

# HOW TO IMPROVE CLIMATE-RELATED REPORTING

A SUMMARY OF GOOD PRACTICES  
FROM EUROPE AND BEYOND

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This document and its two supplements include interactive links to facilitate readers accessing the source documents of the good reporting examples and reference material included. All such links were active and functioning at the time of publication.

Questions about the European Lab and its projects can be submitted to [EuropeanLab@efrag.org](mailto:EuropeanLab@efrag.org).



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# The European Corporate Reporting Lab @EFRAG

The European Corporate Reporting Lab @EFRAG (European Lab) was established by EFRAG following the call by the European Commission in its March 2018 [Action Plan on Financing Sustainable Growth](#) (EC Action Plan). The European Lab serves the European public interest and its objective is to stimulate innovation in the field of corporate reporting in Europe by identifying and sharing good reporting practices through:

- Facilitating dialogue between preparers, users and other relevant stakeholders; and
- Documenting the content and outcomes of this dialogue in reports and other means and making them available in the public domain.

The European Lab has a multi-stakeholder Steering Group (European Lab SG) and under its direction project task forces may be established for specific projects (European Lab PTFs).

The European Lab SG is responsible for: setting the agenda of the European Lab; appointing the members of the European Lab PTFs and/or agreeing on alternative project processes; monitoring project implementation; promoting outputs of the European Lab and mobilising networks; giving direction on external communication; and reviewing the progress of the European Lab activities.

The European Lab PTFs are responsible for the operation and contents of European Lab projects, including planning, selection of specific issues, conducting stakeholder outreach activities, as well as providing project reports and other deliverables.

The activities of the European Lab PTFs may include public consultation such as expert meetings, seminars, round-table discussions, interviews, surveys and other activities to facilitate engagement and exchange with other stakeholders. The European Lab PTFs decide on the form of consultation and outreaches relevant and appropriate for the public.

For more information on the European Lab see [www.efrag.org](http://www.efrag.org).

## Do you want to get involved?

The European Lab encourages readers of this document and its two supplements ([Supplement 1: Climate-related reporting practices](#) and [Supplement 2: Scenario analysis practices](#)) to get involved in future European Lab projects and other activities. To receive relevant news and updates, stakeholders can register in the EFRAG corporate reporting database:



Foreword by the European Lab Steering Group .....	5	APPENDIX 2: PTF-CRR approach .....	26
Preface from the PTF-CRR Chair .....	6	Scope and methodology .....	27
Key messages .....	7	Sample selection .....	30
Project background .....	11	Dialogue with stakeholders .....	37
Synopsis of project findings .....	15	APPENDIX 3: Other frameworks mentioned in company reports.....	40
Climate-related disclosures .....	16	APPENDIX 4: Publications from other initiatives with climate-related reporting examples .....	42
Scenario analysis .....	19	APPENDIX 5: References .....	44
APPENDIX 1: Project Task Force on Climate-related Reporting .....	24	APPENDIX 6: Acronyms and abbreviations .....	46

# Foreword by the European Lab Steering Group Chairman and Vice Chairman



Jean-Paul  
Gauzès

There is an urgent need to rethink the ways in which the financial system approaches sustainability, transparency, and long-term risks. This was why, in 2018, the European Commission put forward a ten-point [Action Plan on Financing Sustainable Growth](#) (EC Action Plan). The EC Action Plan has already led to agreement on new EU legislation, including a new regulation on sustainability disclosures by investors and on the taxonomy of sustainable economic activities. The success of these pieces of legislation and of other elements of the EC Action Plan depends

on good disclosure of non-financial information by companies. This is why the European Commission recently announced, in the [European Green Deal](#), that it would put forward a proposal by the end of 2020 to revise the [EU Non-financial Reporting Directive](#).

In parallel to these legislative developments, the reporting practices of leading companies continue to evolve rapidly. In 2018, as part of the EC Action Plan, the Commission asked EFRAG to establish a European Corporate Reporting Lab – ‘the European Lab’ – to help identify and spread good and innovative reporting practices.

This report on climate-related disclosures is the first major result of the European Lab. Given the urgency posed by climate change, it will stimulate and assist companies in improving their climate-related reporting. It is a valuable complement to the guidelines on climate-related reporting published by the European Commission in June 2019.

The report covers larger and smaller listed, mainly European, companies. It provides examples on all aspects of climate-related reporting and on scenario analysis, which is an increasingly important aspect of corporate strategy and resilience assessment. This first project has also facilitated a much-needed dialogue between preparers and users on the practicalities of enhancing climate-related reporting, a topic that has an elevated importance across different business models and companies.

We would like to express our gratitude to the Chair of the Project Task Force on Climate-related Reporting (PTF-CRR) Michèle Lacroix and the Vice-Chairs Jean-François Coppenolle and Bertrand Janus, and to all the Project Task Force members for generously sharing both their expertise and time over the last eleven months.

Finally, we invite you to share any feedback you may have on this report and to share your expectations and ideas on how the European Lab can continue to add value to European stakeholders ([EuropeanLab@efrag.org](mailto:EuropeanLab@efrag.org)).



Alain  
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# Preface from the PTF-CRR Chair



Michèle  
Lacroix

As the adverse impact of climate change becomes apparent, multiple initiatives have emerged to foster sustainable finance, while regulators and policymakers put increasing pressure on companies to act. Transparency is key in understanding how companies prepare to deal with the impact of climate change as well as how willing they are to consider their own impact on the environment.

Even if the goal is clear, it is a long journey. The Task Force for Climate-related Financial

Disclosure (TCFD) provided guidance on how to report on climate change in June 2017 ([TCFD recommendations](#)). The European Commission has since clarified the non-financial reporting requirements through new non-binding guidelines ([Guidelines on reporting climate-related information](#)) that leverage the structure of the TCFD recommendations. However, none of these frameworks is mandatory, which limits their effective implementation and enforcement. Moreover, companies struggle to address the TCFD recommendations in a clearly articulated, transparent and comprehensive way. The information provided by companies varies in quality and content, with different levels of maturity, transparency and qualitative/quantitative analysis.

The Project Task Force on Climate-related Reporting (PTF-CRR) analysed the climate-related reporting of approximately 150 companies to identify good reporting practices, taking into consideration the needs of users of corporate reports and that preparers are at different stages of maturity in climate-related reporting. Common pitfalls that should be avoided by preparers were also identified. Gathering experts from different backgrounds, industries and countries brought a lot of value and strongly contributed to the quality of the final report. The report intends to provide a useful toolkit for preparers, users and other stakeholders interested in climate-related information. The PTF-CRR hopes that this document and its two supplements ([Supplement 1: Climate-related reporting practices](#) and [Supplement 2: Scenario analysis practices](#)) will contribute to the clarity that both preparers and users need.

## Michèle Lacroix

Chair of Project Task Force on Climate-related Reporting

## Climate-related reporting is improving but remains a challenge

Since the TCFD released its final [recommendations](#) in 2017 and the [EU Non-financial Reporting Directive](#) (NFRD) became effective in 2018, companies have put considerable effort into improving their climate-related reporting. This has not been an easy endeavour as assessing, reporting and acting on climate risks represents a significant challenge for companies and requires a data- and model-intensive multidimensional analysis. The European Lab observed a wide variation in the sophistication and maturity of the approaches taken by companies to adhere to the TCFD recommendations and NFRD requirements.

