to facilitate enhanced disclosures of how companies identify, assess and manage climate-related risks and natural capital; and
- Adopt the TCFD's dual focus on risks and opportunities when assessing environmental, and by extension, climate matters in the context of the disclosure obligations under the NFRD. The Guidelines refer to assessment of potential impacts as part of the due diligence process. These potential impacts can be seen not only as risks, but also as opportunities.

Guidance for companies

- Outline clear, forward-looking policies related to climate and environmental matters, supported by a brief narrative noting the rationale for inclusion in the management report;
- Include specific narrative explaining how material climate-related and environmental risks are identified, assessed and managed, and the extent to which they are integrated into wider due diligence processes; and
- Refer to the Principles and REQ-02 (Policies, strategy and targets) and REQ-06 (Outlook) of the CDSB Framework[1].

Outcomes of policies on environmental matters

The review sought to answer the following question: *Does the report describe the outcomes of policies related to environmental and climate change matters*?

What does the NFRD ask for?

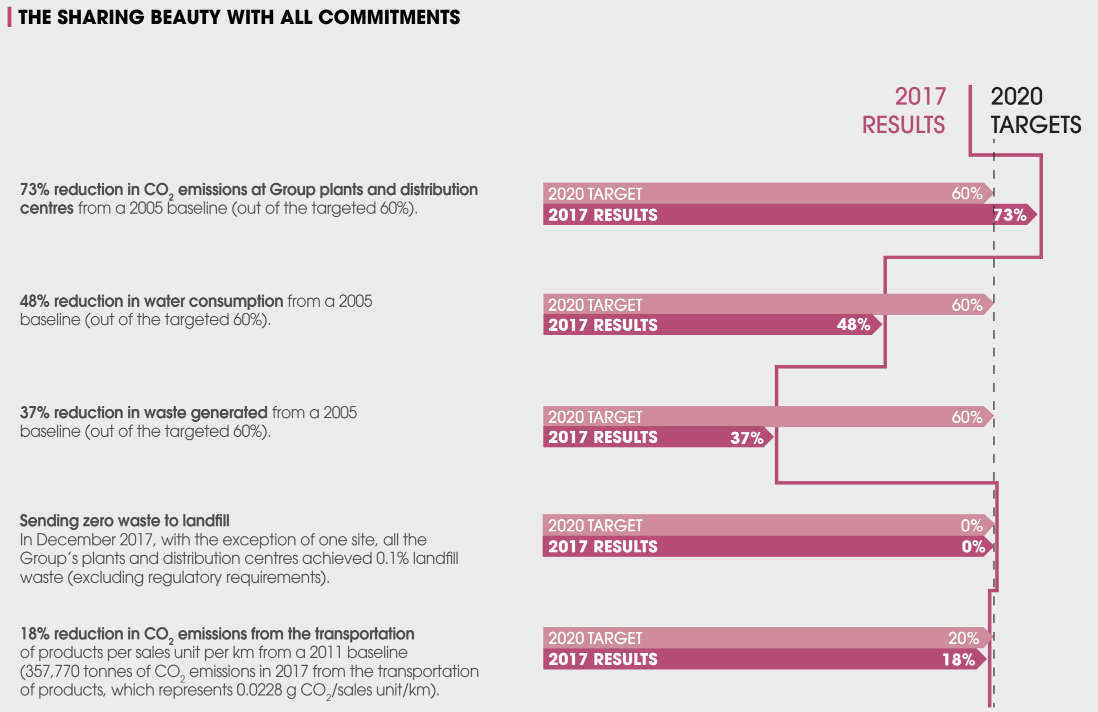
- Companies must include information on the outcomes of policies pursued by the company in relation to environmental matters "to the extent necessary for an understanding of the development, performance, position and impact of its activities, relating to…[such] matters" (Articles 19a and 29a of the Accounting Directive (as amended))[4].

Key findings from the review

- There are multiple approaches to disclosing outcomes of policies related to environment and climate-matters; and
- Of the 65% of companies that disclose one or more non-financial targets, 17% do not report on progress against such target(s).

Examples of reporting practice: Policy outcomes

A first example of reporting practice disclosing outcomes of policies relating to environmental matters is drawn from L'Oréal. In its 2017 Registration Document[14], it includes five relevant non-financial KPIs (related to carbon dioxide emissions, water and waste reduction) assessing progress in 2017 against 2020 targets.



A second example is drawn from Van Lanschot Kempen's 2017 Annual Report[9]. It notes the outcomes of policies related to climate and environmental matters, differentiating between assets on its balance sheet, its investments on behalf of clients, and its own organisation. Therefore, it has made some linkages between financial and non-financial outcomes. It cross-refers to its climate change policy statement, CSR supplement and website. Emphasis is placed on progress related to carbon emissions; however, no indication is given as to the future direction of travel by linking to a future target.

CLIMATE

With stakeholders increasingly expecting banks to help address climate change, we further enhanced our policies in this area in 2017. These make a distinction between the climate impact of 1) the assets on our balance sheet, 2) our investments on behalf of clients, and 3) our own organisation.

1. In 2017, we further developed and applied (using 2016 data) our methodology to determine the carbon emissions of the total assets on our own balance sheet, arriving at a total of 99,660 tonnes. This is more or less in line with our 2016 total of 103,951 tonnes (using 2015 data and updated methodology). Our calculations covered around two-thirds of our balance sheet assets; for more information, see our CSR supplement. We expect to fine-tune our approach again in 2018. At the same time, we aim to extend our measures to reduce our balance sheet's climate impact. In 2017, we started a pilot to make a selected group of mortgage clients more aware of energy savings and energy production (e.g. insulation, solar panels) and of the growing possibilities to finance these. Following a positive client response, we expanded the pilot to all mortgage clients.
2. In 2017, we also carried out a new assessment of the real-life carbon emissions of our assets under management. After our own first assessment in 2016 (based on 2015 data), this time we hired an external consultancy firm. Using its more developed methodology, it assessed the total carbon emissions of our assets under management (based on 2016 data) at 3.9 million tonnes. Our calculations only covered around 50% of all our AuM; see pages 35 and 50. Moreover, we enhanced our climate policy for client investments and improved its integration into our responsible investment policies. We engaged with companies that were lagging behind in terms of climate policies and performance, and encouraged them to take concrete measures to reduce their carbon emissions (for our climate change policy statement, see page 50 and kempen.com/en/asset-management/responsible-investment/climate-change).
3. We have continued to address Van Lanschot Kempen's own climate impact. Since 2011, we have set environmental targets for our own organisation and have been periodically monitoring our progress (see vanlanschotkempen.com/responsible/environment). In 2017, our carbon emissions were 5,257 tonnes (2016: 5,151 tonnes). Emissions per FTE were down 0.5% to 2.76 tonnes.

We received the highest score (A rating) on climate change from CDP, affirming the advanced character of our climate policy. Last but not least, our Chairman Karl Guha released a joint statement, together with the CEOs of 12 other financial institutions, to publicly affirm the seriousness of our efforts to reduce carbon emissions. For further details, see vanlanschotkempen.com/nl/nieuws/nieuwsberichten/2017-06-28-banken-roepen-op-tot-verdere-vergroening.

Proposals for policymakers

- Elaborate on what is meant by 'outcomes' as the disclosures in the Core Sample suggest that companies are interpreting this narrowly as reporting on progress against their non-financial targets. This could include expanding on the linkages amongst indicators, targets and policy outcomes sought; and
- Cross-refer to, or integrate, the metrics and targets from the TCFD into the Guidelines. This could serve as an example of how to explain the relationship between financial and non-financial outcomes, as suggested by the Guidelines.

Guidance for companies

- Embrace a more holistic view of disclosures of climate and environmental matters by linking policies, due diligence, KPIs and non-financial targets to outcomes;
- Disclose progress on the non-financial KPIs or highlight significant changes in results. Where this is not possible, provide a narrative as to why; and
- Refer to the Principles and REQ-02 (Policies, strategies and targets), REQ-05 (Performance and comparative analysis), REQ-06 (Outlook) of the CDSB Framework[1].

Principal risks related to environmental matters and their management

The review sought to answer the following question: *Does the report describe the principal risks related to environmental and climate change matters*?

What does the NFRD ask for?

- Disclose information on principal risks relating to environmental matters linked to the company's (or group's) operations including, where relevant and proportionate, its business relationships, products or services which are likely to cause adverse impacts in those areas; and explain how these risks are managed (Articles 19a and 29a of the Accounting Directive (as amended)).

Key findings from the review

- Specific disclosures on principal risks were examined using the list of climate-related risks identified by the TCFD (i.e. transition and physical risks). This was supplemented with consideration of other natural capital risks (e.g. biodiversity loss). 79% of the Core Sample identified at least one transition or one physical risk, however 28% identified both;
- More companies identified physical risks (56%) compared to transition risks (41%). The most commonly identified transition risk was regulation and policy changes. The most common physical risks were natural disasters (31%); water resources, including droughts (24%); flooding (18%); extreme weather (10%); and hurricanes (8%). (See Figure 4 for details on the transitional and environmental risks identified);
- Analysis of the Control Sample revealed that while 31% of companies identify climate change as a risk, only 2% consider it a principal risk; and
- Most companies (87%) do not specify a time horizon for risks with the exception of Unilever, Total, Shell and Diageo. Analysis of the Control Sample reveals that 5% disclose a time horizon.

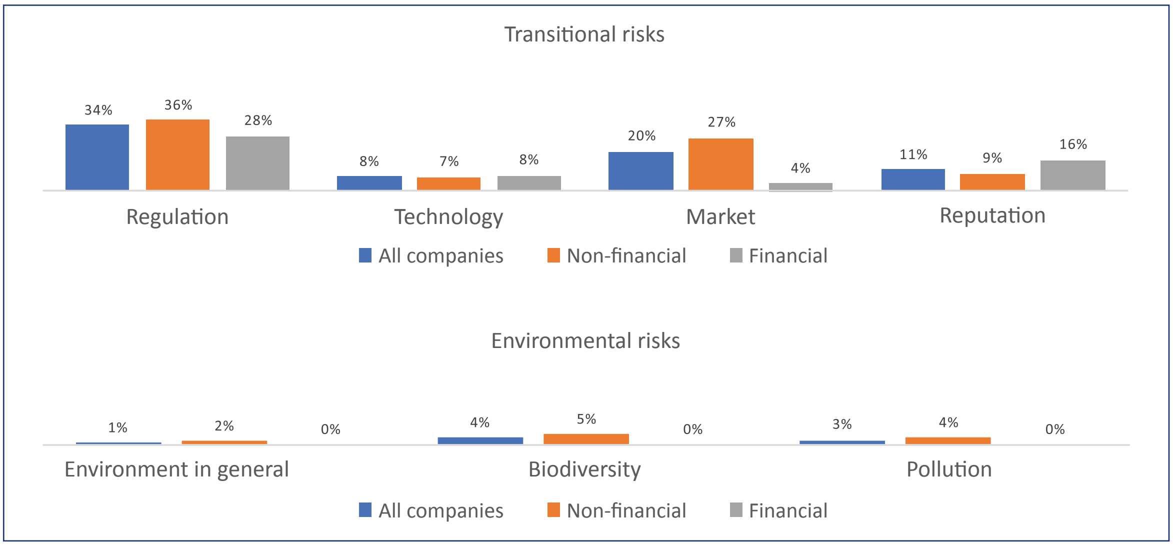


Figure 4: Percentage of Financial Sector and Non-Financial Sector companies identifying transition and environmental risks

Example of reporting practice: Principal risks relating to environmental matters and their management

The extract below from the 2017 Annual Report[15] of Atlas Copco illustrates one approach to disclosing principal environmental risks. The extract includes disclosures on both physical and transition risks. The table presents mitigating factors in keeping with the Guidelines. The diagram could be enhanced further by specifying the time horizons. The environmental risks are described, followed by a high-level explanation of the impact on the company, including on its operations and supply chain. The company also notes the opportunities environmental risks identified can bring, which is keeping the TCFD's dual emphasis on both risks and opportunities.

RISK	CONTEXT	MITIGATING FACTORS	OPPORTUNITIES
Environmental risks (external)	The primary drivers for external environmental risk are from physical changes in climate and natural resources, changes in regulations, taxes and resource prices. Increased fuel/energy taxes can increase operational costs. Regulations and requirements related to carbon dioxide emissions from products and industrial processes are gradually increasing. Changes in mean precipitation can affect all of Atlas Copco's operations and negatively affect operations either directly or by disrupting the supply chain.	■ Atlas Copco consistently develops products with improved energy efficiency and reduced emissions. ■ In its own operations, Atlas Copco has several key performance indicators (KPIs) that address resource and energy usage in order to minimize the costs and impact on the environment. ■ All cooling agents used in Atlas Copco products have a zero ozone-depleting impact during the product's lifecycle, and the aim is to continue to introduce cooling agents with lower Global Warming Potential (GWP).	→ Working proactively with environmental risks can provide significant opportunities to drive innovation at Atlas Copco. → Given that many customers are operating in areas of extreme water stress or scarcity, water efficient or water recycling products can have a strong customer appeal. Thus, this presents a strong business opportunity to extend Atlas Copco's innovations to the focused area of water consumption. → Climate change impacts and predictions can induce changes in consumer's habits and behavior. As a result of climate events Atlas Copco's customers can become more risk averse and demand sustainable products from the Group.

Proposals for policymakers

- Elaborate on what is meant by principal risks in the Guidelines given variances in the use of the term;
- Require a time horizon to be specified when making principal risk disclosures; and
- Better emphasise the links among policies, principal risks, KPIs and the associated time horizons.

Guidance for companies

- Provide comprehensive information on *material* climate-related and environmental risks, their likelihood and associated financial impacts;
- Make the connection between principal risks, materiality, policies, risk management processes, monitoring and KPIs;
- Disclose a time horizon when making disclosures on principal risks; and
- Refer to the Principles, REQ-03 (Risks and opportunities) and REQ-06 (Outlook) of the CDSB Framework[1].

Non-financial Key Performance Indicators

The review sought to answer the following question: *Does the report describe the key performance indicators relevant to the business, related to environmental and climate change matters?*

What does the NFRD ask for?

- Non-financial KPIs in relation to environmental matters relevant to the particular business (Articles 19a and 29a of the Accounting Directive (as amended)).

Key findings from the review

- Disclosure of non-financial KPIs increases with higher market capitalisation of companies;
- 65% of Core Sample companies disclose at least one non-financial target;
- 48% of the Core Sample companies report at least one target with a timeframe over which the target is expected to be achieved, a baseline and progress;
- Not all companies disclosing GHG emissions report targets associated with these: 81% disclose GHG emissions, but only 41% state emissions targets. All UK and French companies in the Core Sample disclose GHG emissions in their management report in comparison to approximately one in two (56%) German companies. This suggests a link between mandatory requirements (in France and the UK) and reporting practice (see Figure 5);
- After GHG emissions, water consumption (29%) is the second most disclosed non-financial target;
- 36% of companies disclosed environmental and climate KPI metrics in the Control Sample;
- 54% disclose progress against non-financial KPIs. More Non-Financial Sector companies (58%) disclose progress against non-financial KPIs, compared to Financial Sector companies (44%); and
- The majority of French (71%) and UK (69%) companies, but only 38% of German companies disclose progress against non-financial KPIs.

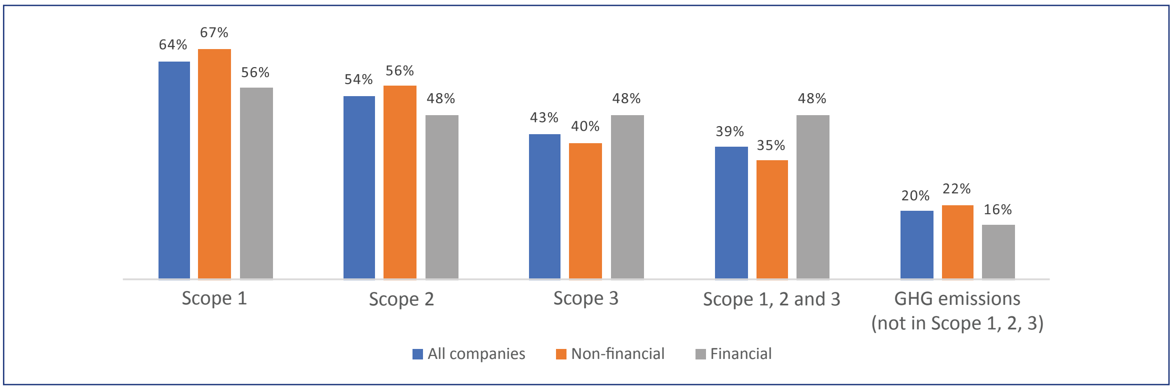


Figure 5: Percentage of Core Sample companies disclosing GHG emissions by industry group

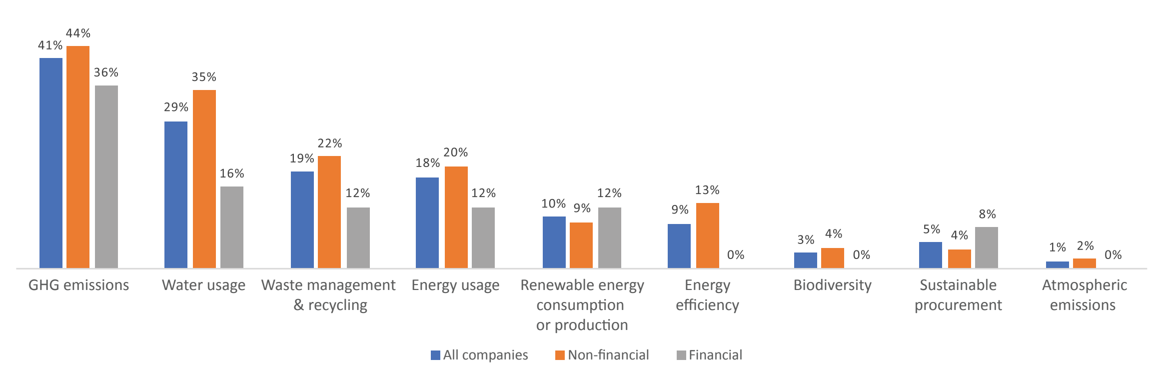


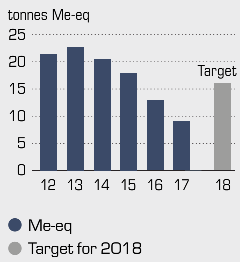
Figure 6: Percentage of Core Sample companies disclosing non-financial targets by industry group

Example of reporting practice: Non-financial KPIs

An example of Non-financial KPIs on environmental matters is given in the 2017 Annual Report[16] of Boliden. The extract communicates relevant and material KPIs to its particular business concerning metal discharges to water, metal emissions to air and sulphur dioxide emissions. Under each environmental target, it states the outcome sought for 2018 and measured against six years' data, allowing for consistent comparisons of annual disclosures.

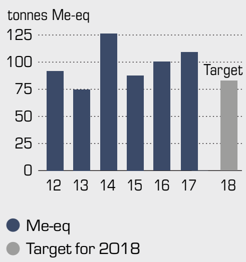
Environmental targets

Metal discharges to water
Discharges of metals to water shall decrease by 25% between 2012 and 2018



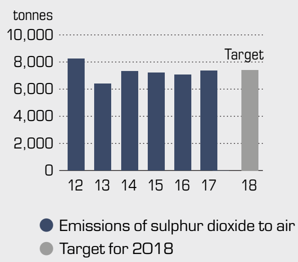
The environmental impact from discharges of metals to water has declined by 57% since the base year of 2012. Discharges have fallen at the majority of Boliden's units during 2017, with a new water treatment plant at one of the units accounting for a large share of the reduction.

Metal emissions to air
Emissions of metals to air shall decrease by 10% between 2012 and 2018



The environmental impact from emissions of metals to air has increased by 19% since the base year of 2012. The copper smelters have, as a result of the recycling of more complex materials, accounted for the majority of this trend. Boliden is currently carrying out investigations in order to improve treatment techniques, amongst others, with a view to turning this trend around. The emissions are within existing environmental permit limits.

Sulphur dioxide emissions
Sulphur dioxide emissions to air shall decrease by 10% between 2012 and 2018



Emissions of sulphur dioxide to air have declined by 11% in comparison with the base year of 2012. A number of investments are being made in order to further reduce these emissions.

Proposals for policymakers

- Define what information should be disclosed for "non-financial KPIs" and that this should include details on timeframe, baseline, progress and outcomes;
- Consider making amendments to the Guidelines to clarify the relationship between indicators, targets and outcomes;
- Consider mandating certain disclosures by energy and resource intensive sectors; and
- Consider amending the Directive to also oblige companies to disclose GHG emissions within their management report, as well as setting Science-based Targets[17] to reduce emissions and internal carbon prices in order to account for current and the potential future costs of carbon taxes and increasing energy prices. This will also help companies to ensure sustained economic competitiveness[18].

Guidance for companies

- Review KPIs disclosed to ensure they are SMART (Specific, Measurable, Achievable, Results-Oriented and Timebound) and linked to the relevant policies, targets and outcomes, as well as principal risks and material issues;
- Draw on data reporting guidelines from the London Stock Exchange Group's ESG reporting guidance[19], including:
  - Publishing ESG accounting principles;
  - Aligning ESG data boundaries and consolidation rules with financial rules used;
  - Ensuring ESG data coincides with the financial annual reporting cycle;
  - Providing raw and normalised data; and
  - Ensuring data is reliable and balanced.
- Make data accessible for report users (e.g. with data in tables);
- Consider use of Science-based Targets where appropriate;
- Refer to the baseline for reporting, and year-on-year progress against targets for non-financial KPIs relevant to the business;
- Use the GHG Protocol guidance[20] to disclose GHG emissions in Scope 1, 2 and, where appropriate, Scope 3, using the financial boundary setting approach, in conjunction with the CDSB Climate Change Reporting Framework[21]; and
- Refer to the Principles and REQ-02 (Policies, strategy and targets), REQ-04 (Sources of environmental impacts) and REQ-06 (Outlook) of the CDSB Framework[1].