This report is the result of collaboration between European preparers, users and other stakeholders within the PTF-CRR and their dialogue with stakeholders outside the PTF-CRR. It has the ambition to be a stocktake of good climate reporting practices with a primary focus on European companies, and also to identify scenario analysis reporting practices for global companies as this is considered a relatively immature aspect of reporting. The report also tries to reconcile preparers' versus users' perspectives in a context where investors seek better information on their exposure to climate-related risks, while companies aim to enhance their climate-related reporting for their own benefit and for the benefit of their stakeholders. The focus of the report is therefore to illustrate good reporting examples and provide suggestions on how to generate and disclose information that is both useful for companies and relevant for users. The report does not comment on the actual implementation of a company's sustainability strategy, but will hopefully inspire them to take the required next steps to improve their climate-related reporting.

The PTF-CRR reviewed the reports of mainly European companies to primarily identify good reporting practices and to assess the level of maturity in the

implementation of climate-related disclosures from both a mandatory (NFRD requirements) and a voluntary (TCFD recommendations) perspective<sup>1</sup>.

## Main findings on climate-related reporting

The PTF-CRR's main findings can be summarised as follows:

### General findings

- Climate-related financial disclosures are in an early implementation stage and there is room for improvement, even among more mature reporting companies. Nevertheless, consistent with the latest [TCFD implementation status report](#), the PTF-CRR observed an improvement in the quality of companies' disclosures compared to the 2017 reporting cycle.
- Some companies still consider TCFD reporting as a pure compliance exercise and miss the opportunity to perform a genuine analysis and report on both their resilience to climate-change risks and the impact of their strategy on the environment. Companies rarely offer enough explanation about if and how their business model and strategy are resilient to climate risks and how they will adapt to a low-carbon world or to increased physical risks.
- Companies are generally good at reporting the climate-related policies they have in place, but less good at reporting how they either monitor or perform against their policies and manage risks. In order to address this shortcoming, companies could include in their reporting, metrics that are directly linked to their climate-related targets. They should also systemically report on their performance against their targets in order to provide transparency on their contribution to emission reduction over time.

<sup>1</sup> The examples of good practices highlighted in [Supplement 1: Climate-related reporting practices](#) and [Supplement 2: Scenario analysis practices](#) are shown as examples and do not imply that the overall climate-related reporting of the company is good.

- «
- Some companies have been identified as leaders in specific aspects of climate reporting, but it is challenging to find companies that show a high level of sophistication on all aspects of climate-reporting.
  - Companies should avoid: disclosing generic information; reporting without a prior materiality assessment; and reporting without a common narrative. Generic information makes it hard for users to assess how committed a company is to addressing climate risks. The PTF-CRR found that companies' disclosures are not always sufficiently underpinned by supporting information or evidence. For example, there is sometimes a lack of clear identification and description of climate-related risks in the short-, medium- and long-term.
  - The PTF-CRR review also identified that various sections of companies' reports are not always clearly articulated or well-connected, making it difficult for users to get a complete picture of companies' approaches to assessing and managing climate-related risks and opportunities. Based on the sample of companies reviewed, it was observed that there is a lack of references to national and international commitments such as the Paris Agreement.

## Adherence to TCFD recommendations

- Among the four TCFD recommendations' thematic areas (*Governance, Strategy, Risk management and Metrics and targets*), the PTF-CRR found that *Metrics and targets* is the area subject to more advanced analysis and reporting by companies, while the other thematic areas are at a less advanced stage of analysis and reporting. For example, the articulation of companies' strategies are generally adequate for the short term, but less detailed or missing altogether for the medium and long term. From a governance perspective, out of the sample of companies reviewed as part of the project, there are only a few examples of

companies that describe the board's role in the oversight of climate-related risks and opportunities. Many companies claim to have integrated sustainability or climate risks into their overall risk management system without providing information on the process for doing so.

- The reporting on the four TCFD recommendations' thematic areas is often not sufficiently articulated and does not provide enough explanation on the interaction between them. This makes it difficult for users to get a complete picture of the company's management of climate-related risks and opportunities.
- Transition risks are subject to a more detailed analysis and reporting than physical climate risks, which require granular details of the exposure and vulnerabilities of companies' and value-chain counterparties' facilities that are currently not comprehensively available.

## Variations in TCFD reporting

- Reporting is more mature among large capitalisation (large cap) companies than in small and medium capitalisation (small cap and mid cap) companies<sup>2</sup>. This is most likely due to capacity and resourcing differences across these companies.
- Similarly, carbon-intensive and financial sectors demonstrate a more mature approach compared to other sectors, as the topic impacts their business models in a more material manner.
- There is still a major gap between preparers' reporting practices and users' expectations. Users would like reports to provide reassurance that companies are taking steps to improve the resilience of their business model. As highlighted in scenario-analysis findings, users are therefore eager to have access to quantitative

<sup>2</sup> Market capitalisation greater than €15 billion (large cap), between €2 billion and €15 billion (mid cap), and less than €2 billion (small cap).



information that preparers are not always comfortable disclosing because the scenario analysis results are either too uncertain or could have a detrimental impact on valuation or reputation.

## Findings on scenario analysis

This report also provides a focus on climate scenario analysis, including a review of the scenario analysis reporting practices of a targeted sample of companies from across the globe albeit with a primary focus on European companies as detailed in *Supplement 2: Scenario analysis practices*. Scenario analysis is the area of climate-related reporting that companies find most challenging to develop and implement.

Companies should use scenario analysis to assess the resilience of their strategies under a range of plausible future climate states. The PTF-CRR observed that some companies use only one scenario, which sometimes is a best-case scenario. This practice misses the point of the scenario analysis exercise, which is to explore the resilience of a company under a variety of scenarios thereby helping it to develop relevant mitigating actions to address the risks emerging from those scenarios.

## Emphasis on transition risks over physical risks

The PTF-CRR noticed that in general, companies in the review sample perform some form of transition risk analysis (either quantitative or qualitative), but struggle with the assessment of physical risks. The lack of detailed data and comprehensive models that support physical risk assessment makes it challenging to quantify its financial impact. Also, publications and guidance supporting the implementation of TCFD recommendations tend to put more emphasis on transition risks than physical risks. The articulation of physical risks and transition risks in the context of scenario analysis remains therefore a significant challenge.

## Conflicting time-horizons

Another critical point is the disconnect between the time horizon of potential impacts from climate change – which is often beyond five years – and the time horizon that companies use for business planning and strategy definition purpose – which is often less than five years. Any risk that could occur beyond 5-10 years and that does not cause an obvious immediate threat to a company's business model, such as climate risk, will not necessarily be considered with sufficient attention by companies' boards and executive committees. However, there is evidence from reviewed reports that governance practices are starting to change, as some companies set up ad-hoc committees in their governance structure to deal with climate-change risks and explicitly consider these risks in their corporate strategy.

## Lack of data for scenario analysis

Scenario analysis is considered as a difficult exercise as the required information is scarce and patchy (e.g. parameters for certain technologies, local data for climate variables), uncertain (e.g. development of policies), and it is challenging to connect reference climate models (e.g. IEA, IPCC climate scenarios) to either companies' financial information or business models. Some approaches to enable appropriate scenario modelling are being developed, but companies would benefit from having further guidance, and the development of sectoral guidance could be helpful.

Furthermore, the uncertainty about how public policies will develop in the years to come, including the possible introduction of a carbon tax and carbon border adjustments (CBA), makes the scenario analysis exercise particularly uncertain. As a result, companies need to make a number of assumptions and modelling shortcuts that are often neither documented nor transparent. Providing a clear, relevant and understandable quantitative impact of climate change on a company's risk profile

« and key financial metrics remains therefore an area for development. This makes it difficult for users to assess whether the scenario-related results are valid, reliable and can be seen as a good enough representation of a company's resilience in the context of increasing climate risks.

The lack of comparability and consistency between the approaches applied by companies to conduct scenario analysis is also an area of concern for investors performing analyses at sector or portfolio level. This is driven by the fact that companies find it challenging to select a relevant set of scenarios for their sector/ business model that cover both mitigation (TCFD recommends at least a 2°C or below scenario) and adaptation issues. This concern could be partly addressed if standard scenarios across industries were developed and companies were committed to being more transparent in their disclosures. Reference scenarios could also be made more relevant for companies trying to assess their exposure to climate-related risks.

## Looking ahead

Despite a general improvement in the quality of climate-related disclosures, on the whole, companies are still at the start of what may be a long journey to improve their reporting. While some are already more advanced in their journey and their awareness and reporting of climate risks and opportunities, others have only made limited progress in developing a comprehensive climate-reporting strategy. Some companies take reporting on climate risk seriously, which is observable in the quality of their disclosure. These companies provide evidence that climate risk is both actively discussed by their management and integrated into their risk management framework and strategy. Other companies only use climate-related reporting for communication purposes without a connection to their business strategy. Many companies also experience challenges in complying with the variety of disclosure requirements and guidance that have arisen during the last years, most of which are not aligned or coordinated, creating a burden for both preparers and users.

The PTF-CRR hopes that with the urgency of climate-related issues, this report will help to raise the bar for the next climate-reporting cycle, and help preparers to enhance the quality of their reporting thanks to the illustrative examples and areas for improvement highlighted in this report.

# PROJECT BACKGROUND



## Why focus on climate-related reporting?

Climate change risk is increasingly being recognised as a financial risk for companies. At the same time, companies' impact on the environment can no longer be ignored. By fostering internal awareness and increased transparency, climate-related reporting by companies plays a role in facilitating analysis of the short-, medium- and long-term risks and opportunities of climate change for the purposes of business and investment decisions. It helps companies to better demonstrate responsibility and forward planning in considering material climate impacts, and helps stakeholders assess the resilience of companies under adverse climate-related impacts. Crucially, climate-related reporting can contribute to the overall EC Action Plan objective of stimulating finance with greater capital allocation and increased funding for the sustainable economy (i.e. contribute to 'shifting the trillions').

## What did the project address?

The project considered the current state of climate-related reporting by European companies, as well as the current and potential use of climate-related reporting information by investors and other users, and other relevant stakeholders. The primary focus was on identifying good reporting practices and assessing the level of maturity in the implementation of the [TCFD recommendations](#), while also taking into consideration the climate-related reporting elements of the [NFRD](#) and the related non-binding [Guidelines on non-financial reporting](#) and [Guidelines on reporting climate-related information](#) (collectively referred to as NFRD CRR elements).

The project addressed two areas: a general review of climate-related disclosures (detailed findings documented in [Supplement 1: Climate-related practices](#)); and an in-depth review of scenario analysis reporting (detailed findings documented in [Supplement 2: Scenario analysis practices](#)). The [key messages](#) and [synopsis of the findings](#) outlined in this document, are based on the content of its two supplements.

The need to focus on general climate-related disclosures came to light because of evidence from various surveys showing room for improvement in this area, and also because investors are increasingly taking climate risk into account in their investment decisions. The focus on general climate-related disclosures encompasses the four broad thematic areas of the TCFD recommendations (*Governance, Strategy, Risk management, Metrics and targets*).

The detailed focus on scenario analysis, also included under *Strategy* in the TCFD recommendations, is because it is an innovative aspect of the TCFD recommendations and a challenging reporting area. It also integrates different aspects of climate-related reporting, has a forward-looking orientation and is pivotal to assessing the resilience of companies under adverse climate change risk events.

As further described in [Appendix 2: PTF-CRR Approach – Sample selection](#), for general climate-related disclosures, the emphasis was on sectors considered to have high exposure to climate risk and on European companies. For scenario analysis, the review focused on companies considered likely to have scenario analysis in their reports because they operate in high-exposure sectors or due to their identification as TCFD reporters. Scenario analysis reporting practices from companies across the globe were reviewed, albeit with a primary focus on European companies (i.e. based in the European Economic Area and Switzerland). Non-European companies were also included in the review because scenario analysis is a challenging and relatively new aspect of reporting for many companies and sectors. Therefore, examples of good reporting practices from across the globe can benefit stakeholders in Europe and beyond.

The project addressed reporting of both the impact of companies on the environment as well as the financial impact of climate change on companies.

As detailed in the accompanying supplements, the project has identified 58 examples of good reporting practices from 30 companies. The selected examples are based on a review of the reporting practices of 149 companies. The chosen examples are spread across multiple companies and this in part reflects that it is rare for any particular company to be advanced across all aspects of climate-related reporting. In certain cases, where a company is relatively advanced in different aspects of climate reporting, several examples were identified from the same company. There are also

examples from some companies that PTF-CRR members are affiliated to. The due process ensured that examples were independently selected and that a collective PTF-CRR assessment of the suitability of any example – informed by individual members' expert judgement – was the sole criterion for including examples. The PTF-CRR selection of examples was further informed by feedback obtained during the stakeholder outreach.

In applying its methodology ([Appendix 2: PTF-CRR approach – Scope and methodology](#)), the PTF-CRR did not set out to identify all existing good practices across the universe of companies.

### **What is the purpose of this document and its two supplements?**

The purpose of this document and its two supplements ([Supplement 1: Climate-related reporting practices](#) and [Supplement 2: Scenario analysis practices](#)) is to help companies improve their climate-related reporting, by sharing examples of good reporting practices, as well as giving an indication of reporting practices to avoid.

### **Meeting the needs of key stakeholders**

One of the objectives of the European Lab is to facilitate dialogue between corporate reporting stakeholders – preparers (including financial institutions), users (e.g. financial institutions, investors, analysts), and other stakeholders (e.g. academics, civil societies, accountancy profession, regulators), whilst identifying good reporting practices that can support preparers and users.

As a result of the PTF-CRR's composition and the way the project was conducted, this document and its two supplements reflect the perspectives of a wide range of preparers, users and other stakeholders, and aim to address their needs. The PTF-CRR, whose member profiles are outlined in [Appendix 1](#), was made up of experts from diverse professional and geographical backgrounds who have specific experience and expertise in climate-related reporting. The wide variety of experience and expertise has been instrumental in selecting a set of practical and value-adding examples from various industries, that can be helpful to preparers, users and other stakeholders of climate-related disclosures. However, not all good reporting practices that have been identified are relevant for all preparers and users, since they may be only applicable to specific industries or sectors.

The PTF-CRR's broad stakeholder perspective was further informed by an outreach dialogue with 48 stakeholders who were not part of the PTF-CRR (i.e. preparers, users, accountancy profession, representatives of industry bodies and academics). The PTF-CRR outreach allowed broader input and gave stakeholders a chance to provide feedback, share additional examples and enrich the preparer and user perspective given on the examples included in the supplements to this document. [Appendix 2: PTF-CRR approach - Scope and methodology](#) includes more details about the PTF-CRR methodology and the profile of stakeholders who participated in the [PTF-CRR outreach](#).

Below is an elaboration on how the PTF-CRR met preparer and user needs.

**Preparer needs:** The PTF-CRR identified good reporting practice examples of climate-related reporting that are relevant for preparers (including financial institutions) who may aim to enhance their related reporting. Wherever they are in their journey to implement climate-related disclosures, preparers may find some inspiring insights from the good reporting practices selected from a broad range of reports. Furthermore, to cater for the needs of a wide set of preparers, the selected examples cover both large and smaller listed companies (i.e. large cap, mid cap and small cap). In their journey towards implementing climate-related reporting, preparers can also consider the reporting practices to avoid that have been identified in this report.

**User needs:** In the analysis and description of good reporting practices, the PTF-CRR includes explanations of the benefit of some good practices and how they can be helpful for investment decisions and other user analytical needs.