Part 2

First responses to the NFRD and TCFD alignment

This part of the review examines whether the NFRD is also a useful vehicle for implementing the TCFD recommendations across the EU.

Initial considerations in aligning the NFRD and TCFD

The TCFD recommendations offer a voluntary means of increasing the level and enhancing the scope and quality of disclosure on climate-related matters. Although it is voluntary and the NFRD is a mandatory mechanism for achieving changes in reporting practices on a broader range of non-financial matters (i.e. covering the full spectrum of ESG issues), the two schemes share some characteristics. For example, both schemes seek to improve transparency and disclosure in relation to environmental information and both seek to support a sustainable, stable global economy by combining long-term profitability with environmental protection.

The TCFD recommendations are aimed at providing decision-useful and forward-looking information on climate-related risks and opportunities, strategies, governance practices, metrics and associated financial impacts. The TCFD's focus on the connection between financial and non-financial information relating to climate risks and opportunities moves climate-related information beyond the realm of corporate social responsibility (CSR) or sustainability information to mainstream business. The four TCFD core recommendations on governance, strategy, risk management, metrics and targets are mirrored in established mainstream reporting practice.

As it focuses on a single theme, the TCFD's treatment of climate-related information is, by definition, more comprehensive than that required under the Directive. The Guidelines 'take into account as far as possible' the Task Force's work. However, the opportunity for the NFRD to serve as a useful vehicle for implementing the TCFD recommendations across the EU is likely to be enhanced by more targeted alignment activity beyond simply 'taking in account' the TCFD's work.

While climate change is not explicitly referred to in the NFRD under environmental matters, the Guidelines refer to the UN SDGs[v], the Paris Agreement[22] and TCFD. Therefore, despite the absence of the term *climate* from the language of the Directive, the NFRD's intention appears to cover climate under the auspices of "environmental matters". This ambiguity, however, has created uncertainties for preparers and inconsistences in reporting practice when comparing disclosures, as shown throughout the findings in this review.

Both the NFRD and the TCFD recommend disclosure through mainstream reports and that the company's established governance processes should be used where appropriate. The easements in the TCFD's recommendations are not meant to override national law.

The Task Force adds that "the governance processes for these disclosures [in other official company reports] would be similar to those used for existing public financial disclosures and would likely involve review by the chief financial officer and audit committee, as appropriate"[2]. There is stronger emphasis on corporate governance of climate-related matters in the TCFD than in the NFRD.

Article 19a(4) of the Accounting Directive allows for disclosure of environmental information outside the non-financial statement of the management report and in a 'separate report' so long as it is "published together with the management report" or "made publicly available within a reasonable period of time, not exceeding six months after the balance sheet date, on the undertaking's website, and is referred to in the management report"[4]. This is a further area that requires harmonising for effective NFRD-TCFD alignment.

[v] Of particular relevance is SDG Goal 12 on Responsible Consumption and Production with its underlying Target 12.6 – encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle – and Goal 13 on climate action – take urgent action to combat climate change and its impacts (United Nations (2015) Sustainable Development Goals. [Online]. Available from: https://www.un.org/sustainabledevelopment/climate-change-2/)

Insights into TCFD adoption

Significant momentum is driving the uptake of the TCFD recommendations, with over 500 companies globally supporting them[23]. Alongside the companies supporting the recommendations, CDSB coordinates a group of 20 leading companies who have committed to implement the TCFD recommendations as practicably as possible within three years, an accelerated commitment to the TCFD's five-year adoption curve. Five of the companies in this group are included in the Core Sample (Ferrovial, Galp, Iberdrola, Signify and Unilever)[24]. The three-year time frame in the commitment acknowledges that reporting practices and disclosures will take time to become embedded in business as usual and to gain more widespread adoption.

Although the final TCFD recommendations were produced in June 2017, some companies within the Core Sample have already made TCFD recommended disclosures in their 2017 management reports on the basis of the draft recommendations. It is likely that companies have considered earlier drafts of the TCFD final report made available by the Task Force in its consultation process. In fact, **38% of companies in the Core Sample have referred to the TCFD in their management report**, demonstrating that companies are already taking first steps towards making the connection between the NFRD and TCFD in their management reports.

In September 2018, the Task Force published results from its review of 1800 corporate reports globally (the TCFD 2018 Status Report, Extract of Figure E1), including the following key 'takeaways'[25]:

*"**The majority disclose some climate-related information.** The majority of companies reviewed disclosed information aligned with at least one recommended disclosure, usually in sustainability reports.*

Financial implications are often not disclosed. *While many companies disclose climate-related information, few disclose the financial impact of climate change on the company.*

Information on strategy resilience under different climate-related scenarios is limited. *Few companies describe the resilience of their strategies under different climate-related scenarios, including a 2°C or lower scenario...*

Disclosures vary across industries and regions. *Companies' areas of focus in terms of climate-related financial disclosures vary significantly. For example, a higher percentage of non-financial companies reported information on their climate-related metrics and targets compared to financial companies; but a higher percentage of financial companies indicated their enterprise risk management processes included climate-related risks. In terms of regional differences, a higher percentage of companies in Europe disclosed information aligned with the recommendations compared to companies in other regions.*

Disclosures are often made in multiple reports. *Companies often provided information aligned with the TCFD recommendations in multiple reports—financial filings, annual reports, and sustainability reports."*

While the TCFD 2018 Status Report, referred to above, provides a snapshot of the state of TCFD implementation, it only refers to the NFRD once on p.72 under the heading 'Government Support' for the TCFD, and specifically in the context of the inclusion of TCFD recommendations in the Guidelines and not to alignment of the TCFD with the Directive itself:

"In August 2018, the European Commission published its Action Plan: Financing Sustainable Growth, in which it commits to revise the guidelines of the Non-Financial Reporting Directive by the second quarter of 2019 to include guidance on disclosing information in line with the TCFD recommendations. The European Commission created the Technical Expert Group on Sustainable Finance to implement elements of the Action Plan, including revising the guidelines"[25].

For the alignment to be effective and influence widespread corporate practice, the TCFD recommended disclosures need to be incorporated into Directive itself. The extract above suggests that political will currently exists within the Commission to support better aligned NFRD-TCFD disclosures which could be galvanised further. Advocacy efforts will need to be undertaken to ensure that this continues as the next Commission defines and embarks on their programme of work in this area.

Governance: Board oversight and management responsibilities

This review examined the following research questions directly aligned to the two TCFD governance recommended disclosures (See Figure 4: Recommendations and Supporting Recommended Disclosures in the TCFD Final Report[2]): *Does the report describe the board's oversight of environmental and climate change matters? Does the report describe management's role in assessing and managing environmental and climate change matters?*

What does the NFRD ask for?

- Board oversight of environmental and climate change matters is not a disclosure obligation of the NFRD; and
- The NFRD makes some references to governance: Recital 18 refers to "management decisions", "effective oversight of the management and successful governance of the undertaking"; and Recital 19 refers to policy on another non-financial matter (i.e. diversity) which "should be part of the corporate governance statement" required under Article 20 of the Accounting Directive (as amended)[4]. While there is no specific NFRD obligation in relation to disclosure of the governance of climate and environmental matters, it is noted that a governance disclosure obligation exists for certain non-financial information on employee matters (i.e. diversity).

Key findings from this review

- Approximately half (49%) of the companies in the Core Sample disclosed both board oversight and management's role in environmental or climate-related matters. However, disclosures on governance are considerably higher for environmental matters than for climate change;
- Core Sample companies made some disclosures of board oversight of climate-related or environmental matters, even though this is not a NFRD obligation: Three-quarters (75%) of companies disclose board oversight of environmental or climate-related matters. More specifically, 60% of companies provide information on board oversight of environmental matters, but only 15% do so on climate-related matters (See Figure 7);
- 31% of UK companies and 21% of French companies disclose within their management report board oversight of climate-related issues. No German companies used the management report for disclosing such information (See Figure 7). When comparing the findings for board oversight of environmental-related issues (see Figure 7), 63% of German and UK companies, and 71% of French companies made disclosures;
- Slightly more Financial Sector companies (80%) have board oversight of environmental or climate matters than Non-Financial Sector companies (73%). This trend is mirrored when looking at the split between board oversight of environmental matters, with 64% of Financial Sector companies having board oversight compared to 58% Non-Financial Sector companies. There are similarly low levels of disclosures of board oversight of climate-related issues by Financial Sector (16%) and by Non-Financial Sector companies (15%);
- 64% of companies disclose management's role in assessing and managing environmental or climate change matters. This is the same when disaggregated by Financial and Non-Financial Sector companies. 58% of companies provide information on management's role on environmental matters, but only 20% do so on climate-related matters (See Figure 8); and
- Of the 51 companies in the Core Sample disclosing information on management's role in environmental or climate-related matters, 18% linked climate or environmental targets to remuneration.