# SYNOPSIS OF PROJECT FINDINGS



During the course of the project, the PTF-CRR reviewed the 2018 climate-related disclosures of over 100 European entities<sup>3</sup> (comprising large cap, mid cap and small cap companies) to identify good reporting practices, based on the TCFD recommendations and the NFRD CRR elements. Whilst the objective of this project was not to perform an assessment of the extent to which companies comply with the recommendations and requirements, in identifying good practices, some insight was obtained on the progress in the implementation and application of the TCFD recommendations and the NFRD CRR elements amongst the reviewed companies.

The good reporting examples identified through the review, together with relevant preparer and user perspectives and potential areas for improvement, and features of reporting practices to avoid, are provided in [Supplement 1: Climate-related reporting practices](#). The conclusions of the reviews are provided below.

## Overall observations

In general, companies are good at reporting the climate-related policies they have in place, but less good at reporting how they monitor their policies and manage risks, and how they include climate change clearly in their processes. Only a few sectors and companies have implemented the TCFD recommendations and NFRD CRR elements in their corporate reporting.

There are significant differences between companies in the ways in which they report on climate-related matters. Companies have different levels of maturity, especially regarding the definition of targets and the governance of risks and opportunities related to the climate. While some companies describe the targets and the performance indicators against targets, with a clear reference to regulatory

requirements, international goals etc., others provide disclosures that are less clear to understand. Also, only a few companies quite clearly disclose the impact of their business activity on the environment and the resilience of their business model, while most lag behind when it comes to measuring the impact and presenting this impact in a transparent way.

An observation made across all aspects of climate reporting was that small cap and mid cap companies are generally less mature and provide less information in their disclosures than the large cap companies. Accordingly, this made it difficult to identify illustrative good reporting practices for small cap and mid cap companies. Their lagging maturity probably reflects the significant cost-benefit challenges that they face, as confirmed by some stakeholder outreach participants. Nonetheless, it is likely that small cap and mid cap companies are in the early stages of implementing climate-related reporting and need implementation support. In addition, many attributes from the identified good reporting practices of large cap companies can also be appropriate for small cap companies. Therefore, small cap companies and their stakeholders can also benefit from the good reporting practice examples identified by the PTF-CRR.

Finally, climate-related reporting is not always included in companies' financial filings, as recommended by the TCFD<sup>4</sup>, but can often be found in other company documents.

Consequently, it is sometimes difficult for users of corporate reports to understand how climate risks are evaluated and managed within the company, and who is responsible.

<sup>3</sup> As explained in [Appendix 2: PTF-CRR approach - Sample selection](#), a general review of climate-related disclosures was carried out on 100 companies out of the total of 149 companies reviewed.

<sup>4</sup> The TCFD recommends that 'preparers of climate-related financial disclosures provide such disclosures in their mainstream (i.e., public) annual financial filings'.





## Governance

Some companies report having climate-related governance structures in place. Large companies have a clear corporate structure, with the board, selected committees or other supporting structures defined, and their roles, reporting duties and responsibilities spelled out. A graphical representation that shows reporting functions and where climate-related governance elements are placed within the company structure, can help evaluate the effectiveness of these governance mechanisms. But other reports are insufficient in describing the board's oversight on climate-related risks and opportunities. Few examples show where and how the board endorses and commits to environmental transformation. The reviews show that boards commit to broad general principles, but these are generally not linked with the other TCFD recommendations' thematic areas: *Strategy*, *Risk management*, *Metrics and targets*.

Leading practices disclose how climate-related performance metrics are incorporated into the company's remuneration policies for executives, managers and employees.

## Strategy

Companies' strategies are generally well articulated for the short-term, but less detailed or missing altogether for the medium- and long-term. Elaboration on the business model, its resilience and dependence on natural capital, are not sufficiently reported in most cases. There are only few examples that describe how the company's business model may impact the climate or the environment more broadly, and vice versa.

The disclosure of the resilience of the company's strategy in a 2°C scenario or below remains a weak point, even for preparers with good climate-related reporting practices. Quantitative information is rarely provided. Good reporting practices include considerations on different climate-related scenarios that cover both transition risks and physical risks. Where possible, good reporting practice examples have been included for mid- or small-cap listed companies.

More details on scenario analysis are provided in the next section of this document and in [Supplement 2: Scenario analysis practices](#).

## Risk management

Proper disclosure of how companies' climate-related risk management practices are integrated into their overall Enterprise Risk Management function is important to inform users on how companies identify, assess, and manage climate-related risk factors. The PTF-CRR found that good reporting practices include a discussion of the roles involved, the methodology employed and the approach to consolidating assessments at enterprise level. In this way, users can properly evaluate the risk profile of a company or its securities. Good practices of information disclosure include providing a visual representation (e.g., table) of how the company prioritises climate-related risks, in relation to other risks, based on the relative likelihood, magnitude, and timing of financial impacts, in addition to highlighting the relevance for stakeholders.

There is room for improvement in the reporting of climate-related risks. This is perhaps partly due to the fact that some countries or regulations require a forward-looking timeframe that is generally only one year, which is too short for climate-change risks. Moreover, many companies just claim to have integrated sustainability or climate risks into their overall risk management system, without providing further information.

A big challenge for many companies is the disclosure of the material climate-related risks over the short-, medium- and especially long-term, and throughout the value chain. Climate-related opportunities are often absent in the reporting of climate-related information. In the majority of cases, when opportunities are included, they are only briefly mentioned. Preparers focus on risks, which are considered as more relevant information to disclose.





## Metrics and targets

In the sample of companies reviewed, metrics are generally reported, but are not always related to targets and are rarely related to the risks, as recommended by the TCFD. When targets are reported, they are often short-term (e.g. 2020 or 2021) and rarely long-term.

Only a few companies have a good framework for reflecting their exposure to a variety of uncertainties (both threats and opportunities) that can have financial, operational and compliance impacts on business performance.

A visual representation of a detailed breakdown of the key sources of GHG emissions across the companies' value chain has been identified as a good practice, as it helps to better assess the potential impact of the companies' plans within their climate action plan.

## Reporting practices to avoid

In [Supplement 1: Climate-related reporting practices](#), the PTF-CRR has also identified reporting practices that lessen the usefulness of climate-related reporting and should therefore be avoided.

For example, information that is too general, or does not provide sufficient detail can hinder the users' assessment of overall information. This could include not providing sufficient detail on the management's role in responding to climate risks and opportunities, or not reporting details of how certain commitments may be achieved.

A lack of connectivity between various elements of the report has also been identified as a missed opportunity for providing a more complete picture of companies' management of climate-related risks and opportunities. It is important to show the connectivity between climate-related information and other information such as financials.

It was also found that some disclosures lack supporting information, for example, around the timeframes of risks or the methodologies used. Such supporting information can help users to better understand the disclosures made.

The TCFD recommends scenario analysis as an effective tool that can help companies consider how climate-related risks and opportunities may evolve, and understand the potential business implications under different plausible outcomes. Scenario analysis can rightly be seen as the cornerstone of climate-related reporting as it articulates climate scenarios, companies' business models and the strategic implications of climate change. It aims to provide decision-useful information for both preparers and users in relation to companies' resilience to climate change, the impact of climate change on their business models, and their strategic alignment to the Paris Agreement.

However, scenario analysis is a complex exercise as it relies on various assumptions (climate scenario, population and economic growth, technology and regulation choices, physical risk exposure) and requires complex data-intensive models. Scenario analysis is currently used for two main purposes:

- As an input for strategic decisions and business model adaptation; and
- To assess the impact of various physical and transition risk-related parameters on a company's financial statements with a forward-looking orientation.