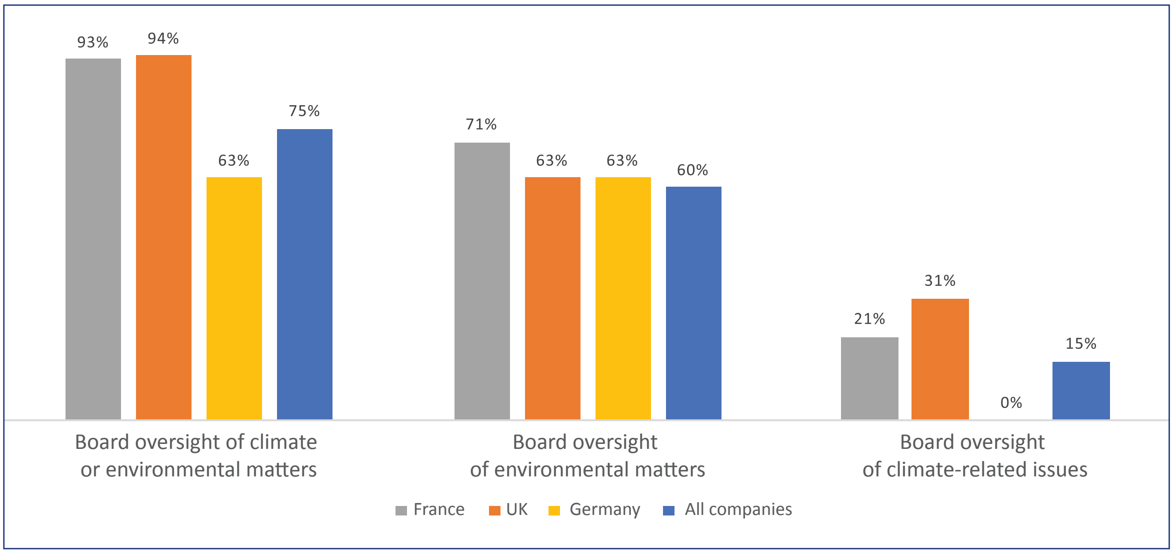


Figure 7: Disclosures of board oversight of climate or environmental matters by Core Sample companies in the UK, France, Germany and all companies

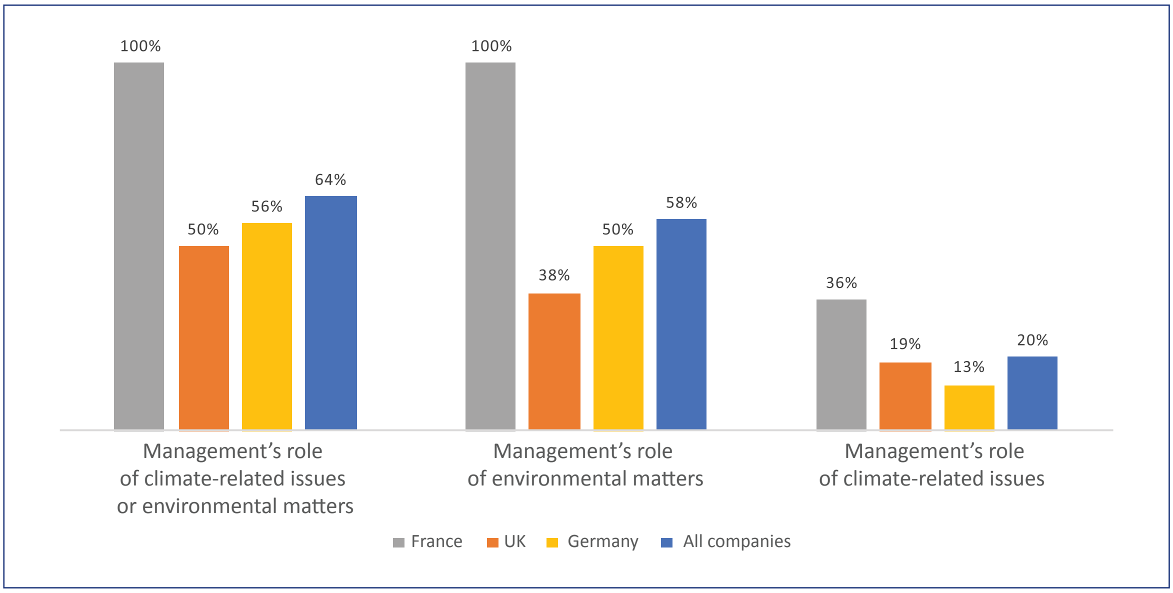


Figure 8: Disclosures of management's role in assessing and managing environmental and climate change matters by Core Sample companies in the UK, France, Germany and all companies

Example of reporting practice: TCFD governance core element – board oversight and management responsibility

An example of a company disclosure related to board oversight of climate and environmental matters is drawn from the 2017 Annual Report and Accounts of Galp[26]. It discloses that "certain corporate governance matters are widely discussed in the Sustainability Committee". This committee is chaired by the independent vice-chair of the Board of Directors with a permanent seat on the committee by the Chair of the Executive Committee amongst others. In reporting to both the Executive Committee and the Board of Directors, the Sustainability Committee serves as a tangible institutional mechanism for facilitating board oversight of climate, environmental and broader sustainability matters. There is a clear reporting structure outlined in the narrative. The extract also details the Sustainability Committee's focus in 2017, which included analysis of climate and energy challenges, metrics and targets, and define sustainability requirements at business development, i.e. assuming management responsibility in assessing and managing environmental and climate matters. The work in 2017 also covered analysing both risks and opportunities, the latter of which is emphasised in the TCFD.

This understanding is due to the corporate governance model implemented, which, as described in section 15 of this Chapter, includes a Board of Directors that assesses the operation of the governance system and largely consists of non-executive members (including the chairman), who monitor the overall performance of the Board of Directors and whether directors' profiles are appropriate for the exercise of their duties. In this context, it should also be noted that there is: A Remuneration Committee, which evaluates the performance of executive directors with the support of non-executive directors; and an Audit Board, which analyses the structure and governance practices adopted in order to verify their effectiveness. In addition, certain corporate governance matters are widely discussed in the Sustainability Committee.

Sustainability Committee

At Galp, management for sustainability is deemed strategic and involves the incorporation of principles, approaches and practices that favour the long-term value creation component. It, therefore, involves managing the creation of sustainable and lasting value that generates confidence in the future for the various stakeholders.

With the aim of creating sustainable value, in 2012 the Sustainability Committee was set up with a mission to ensure the integration of sustainability principles in the management of the Group, by promoting best industry practices in all business and corporate areas.

The Committee is chaired by the independent vice-chairman of the Board of Directors, while its permanent members are the Chairman of the Executive Committee, the executive director who coordinates the area of sustainability, the chief financial officer, the head of EQS and Sustainability Department the heads of the business areas and relevant corporate departments.

This body reports directly to the Board of Directors and the Executive Committee.

In 2017, the Sustainability Committee met four times with the agendas covering the following matters:

- analysing Galp's sustainability context, in particular on climate and energy challenges level, human rights, safety and environment, as a support to the strategy and development of operations in the different geographies;
- analysing Galp's performance and setting of commitments, objectives and goals, aligned with the best practices and benchmarking with peers and benchmark performers;
- defining the sustainability requirements at the business development, the plans for mitigation of deviations and analysing risks and opportunities;

28. Composition of the Executive Committee and/or details of the Board Delegates, where applicable.

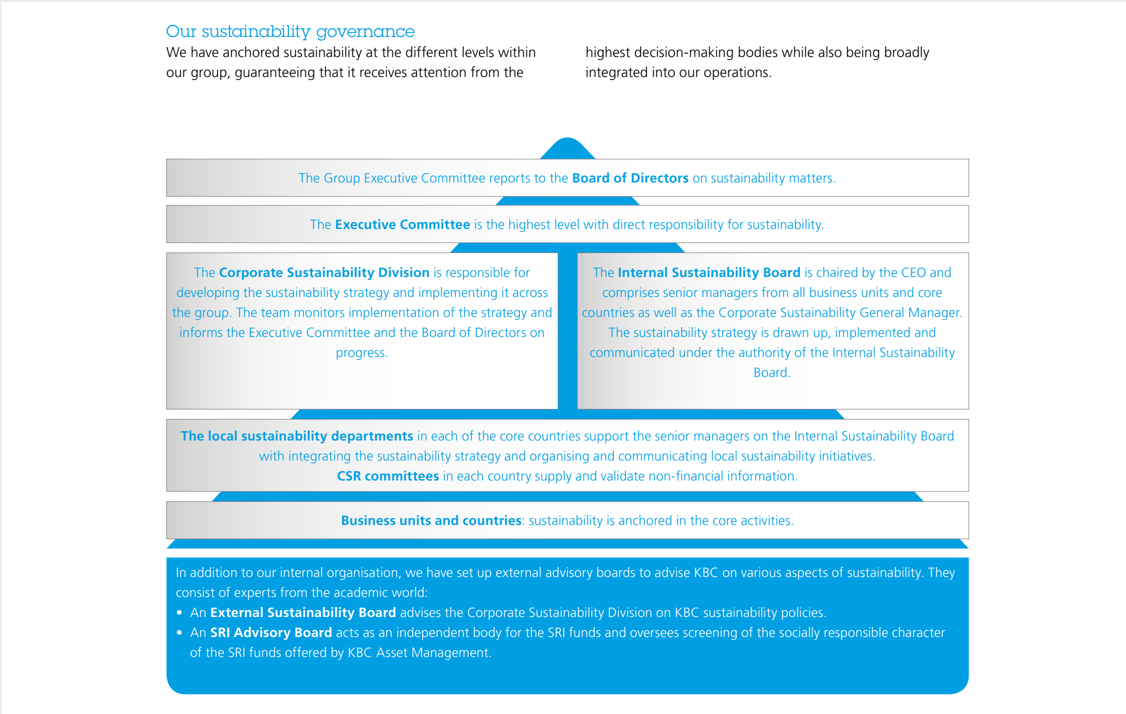
Galp's Executive Committee currently consists of the following seven directors:

Chairman: Carlos Gomes da Silva (CEO)

Members: Filipe Crisóstomo Silva (CFO)
Thore E. Kristiansen
Carlos Costa Pina
José Carlos Silva
Pedro Ricardo
Tiago Câmara Pestana

Example of reporting practice: TCFD governance core element – the interface between board oversight and management responsibility

A second example is drawn from the 2017 Annual Report of KBC Group[27]. KBC Group describes the roles, responsibilities and relationships among different levels and internal functions throughout the business. The Group Executive Committee report sustainability matters to the Board who has ultimate oversight and responsibility. The Executive Committee has management responsibility. The example also shows clearly which business areas have day-to-day responsibility for managing environmental and climate matters.



Proposals for policymakers

- Include the TCFD recommended governance disclosures a) and b) in an amendment to the 'corporate governance statement' in Article 20 of the Accounting Directive (as amended), and in the accompanying Guidelines; and
- Make a clear distinction between the reporting requirements on board oversight and management's role in the Guidelines to enhance disclosures in this area.

Guidance for companies

- Make the two recommended TCFD disclosures on governance in the management report;
- Describe the positions or committees charged with responsibility for assessing and managing environmental matters and climate-related risks and opportunities (e.g. audit, risk, sustainability, etc.), and note the frequency of meetings;
- Describe how the board monitors and oversees progress against goals and underlying targets for addressing environmental matters and climate-related risks and opportunities;
- Describe whether and how performance metrics in relation to climate and environmental matters are incorporated into remuneration policies; and
- Refer to the Principles and REQ-01 (Governance), REQ-02 (Policies, strategy and targets) and REQ-06 (Outlook) of the CDSB Framework[1].

TCFD emphasis on forward-looking information and use of scenario analysis

A key feature of the TCFD is its emphasis on forward-looking information: "The Task Force encourages organisations to undertake both historical and forward-looking analyses when considering the potential financial impacts of climate change, with greater focus on forward-looking analyses[2]". Reporting the outcomes of different climate-related scenarios provides a good description of the resilience of a company's future strategy. Therefore, this review posed the following research question drawn from the TCFD-recommended disclosure c) of the core element on strategy: *Does the organisation describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario?* The TCFD also distinguishes between physical and transitional risks. Corporate disclosures in this respect have been discussed further in the Principal Risks section above.

What does the NFRD ask for?