How well this exercise is performed determines the effectiveness and reliability of companies' reporting on their long-term strategic resilience. Given the challenging nature of the exercise as well as the potential adverse consequences for companies of publishing climate-related scenario analysis results, only a few of them currently perform an exhaustive qualitative and quantitative scenario analysis. A lack of transparency and exhaustiveness often puts the output of such an exercise at odds with investors' expectations. Investors are indeed keen to understand quantified

financial impacts of climate scenario analysis and get some reassurance that companies are taking steps to improve the resilience of their business models. This situation is not surprising as TCFD recommendations have only recently been adopted, meaning that companies are only at the exploratory stages of developing adequate scenario analysis capabilities. This is especially true for the sectors that are less likely to be impacted by climate change, at least in the near future.

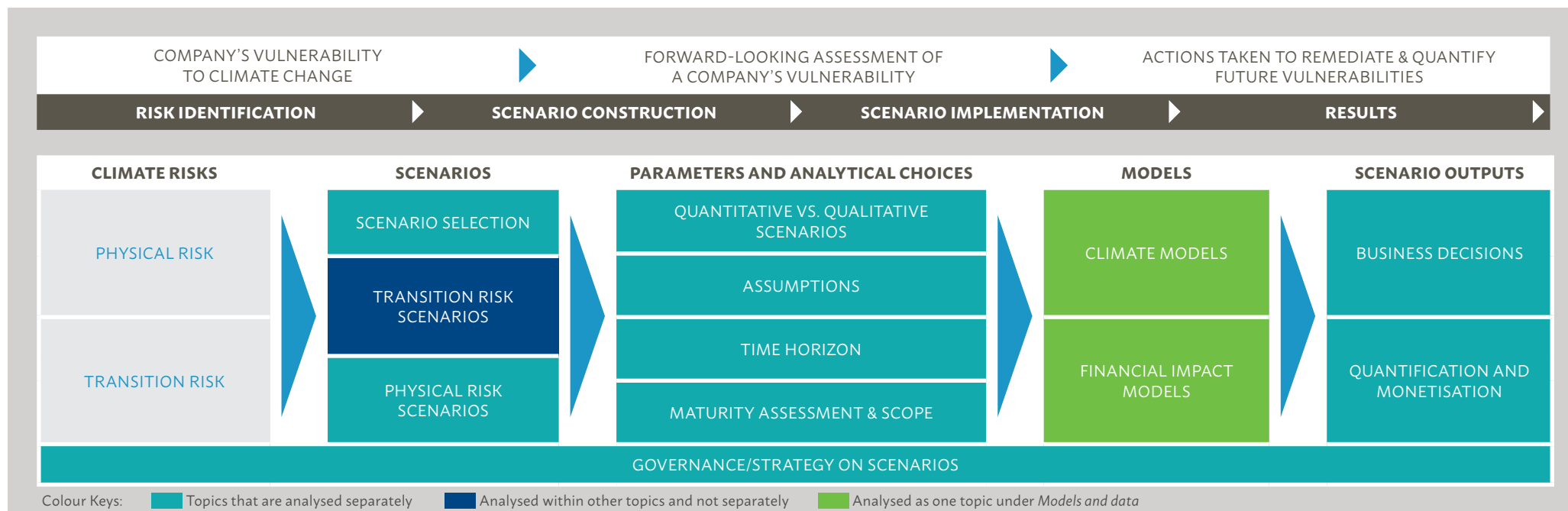
The key challenges faced by companies in conducting and disclosing climate-related scenario analysis can be summarised as follows:

- Selecting a relevant set of scenarios for their sector/business model that cover both mitigation (TCFD recommends at least a 2°C or below scenario) and adaptation issues.
- Translating model outputs (e.g. from existing scenarios of IPCC and IEA) into business variables that can be used operationally for the purpose of scenario analysis.
- Providing a transparent, relevant and understandable quantitative impact of climate change related to physical and transition risks on key financial metrics.
- Providing insight into companies' adaptive capacity and resilience strategy.

Given these challenges and the lack of a mainstream and 'one-size-fits-all' approach for scenario analysis, the focus of the PTF-CRR was on identifying both leading and practical scenario analysis reporting practices within and outside Europe in order to stimulate and inspire other companies to follow suit and develop their internal scenario analysis capabilities.

« The review of scenario analysis reporting practices detailed in [Supplement 2: Scenario analysis practices](#), was broken down into a set of building blocks (see diagram below). A detailed topic analysis was carried out for the key building blocks, based on the review of a targeted sample of companies as described in [Appendix 2: PTF-CRR approach – Sample selection](#).

There is an overall analysis of ten topics. Climate models and financial impact models are treated as being part of one topic (i.e. *Models and data*). It should be noted that *Physical risk scenarios* is a topic of analysis but *Transition risk scenarios* is not separately analysed as a topic because: companies more frequently report on transition risk than they do on physical risk; and transition risk is incorporated within the rest of the analysed topics.



« The analysis of each topic includes a review of current good reporting practices, areas for improvement and a selection of examples of good reporting practices. The analysis also articulates the perspective of both preparers and users of corporate reports on

good reporting practices for each topic. Below is a high-level summary table of these findings.

	Current practice	Good reporting practices	Areas for improvement
<b>GOVERNANCE AND STRATEGY ON SCENARIOS</b>			
Governance and strategy on scenarios	<ul style="list-style-type: none"> <li>Limited evidence being provided of adequate governance oversight of the scenario analysis process.</li> <li>Accountability for management of climate-related issues highlighted by scenario analysis is not provided. No indication of how internal climate expertise is being developed.</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies state the purpose of scenario analysis.</li> <li>They mention the role of the board or senior management in the validation scenario analysis results.</li> <li>They provide a clear link between scenario analysis and strategy or business objectives.</li> </ul>	<ul style="list-style-type: none"> <li>Provide information on the governance oversight of the scenario analysis and who is accountable for it.</li> <li>State purpose of scenario analysis and use scenario analysis to inform the board's strategic thinking over 10-15 years.</li> <li>Provide information on how internal climate expertise is being developed.</li> </ul>
<b>PARAMETERS AND ANALYTICAL CHOICES</b>			
Quantitative vs. qualitative scenarios	<ul style="list-style-type: none"> <li>Qualitative descriptions of scenarios with minimal disclosure of quantitative scenario assumptions, models and outputs.</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies disclose quantitative scenario modelling information (e.g. financial institutions that are participants of the <a href="#">UNEP-Finance Initiative</a> and some energy sector companies).</li> </ul>	<ul style="list-style-type: none"> <li>For companies using an exclusively qualitative set of scenarios, provide a transparent rationale for doing so.</li> <li>Outline company-level specific implications when relying on sector-relevant qualitative scenarios.</li> </ul>
Assumptions	<ul style="list-style-type: none"> <li>Lack of transparency. Few companies provide a comprehensive disclosure of scenario-related assumptions. This makes it difficult to interpret the results of the scenarios.</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies provide transparency on key quantitative assumptions related to the inputs and models used in scenario analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Consider disclosing key scenario assumptions in a manner that is comprehensive and insightful on specific implications for the company.</li> </ul>
Time horizon	<ul style="list-style-type: none"> <li>Lack of detail on what companies consider to be short-, medium- and long-term horizons.</li> <li>Not enough quantitative information about how different time horizons are integrated into scenario analysis. Scenario analysis timeline is often only described qualitatively.</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies specify what they consider to be short-, medium- and long-term horizons.</li> <li>They disclose scenario analysis information related to both physical and transition risk over specified time horizons.</li> </ul>	<ul style="list-style-type: none"> <li>Use of long-term climate-change relevant time horizons to further enhance scenario analysis.</li> <li>Decompose scenario outputs based on what companies consider as short-, medium- and long-term horizons.</li> <li>Disaggregate the risk indicators for all material climate change risk factors based on the time horizons that are relevant for the sector and/or geographical spread of business activities.</li> </ul>



	Current practice	Good reporting practices	Areas for improvement
<b>PARAMETERS AND ANALYTICAL CHOICES (continued)</b>			
Maturity assessment and scope	<ul style="list-style-type: none"> <li>Lack of explicit information on the level of completion and maturity of the scenario analysis, which may limit stakeholder confidence in the conclusions of the disclosed scenario analysis information.</li> <li>Limited scope of analysis, leading to an incomplete picture of resilience strategy.</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies disclose information on the level of completion and maturity of scenario analysis, major exclusions of assessment areas (e.g. limited regional coverage, selected business areas), data gaps and/or conceptual weaknesses.</li> <li>They provide an outline of future work where gaps have been identified.</li> </ul>	<ul style="list-style-type: none"> <li>Expand basic information about the overall status of the assessment, major limitations as well as plans to advance the analysis.</li> <li>Establish a consolidated, structured format to present detailed information when reporting at an advanced level.</li> </ul>
<b>SCENARIOS AND MODELS</b>			
Scenario selection	<ul style="list-style-type: none"> <li>Short descriptions provided of companies' process and rationale for defining a scenario range.</li> <li>Some companies use a single scenario or sector scenario for the analysis, which is not in line with TCFD recommendations.</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies disclose a set of scenarios that include a range of transitional and physical risks relevant to the company.</li> <li>They provide the rationale for selecting a scenario (e.g. coverage of a certain type of risk relevant to the company).</li> <li>They also disclose and explain the positioning and relationship of the scenarios in the scenario range.</li> </ul>	<ul style="list-style-type: none"> <li>Provide context about the rationale for scenario selection.</li> <li>Provide a range of scenarios and contextualise them in relation to each other.</li> </ul>
Physical risk scenarios	<ul style="list-style-type: none"> <li>Few companies performed and disclosed physical risk scenario analysis.</li> <li>Analysis is often performed for only part of the portfolio, and stressing only some physical risk variables.</li> <li>High-level figures or maps are provided to assess the materiality of the risk but no comprehensive financial impact is provided.</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies provide some description of the models but not the key assumptions being used.</li> <li>They provide potential actions points and adaptation strategies including disclosure of specific adaptation plans that will be undertaken as a result of the physical risk assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Perform full rather than partial analysis of the exposure to physical climate risk, disclose the financial impacts and provide more details on actions taken to adapt to climate change.</li> </ul>
Models and data	<ul style="list-style-type: none"> <li>Disclosure does not consistently provide transparency on the models and data underlying scenario analysis.</li> <li>Lack of disclosure on financial impact models, and limited transparency on energy-system models and the data describing the item being analysed (project, specific asset, portfolio of assets, physical location).</li> </ul>	<ul style="list-style-type: none"> <li>More advanced companies explain the model and data set choice.</li> <li>They differentiate between models and provide information on model types.</li> <li>They connect different internal and external data sources.</li> <li>They disclose model and data limitations and provide an outlook on the next steps.</li> </ul>	<ul style="list-style-type: none"> <li>Provide transparency and clarity on models and data to enhance the understandability and credibility of scenario analysis outputs.</li> <li>Include a clear description of the function, inputs, outputs and limitations of models, as well as their interaction with other models.</li> </ul>





	Current practice	Good reporting practices	Areas for improvement
<b>INTEGRATION INTO BUSINESS DECISIONS</b>			
Scenario outputs and business decisions	<ul style="list-style-type: none"> <li>Different levels of maturity largely linked to the uncertainty of climate change, especially in relation to time horizons or impact on business models.</li> <li>Poor information currently available on potential adaptation of business models and strategy under various climate-change scenarios.</li> </ul>	<ul style="list-style-type: none"> <li>Energy and material companies are most advanced when translating scenario analyses into business decisions.</li> </ul>	<ul style="list-style-type: none"> <li>Provide clear business decisions taken as a result of scenario analysis.</li> <li>Provide project-level impacts when relevant.</li> </ul>
Quantification and monetisation of scenario outputs	<ul style="list-style-type: none"> <li>Very few companies quantify their scenario outputs. Few quantified scenarios pertain to the business outlook/market development but are rarely specifically calculated for the company itself.</li> </ul>	<ul style="list-style-type: none"> <li>Scenarios are performed as sensitivity analysis, where the company considers one quantified risk/opportunity factor at a time.</li> </ul>	<ul style="list-style-type: none"> <li>Provide more quantification and monetisation of the scenarios.</li> <li>Where applicable, link the impact of each scenario to its impact on the financial disclosure.</li> <li>Compare impact to base case.</li> <li>Consider using data tables instead of only visual illustrations to enhance user-friendliness.</li> <li>Provide year-to-year comparative data, where available, to allow trend analysis.</li> </ul>

APPENDIX 1:

# PROJECT TASK FORCE ON CLIMATE- RELATED REPORTING



# Project Task Force on Climate-related Reporting

The PTF-CRR was appointed by the European Lab SG in February 2019 for the duration of the European Lab's first project on climate-related reporting. The PTF-CRR was responsible for the operation of the project and its deliverables, and brought together a team from a broad range of stakeholder groups and geographical backgrounds, that had practical experience and expertise in climate-related reporting. The members of the PTF-CRR participated in the project in a personal capacity.

The members of the PTF-CRR are all practitioners working for companies in different sectors, users including financial institutions and investment professionals, civil society, academia or the accountancy profession, and from different EU countries including Belgium, Bulgaria, Denmark, Finland, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain, Sweden and the United Kingdom.

## PTF-CRR members

**Michèle Lacroix**, SCOR – **Chair**

**Jean-Francois Coppenolle**, Aviva – **Vice Chair**

**Bertrand Janus**, Total – **Vice Chair**

**Cristina Bage-Friborg**, SSAB

**Michel Bande**, CSR Europe

**Piotr Biernacki**, Polish Association of Listed Companies  
and Foundation of Reporting Standards

**Eric Dugelay**, Deloitte

**Aurélie Faure-Schuyer**, Network for Sustainable Financial Markets

**Elena Flor**, Intesa Sanpaolo

**Antonio Fuertes Zurita**, Naturgy

**Andrea Gasperini**, Italian Association for Financial Analysis (AIAF)

**Giulia Genuardi**, Enel

**Andreas Horn**, BASF

**Jane Jagd**, Ørsted

**Andre Jakobs**, ABN Amro

**Kristina Jeromin**, Deutsche Börse

**Anna Lindberg**, Swedbank

**Alexandra Middleton**, University of Oulu

**Miroslav Petkov**, PFG

**Alice Peyrard**, Veolia

**Nicole Röttmer**, PwC

**Matthias Schmidt**, Deloitte

**Michael Zimonyi**, CDSB

## European Lab team

**Chiara Del Prete**

**Hocine Kebli**

**Lina Lemessiou**

**Vincent Papa**

**Saskia Slomp**

APPENDIX 2:

# PTF-CRR APPROACH

## Scope

The PTF-CRR examined the current state of climate-related reporting from a selection of primarily European, and some global, companies, as well as the current and potential use of climate-related information by users and other stakeholders. Different disclosure frameworks that could fit this purpose were considered. The PTF-CRR decided to focus primarily on the TCFD recommendations, while also taking the NFRD CRR elements into account. While recognising the importance of other frameworks used by companies (see [Appendix 3: Other frameworks mentioned in company reports](#)), the PTF-CRR considered the TCFD recommendations and the NFRD CRR elements to be the most relevant for the analytical and European scope of the PTF-CRR's work.