- Scenario analysis is not a disclosure obligation of the NFRD;
- However, Recital 3 to the NFRD refers to "disclosure of non-financial information [as] vital for managing change towards a sustainable global economy by combining long-term profitability with social justice and environmental protection"[3].

Key findings from this review

- There are limited disclosures on scenario analysis. Of the Core Sample, only Unilever disclosed outcomes of scenario analysis within their management report, including details of analysis of a 2°C scenario, in keeping with the Guidelines;
- Four companies, Galp, BP, Total and Shell, stated in their management report that they have conducted scenario analysis; however, they do not provide details on assumptions of their analysis or impact; and
- A further seven companies in the Core Sample (9%), five of which are banks, reported that they are conducting or have expressed their intentions to conduct scenario analysis.

Examples of reporting practice: Scenario analysis

Unilever discloses in its 2017 Annual Report and Accounts[28] how it has considered the impact of climate change on its business in 2030, taking into consideration 2°C and 4°C scenarios. It states its key assumptions for each scenario and applies a materiality threshold to assess impacts. The main impacts under each scenario are disclosed and consideration is given to financial risks arising from them. The information is then linked back to inform the company's business model, sales, operations, and to identify further work and evidence needs.

UNDERSTANDING IMPACT

Climate change has been identified as a principal risk to Unilever (see page 28). To further understand the impact that climate change could have on Unilever's business we performed a high-level assessment of the impact of 2°C and 4°C global warming scenarios. The 2°C and 4°C scenarios are constructed on the basis that average global temperatures will have increased by 2°C and 4°C in the year 2100. Between today and 2100 there will be gradual changes towards these endpoints and we have looked at the impact on our business in 2030 assuming we have the same business activities as we do today. We also made the following simplifying assumptions:

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

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

conduct further analysis on the impact of climate change on our agricultural supply chain and the impact of changing weather patterns (including both persistent effects such as droughts and the temporary effects of storms) on critical markets and manufacturing.

RESPONDING TO RISKS AND OPPORTUNITIES

We are taking action to address our climate change risks in line with the output from the scenario analysis, as well as benefiting from any opportunities these changes could present across our value chain. In 2018, we will launch the Sustainable Agriculture Code (SAC) 2017 which gives Unilever, our farmers and suppliers a set of rigorous standards to drive sustainability improvements across our supply chain. The revised SAC incorporates standards on Climate Smart Agriculture. Further risk assessment on individual crops and countries of origin will allow us to focus efforts on implementation of Climate Smart Agriculture. We are also committed to eliminating the deforestation associated with commodity supply chains, with a particular focus on sustainable palm oil production (see pages 13 and 15).

Our 2030 carbon positive target commits us to eliminating fossil fuels from our manufacturing operations by using only energy from renewable sources and supporting the generation of more renewable energy than we consume, making the surplus available to the communities in which we operate (see page 15). Since 2008, our factories have avoided costs of over €490 million through cumulative energy savings – and in doing so minimising our exposure to future regulatory costs.

Climate change has the potential to impact our brands in different ways depending on the raw materials used in the production of our products and their end use. We are developing product innovations with less greenhouse gases across the value chain and less water in use (see pages 11, 13 and 14). Our categories' response to climate change has been guided by a review of the areas where we can have the biggest impact on mitigating climate risk or benefiting from climate opportunity.

In contrast, energy company Galp chose to use four scenarios "with different levels of technological and regulatory disruption" and "different outputs regarding Oil & Gas demand and the global energy mix" to test the resilience of its strategy and to identify both risks and opportunities of each scenario for long-term value creation[26].

Proposals for policymakers

- Include the strategy TCFD core element recommended disclosure c) in the NFRD;
- Provide further guidance on resilience in the Guidelines; and
- Provide some specificity on the scenarios a company could adopt in the Guidelines – TCFD recommendations stipulate that at least two different scenarios with one 2°C or lower should be used. Given the recent IPCC report[29], it would be prudent to use a 1.5°C scenario.

Guidance for companies

- Even if a company has not conducted scenario analysis, it is possible to signpost where the company has made progress on integrating forward-looking information into reporting;
- Focus the company reporting strategy on the financial impacts of climate-related risks and opportunities and any efforts to develop scenario analysis; and
- Refer to the Principles, REQ-03 (Risks and Opportunities) and REQ-06 (Outlook) of the CDSB Framework[1].

First steps on climate-related financial disclosures

While the NFRD is in its first year of reporting, one in three companies in the Core Sample have shown they are making first steps to prepare for voluntary TCFD disclosures in their management report, within the first reporting year since the TCFD Final Report was published. Having an overview of some of these initial TCFD reporting practices will aid in identifying opportunities for NFRD-TCFD alignment and where further impetus is required. Thirty companies within the Core Sample have mentioned the TCFD recommendations in their management reports. Selected highlights of these disclosures are provided here. For details of the full 30 companies, see cdsb.net/NFRreview.

Enel's 2017 Annual Report[30] considers exposure to climate change as one of the main risks it faces under the wider umbrella of environmental sustainability. The Enel Group has signed a letter of support for implementation of the TCFD. To take this support forward within the business, it created a working group to develop long-term climate models, define key climate scenarios, map climate-related risks and opportunities, and focus on financial reporting related to climate change – all necessary preconditions for effective climate-related disclosure. Enel uses scenario analysis as a tool to "assess the possible economic and financial impacts on the business and to evaluate the Group's strategy and the related risk management and governance elements". The core TCFD elements are also considered holistically. The NFRD could benefit further from adopting a similar interconnected approach to facilitate achievement of its outcomes.

ING, in its Group Annual Report 2017[31], sees publication of the TCFD report as a key development in 2017 and acknowledges the important role of the TCFD to "encourage investors to shift to more low-carbon and climate-smart options as companies become more transparent about reporting on the financial implications of climate change". It includes its climate-related disclosures in a `Non-financial appendix', where it lists the 11 recommended disclosures across the four core elements of the TCFD and then signposts where in the Annual Report and "other Public Disclosures" this information can be found. This appendix provides an accompanying narrative on how the group has identified climate-related risks and opportunities and has approached climate change governance. Its narrative surrounding ING's climate change strategy recognises where further work is needed: "As reported in our 2016 annual report, the results were not accurate enough to be published and there is still no market for measuring financed emissions. ING therefore intensified the search for the right metrics and methods…". Under the recommended TCFD disclosure c) of strategy and a) of risk management, ING states that "analysis is in development". This is a key point as full adoption of TCFD will take time, a point which the Task Force acknowledges in its five-year adoption and uptake curve. ING note that "… it will take several years for companies like ING and its clients to be able to align fully with the recommendations. In fact, it is only as our clients start to disclose more completely that we can use that data for our own analyses and disclosures. However, we are not waiting for a perfect world before we take action". It is therefore helpful to report where on that journey the company or group is.

Ferrovial S.A. and its subsidiaries' 2017 management report[32] states on the report cover that it 'meets the requisites' of the NFRD and related Spanish national legislation, 'observes' the TCFD recommendations and 'aligns' with the CDSB Framework. Its climate strategy refers to its commitment to implement the TCFD. To this end, it created an internal project, Ferrovial 2020 "to identify and evaluate risks and business opportunities related to climate change and the new associated regulatory framework".

In its 2017 Annual Report and Accounts[28], **Unilever** notes its public commitment to TCFD implementation and emphasises the value of adopting the TCFD recommendations: as "an important step forward in enabling market forces to drive efficient allocation of capital and support a smooth transition to a low-carbon economy". It adopts a two-pronged approach to its reporting strategy by continuing "to integrate climate-related disclosures throughout the Strategic Report narrative", as well as including a dedicated section of its report on climate change risks and opportunities. A separate section was included to give it heightened focus "in recognition of the growing significance of the impacts of climate change on [its] business".

Eni in its 2017 Integrated Annual Report[33] states that it is "part of the TCFD…targeted to a more transparent disclosure about risks and opportunities relating to climate change". It adds in its section identifying climate change as a strategic risk that as "part of the TCFD, [it was] supporting the progress and correct transposition of recommendations issued by [the] TCFD". Moreover, Eni in its consolidated disclosure of non-financial information statement produced in accordance with the relevant NFRD implementing Italian Legislative Decree states that the contents under the Path to Decarbonisation heading of its management report are drafted in accordance with the TCFD recommendations. Eni adds that it is "committed to gradual implementation" of the TCFD recommendations. Its approach to disclosure is to provide a Dashboard signposting the key elements disclosed under the four TCFD core elements in reports and documents (notably in both its Integrated Annual Report and Sustainability Report).

National Grid, in its 2017/18 Annual Report and Accounts[34] considered climate impact under the umbrella of environmental sustainability, and in the same section expressed its commitment to implementing the TCFD recommendations. It mapped its TCFD disclosures in a 'first response' table, and noted it had "embarked on a longer term process to determine how we most clearly articulate our assessment of financial impacts of climate change and climate-related scenarios, including a 2°C scenario". It also noted that the TCFD included further supplemental guidance applicable to energy companies. Its approach to management of climate risks cross-refers to the principal risks section of the management report. In terms of metrics and targets, it takes a collaborative approach to their development "speaking to our peers, investors, credit rating agencies and advisors" which suggest a desire for information generated through the TCFD recommendations to be decision-useful.

Santander in its 2017 Annual Report[35] also notes that the TCFD recommendations incorporate for the first time "stress exercises that include different climate scenarios". It states that it has "a Map of Uses in place to strengthen the alignment of scenario analysis for each risk type, along with continuous improvement of such uses". It points out that the TCFD recommendations "will imply a significant advance in the reporting of risk and opportunities associated with climate change by financial institutions". Thus, it suggests that TCFD implementation requires a step change in reporting practices.

Lloyd Banking Group in its 2017 Annual Report and Accounts[36], under the Environment heading, welcomes the TCFD recommendations and explains it has mapped its approach to TCFD implementation. It is "developing a strategy and implementing processes to: Assess the materiality of climate risks across [its] business; Identify and define a range of scenarios, including relevant physical and transition risk; Evaluate business impacts; and Identify potential responses to manage the risks and opportunities". One page of its report summarises both its "climate-related financial disclosures" with a narrative around the four core TCFD elements and a table stating how the Group complies with the non-financial information statement required under relevant national NFRD implementing legislation (e.g. s.414CA and s.414CB of the UK Companies Act 2006[37]). In the Non-Financial Information Statement table, Lloyds refers to environmental matters and signposts to the environmental statement where policies and standards governing its approach lie. It cross-refers to other parts of the report, e.g. risk management. Climate is treated separately although having them on the same pages suggests complementarity.

The TCFD disclosures on its strategy refer to its 2017 review of how it integrates environmental sustainability into its strategy and risk management processes. It states that it is "committed to supporting the transition to a low carbon economy through [its] financial products and services, including renewable energy services". Under governance, it refers to a subcommittee of the Board, the Responsible Business Committee and the Sustainability Committee. On risk management, amongst other areas, it identifies the physical risk of flooding as climate risk and signposts to environmental risk management elsewhere in the report. And on metrics and targets, Lloyds discloses that it is "working to develop strategic commitments and targets in response to climate-related risks and opportunities, with different parts of the business feeding into the target setting process". The cross-business engagement effort is also a practical first step in preparing for TCFD disclosures. It also discloses its CO_2 emissions and adds that it "will also consider the supplementary industry specific recommendations for the financial sector". Lloyds Banking Group is a further company stating its plans to undertake a TCFD review. It states in 2018, it will "commence a systematic review of climate-related risks and opportunities across the Group's core divisions".

Under risk management in its 2017 Registration Document[38], **Total** discloses its processes to identify, assess and manage risks and how climate-related risks are integrated into global risk management. Specific metrics and targets are signposted to elsewhere in the report. It also includes a "TCFD Correspondence Table" (similar to ING's table referred to above), with the 11 recommended disclosures, cross-referring to the information in Total's reporting in the management report, its 2017 Climate Report, and 2017 CDP Climate Change Questionnaire response.

In summary, the 30 companies in the Core Sample that have referenced the TCFD recommendations provide an overview of the approaches to and nature of the corporate support for and disclosures on climate-related risks and opportunities in line with the TCFD recommendations. What becomes apparent from the above snapshot is that **there is great diversity in the approach taken, level of disclosures in this area, and where each company is in their TCFD reporting journey.** As the body of reporting practice continues to grow and disclosures evolve, further opportunities for harmonisation should emerge. However, **before processes become too embedded, now is the opportune time to ensure greater alignment between disclosures related to environmental and climate matters under the NFRD and those of the TCFD.**

Promoting greater NFRD-TCFD alignment

This review has found some harmonisation between the disclosure obligations of the NFRD on environmental matters and the TCFD, as well as some areas of the TCFD such as scenario analysis and financial linkages of climate-related risks and opportunities not covered by the NFRD. Where companies are reporting against the NFRD, some are also making some climate-related disclosures aligned to the TCFD recommendations. This is typically less than the disclosures made by companies on environmental matters under the NFRD.

Articles 19a and Articles 29a of the Accounting Directive should make explicit reference to climate in the list of information to be disclosed in the non-financial statement. There is a tangible opportunity for all 11 recommended disclosures (as contained in Figure 4 of the TCFD Final Report[25]) to be incorporated in the NFRD, as part of the review of the NFRD and its Guidelines. The Technical Expert Group on Sustainable Finance should strengthen the linkages between financial and non-financial information in disclosures relating to environmental and climate matters in the non-binding guidelines. The review of the Guidelines further affords an opportunity to emphasise in the Guidelines tools available for alignment, including how principles of the NFRD-TCFD and CDSB Framework align.

For companies, it is possible to make first steps at implementing the TCFD recommended disclosures as they consider their disclosure obligations for environmental and climate-related matters under the NFRD. There is a growing body of knowledge which can be drawn upon through the TCFD Knowledge Hub[39], including guidance, tools, events and case studies.

Conclusions

Initial response to the NFRD obligations on information on environmental matters

When embarking on this review earlier this year, CDSB and CDP recognised that 2018 afforded an opportune time to examine initial responses of Core Sample companies to the Non-Financial Reporting Directive (NFRD). One reporting cycle covering the 2017 financial year had passed for those entities which met the Directive's new criteria for including a non-financial statement in their management report. The aim of this review was to generate an evidence base of corporate reporting practices on environmental matters under the first year of reporting under the NFRD. This could also serve as a baseline for measuring changes in reporting practices and in future assessments on the state of European corporate reporting of non-financial information. The review also considered what was recommended in the reporting methodology of the non-binding guidelines to the Directive, produced in 2017 as a Communication from the Commission.

When considering business model disclosures, it was found that **no standardised approach** existed despite four in five companies (83%) describing their business model in their management report. Less than half of the companies (44%) in the Core Sample disclosed how their business models were affected by environmental or climate-related matters. Put another way, over half of companies in the Core Sample (56%) either neglected to disclose information on environmental or climate-related matters within their business model disclosure, or the review assumed they concluded that environment or climate-related information was not material to their business. While disclosures in themselves are useful, it is also helpful for companies to share their reasoning for omitting such information. This is a requirement of Article 19a(1)(d), but the review found **negligible evidence of clear and reasoned disclosures around omissions of environmental and climate policies.**

When considering disclosures by companies in the Core Sample of policies pursued in relation to environmental matters and implementation of due diligence, **three and a half times as many companies (70%) made disclosures on environmental or broader sustainably policies than on climate-related policies (20%)**. This is a trend, which was repeated in the Control Sample, with 31% making disclosures on environment and 7% on climate. Could this difference be attributable to disclosures on environmental matters being mandatory under the NFRD whereas the position on climate-related information is ambiguous? Just over three-quarters of Core Sample companies also disclosed the role of environment or climate-related matters in their finances and investments, making a connection between financial and non-financial information. Moreover, less than a quarter (23%) had a clear statement in their management report that climate or environment was integrated into their overall due diligence processes. 4% of companies disclosed their due diligence processes for both environmental and climate risks, despite the close association between the two, particularly in the context of physical risks. Over twice as many companies disclosed how they identified, assessed and managed climate risks (35%) in comparison to environmental risks (15%).

When considering disclosures by Core Sample companies of outcomes of policies on environmental matters, it was found that there are varying approaches to disclosing outcomes of policies related to environment and climate. While 65% of companies in the Core Sample disclosed one or more non-financial targets, 17% failed to report progress against the target. Advice on what is meant by outcomes of policies and the interlinkages among indicators, targets and policy outcomes could make corporate disclosures more effective.

When considering disclosures by Core Sample companies of principal risks related to environment and their management, the review examined climate-related physical and transition risks identified by the Task Force on Climate-related Financial Disclosures (TCFD) as well as other environmental risks. **The majority of companies (79%) identified one or more transition risks (e.g. regulatory change) or physical risks (e.g. natural disasters)**. More physical risks (56%) were identified by companies than transition risks (41%). In the Control Sample, less than one in three companies (31%) identified climate change as a risk, only 2% considering it a principal risk. Moreover, four companies stated a time horizon for principal risks. Consideration could be given to integrating the concepts of transition and physical risks into the Directive to further enhance disclosures on climate change and environment as principal risks.

In the findings relating to environmental and climate-related key performance indicators relevant to the particular business, it was found that **disclosures of non-financial KPIs increase with higher market capitalisation of companies**. A majority (65%) of companies in the Core Sample disclosed at least one non-financial target. A gap was also identified between the level of disclosure of non-financial targets relating to climate and environmental matters and the information needs of management report users. Additionally, not all companies presenting targets provided a baseline or disclosed progress over time relative to previous years. GHG emissions and water consumption were the most widely disclosed non-financial targets. The KPI disclosures generally did not take into account the methodological guidance in the Guidelines, including the emphasis placed on using both material narratives and indicator-based disclosures, also supporting this review's assertion that the Guidelines published by the Commission are not being adopted by companies to support their disclosures and therefore unlikely to be referred to widely by national regulators. Disclosure of GHG emissions could be made more consistent and comparable by the Directive stating that companies disclosing such information in their non-financial statement should do so using the GHG Protocol guidance in conjunction with reporting under the Paris Agreement, the CDP Questionnaire and the CDSB Climate Change Reporting Framework.

Inclusion of **information related to climate and environmental matters in the above areas should also be viewed collectively** to gain a more holistic understanding whereby there is a golden thread between the company's performance, position and impact of its activity. The review found that companies can disclose decision-useful environmental and climate-related information in line with the NFRD, however companies in the Core Sample do not make the connection between these different areas. While 40% of companies in the Core Sample describe their climate or environmental strategy or policies, they do not refer to climate or environment in their business model. Similarly, 55% describe their environmental or climate policy or strategy but do not disclose how environmental and climate risks are integrated into wider due diligence processes of the business. These are missed opportunities.

The findings show several differences in disclosures of environmental and climate-related information respectively. Clarifying in the Directive that environmental matters also encompass climate-related information would improve usability of future disclosures and allow for greater comparability across disclosures regarding policies and related due diligence processes amongst other areas. Clarifying that the Directive considers **climate-related information is within the scope of ESG matters** would also facilitate enhanced disclosures of how companies identify, assess and manage both environmental and climate risks, which can be interrelated.

Recommendation 1: Insert the word "climate" immediately after the word environment in Articles 19a(1) and 29a(1) of the NFRD to clarify that environmental information also includes climate-related matters and require disclosures to make links between financial impacts to climate and environmental matters.

The review also found that the exemption in the NFRD to include non-financial information outside the management report so long as it had been publicly made available with a reasonable time (not to exceed 6 months after the balance sheet date) and is referred to in the management report (Article 19a(4) of the Accounting Directive) had been the norm by German companies in the Core Sample following on from its national transposition. The New Momentum for Reporting on Sustainability report supports these findings, revealing that only 43.5% of German organisations reviewed published the non-financial statement in their management or annual report and the remaining non-financial statements are scattered across different publications[40]. Other jurisdictions have also adopted this approach to a lesser extent. The Commission should close this exemption as part of its review of the Directive, acknowledging that companies in many jurisdictions are using the management report as the home for this information.

Disclosure in mainstream financial filings can foster shareholder engagement and broader use of climate-related and environmental disclosures, thus promoting a more informed understanding of associated risks by investors and others. There is also evidence that sustainability risks disclosed in company sustainability reports and legal filings are not aligned, which affects how decision-useful the information is. More specifically, "a comparison between the material sustainability disclosures of 170 WBCSD member company sustainability reports and their risk factors in mainstream corporate reporting revealed that, on average, only 29% of material issues disclosed in sustainability reporting are also reported as risks in mainstream reporting"[41]. Thus, 71% of sustainability issues deemed material by businesses were not disclosed to investors as risk factors.

Publication of information on climate and environmental matters in the management report helps to ensure appropriate controls govern the production and disclosure of the required information. It contributes to ensuring that the governance processes for these disclosures would be similar to those used for existing public financial disclosures and would likely involve review by the chief financial officer and audit committee, as appropriate.

While it is important to include non-financial information in corporate publications other than the management report, the audience of sustainability reports is considerably wider. Due to this difference in intended audience, the materiality determination process is different. This means sustainability reports typically contain more depth and detail, including information that may be deemed not material in a management report[41]. As a result, material information may be lost or misinterpreted within other information, hindering its use by investors.

Recommendation 2: Remove Paragraph 4 of Articles 19a and 29a of the Accounting Directive, which allows material information required for the non-financial statement to be reported outside the management report and up to 6 months after its publication.