The PTF-CRR also decided to place specific focus on scenario analysis and its forward-looking nature, an innovative aspect of the TCFD recommendations and a challenging reporting area.

Regarding the size of the companies reviewed, the PTF-CRR decided to cover a broad range of market capitalisation levels, including small cap, mid cap and large cap<sup>5</sup>. This should enable companies of different capitalisation levels to find relevant good reporting practice examples for their own corporate reporting. For more details about the approach used to select reports and the number of reports reviewed, see [Appendix 2: PTF-CRR approach – Sample selection](#).

The aim of the PTF-CRR was not to come up with a set of recommendations. The aim of this document and its two supplements ([Supplement 1: Climate-related reporting practices](#) and [Supplement 2: Scenario analysis practices](#)) is to provide 'snapshots' of good

reporting practices and give an indication of reporting practices to avoid regarding climate-related disclosures. It also provides the perspective of preparers and users on the quoted examples, including suggestions for potential improvement of the information disclosed.

It should be noted that a quoted good reporting practice example from any company does not in any way imply good overall climate-related reporting by the particular company. It is only a snapshot of a good climate-related reporting element in the specific corporate report from which the example was extracted.

Furthermore the PTF-CRR objective was not to exhaustively identify all good climate-related reporting practices by any single company reviewed, nor to undertake a compliance assessment.

## Methodology

### Climate-related disclosures

The PTF-CRR review focused on climate-related disclosures by companies in their annual report, sustainability report or any other separate report published together with the company's management report or made available on the company's website.

The methodology used by the PTF-CRR involved identifying disclosures related to the implementation of the TCFD recommendations and the NFRD CRR elements in the corporate reporting of the sample of companies selected for review as explained in [Appendix 2: PTF-CRR approach – Sample selection](#). A pilot review was initially carried out on a small number of companies and was subsequently rolled out to the whole sample.

<sup>5</sup> Market capitalisation greater than €15 billion (large cap), between €2 billion and €15 billion (mid cap), and less than €2 billion (small cap).

« The review was structured under the four thematic areas of the eleven TCFD recommendations, namely *Governance*, *Strategy*, *Risk management*, and *Metrics and targets*. Three additional NFRD CRR elements, as identified in the EC [Guidelines on reporting climate-related information](#), were also classified under these thematic areas. The details are outlined in [Supplement 1: Climate-related reporting practices](#).

Identified information was considered in terms of how well it met the requirements of the TCFD recommendations and the NFRD CRR elements, as follows:

- Lack of satisfactory information.
- Presence of partly satisfactory information – limited number of TCFD recommendations and additional NFRD CRR elements addressed, or issues with the completeness of the TCFD and NFRD recommended disclosures.
- Presence of satisfactory information – some points of the TCFD recommendations and the NFRD CRR elements addressed, or all points of the TCFD recommendations and the NFRD CRR elements addressed but related to the environment in a more general way.
- Presence of fully satisfactory information – completeness of the points of the TCFD recommendations and the NFRD CRR elements and directly related to climate.

The aim of the exercise was not to assess the compliance of climate-related reporting practices with the TCFD recommendations and NFRD CRR elements, but through the above mechanism to identify good climate-related reporting practices, and those reporting practices to be avoided as they do not serve the purpose of climate-related reporting. In addition, the review gave valuable insights into the implementation and application of the TCFD recommendations and the NFRD CRR elements.

## Scenario analysis

The review of scenario analysis reporting practices and the identification of good reporting practice examples was performed through a two-stage review that consisted of the following:

### a) Initial screening

An initial review was carried out of the relevant reports (i.e. annual, integrated, sustainability or climate reports) of the initially selected companies to identify whether or not scenario analysis information was disclosed. The sample selection methodology is explained in [Appendix 2: PTF-CRR approach – Sample selection](#).

For those companies that were identified as disclosing scenario analysis information, that information was reviewed according to a set of questions relating to scenario reporting in general (e.g. location of disclosure), parameters and assumptions (e.g. identification and documentation of data gaps), analytical choices (e.g. quantitative versus qualitative, number of scenarios, models and data), and scenario outputs and business impacts (e.g. reporting on financial impacts, decisions). These questions were compiled on the basis of the TCFD recommendations while also taking account of recommendations on useful scenario reporting from [Climate scenarios demystified – A climate scenario guide for investors](#), issued by [Cicero Climate Finance](#) in February 2018. While reviewing each report, the PTF-CRR assigned a qualitative, judgmental five-scale (A-E) rating to any of the applicable questions.

The qualitative rating was only a starting point towards making an overall assessment of the usefulness and noteworthy aspects of each reviewed company report. On this basis, the initial screening identified a preliminary set of good reporting examples.

« b) Second review with a focus on reporting practices across specific topics:

For further analysis, and the identification of examples of good reporting practices and areas for improvement, the PTF-CRR conducted a second, follow-up review of the reports of companies that included scenario analysis information. The focus of the second review was on cross-checking the preliminary set of examples, and where necessary, identifying other or better examples and areas for improvement. Furthermore, the focus was on selecting good examples related to ten specific topics outlined in [Supplement 2: Scenario analysis practices](#). The ten topics fall under four broad categories (i.e. governance and strategy on scenarios; parameters and analytical choices; scenarios and models; and integration into business decisions). The ten topics also encompass the set of questions that had been used to review the reported scenario information.

## Overall sample selection

The work of the PTF-CRR involved reviewing the corporate reports of two different samples of companies, which were selected as detailed below. The two samples considered – 100 companies for a general review of climate-related disclosures and 70 companies for an in-depth review of scenario analysis reporting, with 21 companies being included in both samples – effectively resulted in a review of 149 companies as shown in the table below:

	Sample used for general review of climate-related disclosures	Sample used for in-depth review of scenario analysis reporting	Overall number of companies reviewed
Companies considered for general review of climate-related disclosures	79	-	79
Companies considered for general review of climate-related disclosures and in-depth review of scenario analysis reporting	21	21	21
Companies considered only for in-depth review of scenario analysis reporting	-	49	49
<b>Total companies reviewed</b>	<b>100</b>	<b>70</b>	<b>149</b>
Companies from which examples were selected	15	21	30
Number of examples selected	20	38	58

## Climate-related disclosures

To explore how companies are providing the climate-related disclosures called for by the TCFD recommendations and the NFRD CRR elements, the PTF-CRR selected a sample of 100 European companies. The Thomson Reuters Eikon (TRE) database was used to collect the baseline information for the sample selection, as its detailed collection and categorisation of companies provided the key input for the analysis.

The TRE database provides current and historical financial and non-financial information, covering 99% of market capitalisation through financial statements, including footnote items, key ratios, operating metrics, and more. For Europe specifically, at the time of selection (May 2019), the database included about 8000 listed companies, of which 2000 met the NFRD (2014/95/UE) criterion of an average number of 500 employees during the financial year. About 1100 of those companies were active in the 'priority sectors' defined in the TCFD recommendations<sup>6</sup>. Of the 1100 companies active in the TCFD priority sectors within the TRE database, about 500 had ESG information identified and scored in the TRE database.

The PTF-CRR finally selected 100 companies, comprising 50 large cap (market capitalisation higher than €15 billion), 30 mid cap (market capitalisation between €2 billion and €15 billion) and 20 small cap (market capitalisation below €2 billion) companies.