Synergies between the NFRD and the TCFD

Not only did 2018 represent the first year of reporting by companies across Europe under the NFRD, but it also presented an opportunity for companies globally to consider their initial responses in their management reports to the voluntary framework of the Task Force for Climate-related Financial Disclosures. There are **obvious synergies in subject matter of both the NFRD and TCFD**. While the NFRD does not explicitly refer to climate change or climate risk, there are numerous references to climate and examples of climate-related disclosures throughout the Guidelines. The Commission also notes in the Guidelines, that they take into account the work of the Task Force. While climate change is not explicitly stated in the Directive, it is clear from the Guidelines that the intention is to cover both climate and environmental matters in the Directive, and that the TCFD falls within its remit.

This review found that companies are making climate-related disclosures under the NFRD, and that **38% of companies in the Core Sample also made some form of reference to the TCFD** in their management report. An obvious question can then be posed: *Can companies adapt their disclosures on climate and environmental matters in their management reports to respond to both the NFRD obligations and TCFD recommended disclosures? Moreover, can gaps and synergies be identified between the mandatory NFRD and the voluntary TCFD framework?*

Closing these gaps and emphasising the synergies could not only facilitate more harmonised, streamlined and consistent reporting under both, but also drive better disclosures across Europe of climate-related and environmental information in management reports. This in turn could yield decision-useful information contributing to raising the level of transparency and improving the consistency and comparability of disclosures. This helps to ensure disclosures meet the needs of investors and other stakeholders and aids in managing change towards a sustainable global economy (as stated in the Directive). For the TCFD this means, amongst other things, measuring the impacts of climate change and improving the quality of climate-related financial disclosures to support more appropriate pricing of risks and allocations of capital in the global economy[25].

Synergies between the TCFD and NFRD include overall subject matter and complementary outcomes. The four core elements in the TCFD of governance, strategy, risk management, metrics and targets also feature in the broad areas to be disclosed under the Directive. In general, both apply the principle of materiality to disclosures, although for the TCFD its applicability varies dependent on the recommended disclosure.

The two disclosure mechanisms however differ in that the TCFD does not simply look at the impact of the company's activity on the environment, but also considers the **reciprocal impact of both climate risk and opportunities on the business**. The NFRD could be enhanced by embracing the concept of forward-looking information and also encouraging the identification of opportunities arising for the business from natural capital and climate change.

Both **require disclosures to be made in the management report**. As discussed further in this conclusion, the NFRD exception to disclose outside the management report is by choice differentiating it from the TCFD. This is a further area which should be harmonised for effective TCFD-NFRD alignment.

The TCFD Final Report[25] recognises the **need for alignment with other frameworks** and specifically refers to the NFRD in its Table A4.1 of Select Disclosure Frameworks: Governments. Given the reference in the Recitals to the Directive to recognised international frameworks, this harmonisation point should be taken up by the Commission in its review of both the Directive and Guidelines. The specific differences and synergies between the TCFD, NFRD, the CDSB Framework, the CDP questionnaire and good reporting practice should also be considered in this context.

This review also examined first responses to the TCFD governance core recommendation by the Core Sample. **Board oversight of environmental and climate change matters was not a disclosure obligation under the NFRD**, although it does provide that companies include a corporate governance statement in their management report under Article 20 of the Accounting Directive[4].

The review also found that almost half of companies (49%) disclosed both board oversight and management's role in assessing and managing environmental or climate change matters. There were higher disclosures of board oversight of environmental (60%) than climate-related information (15%). Similarly, 58% of companies provided information on management's role on environmental matters, but only 20% for climate-related matters. In both cases, this may be attributable to the mandatory obligation for environmental matters in the Directive compared to the voluntary approach of the TCFD.

Recommendation 3: Incorporate TCFD recommended disclosures a) and b) on governance into the 'corporate governance statement' in Article 20 of the Accounting Directive. This could include examining opportunities for greater alignment between existing corporate governance disclosure requirements and the TCFD's recommendations and how conformance with one could be treated as satisfying the requirements of the other.

The research also looked at the TCFD strategy recommended disclosure c) on resilience of the company's strategy and consideration of climate scenarios. While this was not an obligation of the Directive, Recital 3 recognises the value of disclosures in helping to manage towards a sustainable global economy[3]. The Guidelines support use of scenario analysis and include the TCFD notion of forward-looking information in its principles.

When considering company disclosures on the resilience of the company's strategy, taking into consideration of different climate-related scenarios, including a 2°C or lower scenario, it was found that **whilst some companies are conducting scenario analysis, they appear reluctant at this stage to report the findings in their management statement**, and only Unilever has disclosed outcomes of scenario analysis in its management report. A further seven are in the process of or expressed an intention to conduct scenario analysis. Disclosures on scenario analysis are largely in their infancy.

Recommendation 4: Incorporate the strategy TCFD recommended disclosure c) on resilience and scenario analysis in an amendment to the NFRD and require use of a 1.5°C scenario based on the science presented by the UN's Intergovernmental Panel on Climate Change (IPCC).

In addition to the above analysis on TCFD recommended disclosures on governance and strategy, the review also considered narratives around the TCFD in 30 of the Core Sample reports that provided some mention of the TCFD. At this early phase of adoption, it is important to **distinguish between those companies making some of the actual recommended disclosures and those noting their awareness or support of the TCFD**. While heightened awareness and expressions of support for the TCFD recommendations are valuable, they should not be taken as disclosures under the TCFD.

This review report has included a dedicated section summarising highlights of what some of the 30 companies in the Core Sample have disclosed in relation to the TCFD and what form their disclosures take. This provides a better view of the initial response to the TCFD by companies. To achieve TCFD-NFRD alignment, it is necessary to **move beyond the four areas of TCFD recommendations to a more granular level of the actual 11 recommended disclosures** themselves.

The section of the review report above was entitled 'First steps on climate-related financial disclosures' as it reflects the beginning of the TCFD journey, which may or may not include actual disclosures. Recognition that this was the **start of the journey was a common feature across many companies' commentary** in their management reports. In some cases, it contained more information around how the company is preparing for disclosures. Different approaches were taken to the disclosures which ranged from text-based narratives to use of a first response table in a non-financial appendix, to a TCFD recommendations roadmap or dashboard.

A commitment made in support of the TCFD or to implement the TCFD recommendations can be a first step in securing board oversight or assigning management responsibility for identifying, assessing and managing climate-related risks and opportunities. Other practical first steps reported included: establishing internal working groups (e.g. to define scenarios or to focus financial reporting on climate change); mapping climate-related risks and opportunities; revisiting existing processes to see how they could be built upon or tweaked; undertaking an internal or externally-facilitated TCFD review; and preparation of relevant papers on the TCFD recommendations for board and management. All of this leads to the importance of providing an evidence base that identifies good practices and also lessons learned throughout the first few years of TCFD implementation.

Recommendation 5: As reporting practices on environment and climate-related matters continue to develop, the Commission should look to contribute to the evidence base by ensuring that reporting Member State competent authorities supervise such reporting. This feedback through supervision is key to enhancing corporate disclosures on climate-related and environmental matters.

In undertaking the research for this review, there was **no direct evidence from companies that the Guidelines were being used or having a positive effect on NFRD or TCFD-aligned disclosures**. It would be helpful for the Commission as part of its review of the Directive and Guidelines to assess the extent to which the Guidelines are being used by report preparers and the extent to which the Guidelines are referenced in national implementing legislation and related guidance. Currently, the Guidelines are published as a Communication from the Commission and may be difficult for report preparers to find if they are not aware of their existence. As a result, the Guidelines may well exist in a vacuum and a more effective way of assimilating them into reporting frameworks is required. Different means for bridging the gap between the Directive and the Guidelines and national implementing legislation could merit further investigation.

Recommendation 6: The Commission, through its review of the Directive and Guidelines, should consider how it can promote greater use of the information contained in the Guidelines and explore means for better assimilation of the Guidelines in national reporting frameworks.

In this review, only one in three companies in the Core Sample provide some form of commentary on TCFD implementation. While it is still early days in terms of corporate reporting of climate-related risks and opportunities, there appear to be **fewer disclosures on climate-related matters made by companies in the Core Sample than on environmental matters**. If the TCFD and NFRD are to be effective mechanisms for achieving their desired outcomes, this will require a step change not only in the uptake but in the effectiveness of reporting. One way to achieve this at the scale needed and with rapid uptake is through mandatory reporting of the TCFD recommended disclosures. The Commission should therefore look to assume a leadership role globally on TCFD and mandate disclosure of its 11 recommended disclosures (as stated in Figure 4: Recommendations and Supporting Recommendations of the TCFD Final Report) in an amendment to the Non-Financial Reporting Directive.

Recommendation 7: Incorporate all 11 TCFD recommended disclosures and consider how better linkages between financial and non-financial information can be made in the Accounting Directive, drawing on the essential approach of the TCFD.

Appendix 1 – Methodology

This review examined disclosures in company management reports relating to environmental matters of the highest 80 European listed companies by market capitalisation (the Core Sample) (and was supplemented with a further analysis of 500 company reports (by market capitalisation) (the Control Sample)) against the required elements of the Directive across 12 EU Member States. The following criteria was applied to select the companies from both samples:

- Be a publicly-listed company;
- Have over 500 employees (as outlined in the Articles 19a and 29a of the Accounting Directive);
- Balance sheet total over €20 million OR net turnover over €40 million (based on the majority of Member States' transposition of the Directive); and
- Belongs to one of the eight industry groups listed by the TCFD (comprised of Financial Sector and Non-Financial Sector companies).

The research did not consider the full suite of public interest entities which are caught under the NFRD and did not consider divergences in national transposition.

The research was conducted through 10 research questions covering the disclosure requirements on environmental matters of the Directive and the TCFD recommended disclosures, particularly relating to governance and scenario analysis. In formulating the questions, the NFRD was referred to in the first instance. Where insufficient detail existed in the Directive, elements of the Guidelines were used, coupled with additional information drawn from the TCFD recommended disclosures.

The data from the Core Sample and Control Sample was collected using NVivo[42], qualitative data analysis software designed to help analyse text-based information. This enabled searches of specific text across a large number of data sources and facilitated a more systematic collection and categorisation of qualitative information.

To collate company responses to the research questions, each question was deconstructed into sub-questions and keywords. Search terms and phrases were identified through a pilot review of Core Sample reports. Given the varying levels of specificity of terms and diversity of company responses for similar issues, the researchers used three different approaches to data collection for each question: a search for keywords, terms and phrases using the software; a manual search to maintain accuracy and reliability for certain questions (where key word searches were not feasible; and a mixture of both methods to locate a specific keyword, term or phrase and then manually review the context and discussion around that item. The most common synonyms were used as search terms.

Collecting data on company disclosures required a degree of interpretation as the way companies discuss information is diverse and nuanced. To minimise subjectivity in interpretation, the review implemented a four-step data collection and verification process using different team members and rotating roles. In the first step, the research questions were divided among team members and data was collated for each question by analysing company reports. Secondly, the analysis completed was reviewed and verified by another team member. Thirdly, the outcomes of the first two steps were discussed to reach a consensus on the interpretation of company responses. Finally, the resolutions made in the third step were reflected in the final data.

For a list of companies reviewed, visit cdsb.net/NFRreview.

Appendix 2 – Geographic scope and sectors of company report samples

Core Sample Reports as Categorised by TCFD Sector and Geographic Scope									
	Financial Sectors				Non-Financial Sectors				
Country	Asset Managers	Asset Owners	Banks	Insurance	Agriculture, Food and Forest Products	Energy	Materials and Buildings	Trans-portation	Grand Total
United Kingdom			5	1	6	2	1	1	16
Germany	1			2	1		6	6	16
France		1	3	1	2	2	5		14
Spain			4			2	1		7
Netherlands			2		1	1	2		6
Italy			2			3		1	6
Sweden			1		1		3		5
Denmark			1				1	1	3
Belgium			1		1				2
Ireland							2		2
Portugal						1		1	2
Finland					1				1
Total	**1**	**1**	**19**	**4**	**13**	**11**	**21**	**10**	**80**

Figure 9: Geographic scope of Control Sample

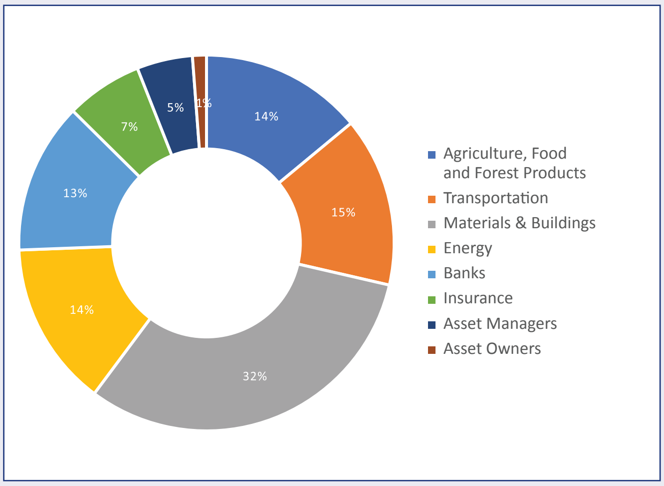


Figure 10: Classification of Control Sample by TCFD non-financial and financial sectors

References

1 Climate Disclosure Standards Board (2018) CDSB Framework for reporting environmental information, natural capital and associated business impacts. Advancing and aligning disclosure of environmental information in mainstream reports. [PDF]. Available from: https://www.cdsb.net/sites/default/files/cdsb_framework_2.1.pdf

2 Task Force on Climate-related Financial Disclosures (2017) Recommendations of the Task Force on Climate-related Financial Disclosures. [PDF]. Available from: https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf

3 The European Parliament and The Council of The European Union (2014) Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of nonfinancial and diversity information by certain large undertakings and groups. [Online]. Available from: http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=14214106 89280&uri=CELEX:32014L0095

4 The European Parliament and The Council of The European Union (2013) Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC. [Online]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02013L0034-20141211

5 European Commission (2017) Communication from the Commission — Guidelines on non-financial reporting (methodology for reporting non-financial information) (2017/C 215/01). [Online]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017XC0705(01)

6 EU High-Level Expert Group on Sustainable Finance (2018) Financing a sustainable European economy. Final Report 2018. [PDF]. Available from: https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf

7 European Commission (2018) Communication from the Commission to the European Parliament, The European Council, The Council, The European Central Bank, The European Economic and Social Committee and the Committee of the Regions Action Plan: Financing Sustainable Growth (COM/2018/097 final). [Online]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0097

8 European Commission (2018) Consultation document: Fitness check on the EU Framework for public reporting by companies. [PDF]. Available from: https://ec.europa.eu/info/consultations/finance-2018-companies-public-reporting_en

9 Van Lanschot Kempen NV (2018) 2017 Annual Report. [PDF]. Available from: https://media.vanlanschot.nl/media/pdfs/2017-annual-report-van-lanschot-kempen.pdf

10 International Integrated Reporting Council (2013) Integrated <IR> Framework. [PDF]. Available from: http://integratedreporting.org/wp-content/uploads/2015/03/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf

11 Stategyzer (2018) The Business Model Canvas. [Online]. Available from: https://strategyzer.com/canvas/business-model-canvas

12 The International Integrated Reporting Council (2015) Materiality in <IR> Guidance for the preparation of integrated reports. [PDF]. Available from: http://integratedreporting.org/wp-content/uploads/2015/11/1315_MaterialityinIR_Doc_4a_Interactive.pdf

13 Danone (2017) Registration Document Annual Financial Report. [PDF]. Available from: http://ddr2017.danone.com/EN/annual-repport-2017/index.html#page=1

14 L'Oréal (2018) 2017 Registration Document Annual Financial Report – Integrated Report. [PDF]. Available from: https://www.loreal-finance.com/_docs/0000000179/LOreal_2017_Registration_Document.pdf

15 Atlas Copco AB (2018) Annual report 2017. [PDF]. Available from: https://www.atlascopcogroup.com/en/investor-relations/financial-reports-presentations/financial-publications

16 Boliden AB (2018) Metals for long-term value creation. Annual report 2017. [PDF]. Available from: https://vp217.alertir.com/afw/files/press/boliden/201803060710-1.pdf

17 Science-based targets initiative (2018). [Online]. Available from: https://sciencebasedtargets.org/

18 CDP (2018) Price on carbon. [Online]. Available from: https://www.cdp.net/en/campaigns/commit-to-action/price-on-carbon

19 London Stock Exchange Group (2018) Guidance for issuers on the integration of ESG into investor reporting and communication. [Online]. Available from: https://www.lseg.com/sites/default/files/content/images/Green_Finance/ESG/2018/February/LSEG_ESG_report_January_2018.pdf

20 Greenhouse Gas Protocol (2018). [Online]. Available from: http://ghgprotocol.org/

21 Climate Disclosure Standards Board (2012) Climate Change Reporting Framework. [PDF]. Available from: https://www.cdsb.net/sites/default/files/cdsb_climate_change_reporting_framework_edition_1.1_0.pdf

22 Parties to the United Nations Framework Convention on Climate Change (2015) Paris Agreement. [PDF]. Available from: https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf

23 Task Force on Climate-related Financial Disclosures and Climate Disclosure Standards Board (2018) TCFD Supporters. [Online]. Available from: https://www.fsb-tcfd.org/supporters-landing/

24 Climate Disclosure Standards Board (2018) Task Force on Climate-related Financial Disclosures. [Online]. Available from: https://www.cdsb.net/what-we-do/task-force-climate-related-financial-disclosures/commit-implement-recommendations-task

25 Task Force on Climate-related Financial Disclosures (2018) The Task Force on Climate-related Financial Disclosures: 2018 Status Report. [PDF]. Available from: https://www.fsb-tcfd.org/wp-content/uploads/2018/09/FINAL-2018-TCFD-Status-Report-092618.pdf

26 Galp Energia, SGPS, S.A. (2018) Annual Report and Accounts 2017. [PDF]. Available from: https://www.galp.com/corp/Portals/0/Recursos/Investidores/SharedResources/Relatorios/EN/Annual_Report_and_Accounts_Galp_2017_1.pdf

27 KBC Group NV (2018) Annual report 2017. [PDF]. Available from: https://www.kbc.com/en/system/files/doc/investor-relations/Results/JVS_2017/JVS_2017_GRP_en.pdf

28 Unilever (2018) Annual Report and Accounts 2017. [PDF]. Available from: https://www.unilever.com/Images/unilever-annual-report-and-accounts-2017_tcm244-516456_en.pdf

29 Intergovernmental Panel on Climate Change (2018) Global Warming of 1.5 °C – an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. [Online]. Available from: http://ipcc.ch/report/sr15/

30 Enel (2018) Annual Report 2017. [PDF]. Available from: https://www.enel.com/content/dam/enel-com/governance_pdf/reports/annual-financial-report/2017/annual-report-2017.pdf

31 ING Groep N.V. (2018) Annual Report 2017. [PDF]. Available from: https://www.ing.com/Investor-relations/Annual-reports/2017.htm

32 Ferrovial, S.A. (2018) Integrated Annual Report 2017. [PDF]. Available from: https://www.ferrovial.com/wp-content/uploads/2018/02/Integrated-Annual-Report-2017.pdf

33 Eni SpA (2018) Integrated Annual Report 2017. [PDF]. Available from: https://www.eni.com/docs/en_IT/enicom/publications-archive/publications/reports/rapporti-2017/Integrated-Annual-Report-2017.pdf

34 National Grid (2018) Annual Report and Accounts 2017/18. [PDF]. Available from: https://www.nationalgrid.com/sites/default/files/documents/NGAR18_1_Full-Report_Web.pdf

35 Santander Group (2018) Annual Report 2017. [PDF]. Available from: https://www.santander.com/csgs/Satellite/CFWCSancomQP01/en_GB/pdf/Complete_book_2017.pdf

36 Lloyd Banking Group (2018) Annual Report and Accounts 2017. [PDF]. Available from: https://www.lloydsbankinggroup.com/globalassets/documents/investors/2017/2017_lbg_annual_report_v3.pdf

37 United Kingdom (2013) The Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013. (SI 1970). [Online]. Available from: http://www.legislation.gov.uk/uksi/2013/1970/made

38 Total S.A. (2018) 2017 Registration document including the annual financial report. [PDF]. Available from: https://www.total.com/sites/default/files/atoms/files/ddr2017-va-web.pdf

39 Task Force on Climate-related Financial Disclosures and Climate Disclosure Standards Board (2018) TCFD Knowledge Hub. [Online]. Available from https://www.tcfdhub.org/

40 Global Compact Network Germany, econsense – Forum for Sustainable Development of German Business (2018) New momentum for reporting on sustainability? Study on Implementation of the CSR Directive Implementation Act. [PDF]. Available from: https://econsense.de/app/uploads/2018/10/econsense_Study-on-Implementation-of-the-German-CSR-Directive-Implementation-Act_2018.pdf

41 World Business Council for Sustainable Development (2017) Sustainability and enterprise risk management: The first step towards integration. [PDF]. Available from: https://docs.wbcsd.org/2017/01/WBCSD_Risk_Publication_2016.pdf

42 NVivo qualitative data analysis Software (2018) QSR International Pty Ltd. Version 12 Plus. https://www.qsrinternational.com/nvivo/home

Contact us

cdsb.net
@CDSBGlobal
Contact:
Michael Zimonyi
Policy & External Affairs Manager
michael.zimonyi@cdsb.net

London
CDSB Secretariat & CDP
Plantation Place South
60 Great Tower Street
EC3R 5AD London
United Kingdom

cdp.net
@CDP
Contact:
Mirjam Wolfrum
Director Policy & Reporting
mirjam.wolfrum@cdp.net

Berlin
CDSB Secretariat & CDP
WeWork Sony Center
Kemperplatz 1
10785 Berlin
Germany