To arrive at the final selection, the TRE ESG Emission Scoring was used to further filter mid cap and small cap companies, with primary consideration going to companies with better scores. The underlying assumption was that entities with good climate-related reporting practices are 'more likely to be found' among those

<sup>6</sup> Energy, Materials and Buildings, Transportation, Agriculture, Food and Forest products, Banks, Insurers, Asset Owners and Asset Managers

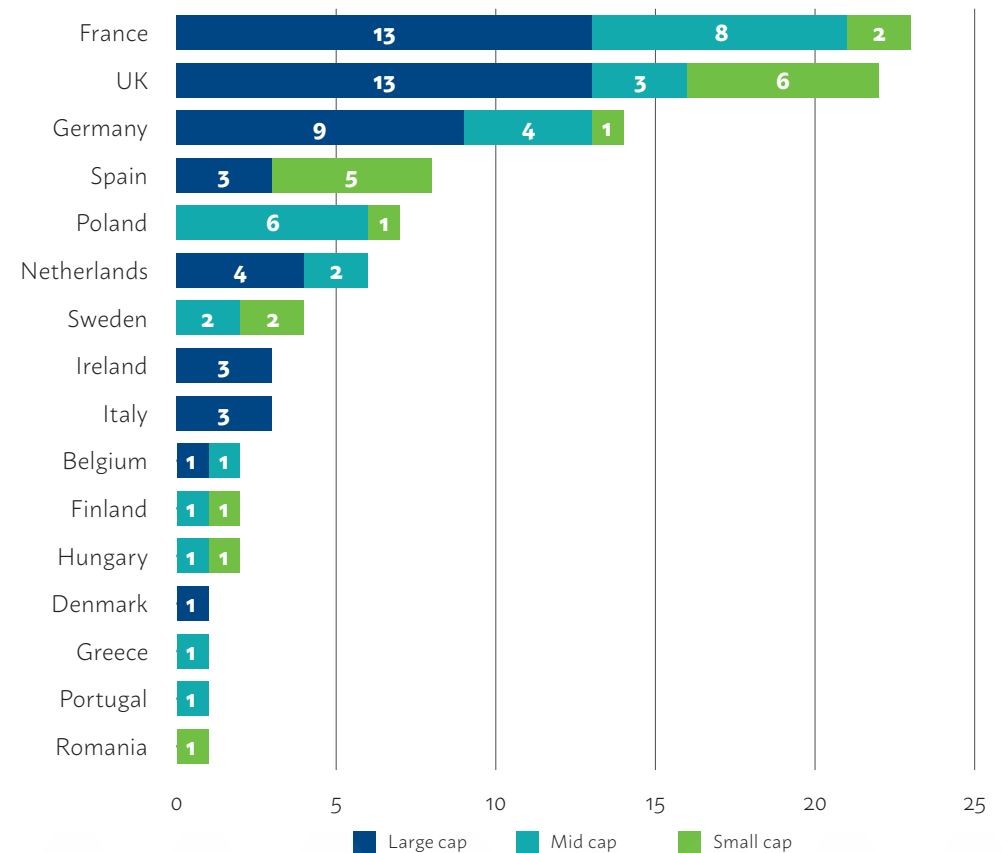
# Sample selection

with good practices in terms of their commitment and effectiveness towards reducing environmental emissions in their production and operational processes. Minor adaptations were made to the final selected list based on PTF-CRR members' professional judgement, to achieve a representative coverage of European countries.

It is worth mentioning that the objective was not to obtain a 'statistically valid' sample but to target listed entities within the scope of the NFRD that are in one of the priority sectors identified by the TCFD, and that disclose material ESG information. It was the PTF-CRR's belief that this would result in a higher chance of finding good reporting practice examples, covering an acceptable spectrum of countries and industries.

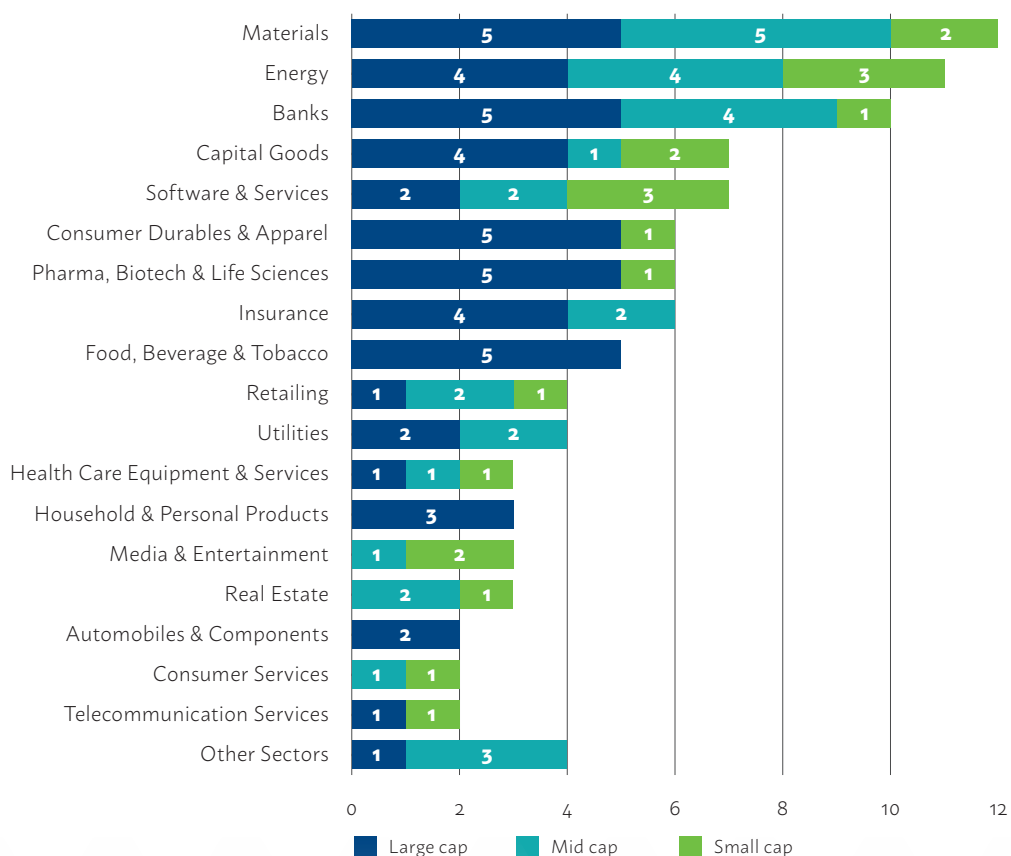
The charts that follow present the number of companies broken down by country and by sector.

**SAMPLE BY COUNTRY**  
(number of companies)



## SAMPLE BY SECTOR

(number of companies)



## Scenario analysis

The scenario analysis reporting practices and examples were identified through a targeted review of 70 companies, with 45 companies either having some form of scenario-related disclosures or only indicating that they conduct scenario analysis with no related disclosure (64%). Because the review was done on a targeted rather than random sample, the percentage of companies that disclose or only conduct scenario analysis (64%) is not representative and is much higher than the level of adoption (9%) highlighted in the 2019 TCFD implementation status report.

The 70 companies reviewed consist of:

- A targeted and judgmental initial selection of 60 companies that were known or likely to have high climate risk exposure and to conduct and disclose scenario analysis. The sample included companies known to be TCFD reporters and consisted of both listed and unlisted companies. The selected companies were assumed to be more mature/advanced in climate-related reporting. A review of these 60 companies was the starting point for the PTF-CRR members' review of reporting practices; and
- An additional 10 companies identified during the dialogue with stakeholders.

The 70 companies include 54 European companies and 16 non-European companies (i.e. companies with headquarters outside the European Economic Area and Switzerland). The inclusion of non-European companies in the review of targeted companies is due to scenario analysis being a challenging and relatively new aspect of reporting for many companies and sectors. This makes it particularly beneficial to consider good reporting practices from across the globe. The sample includes 21 European companies that were also included in the general review of climate-related disclosures 100-company sample.

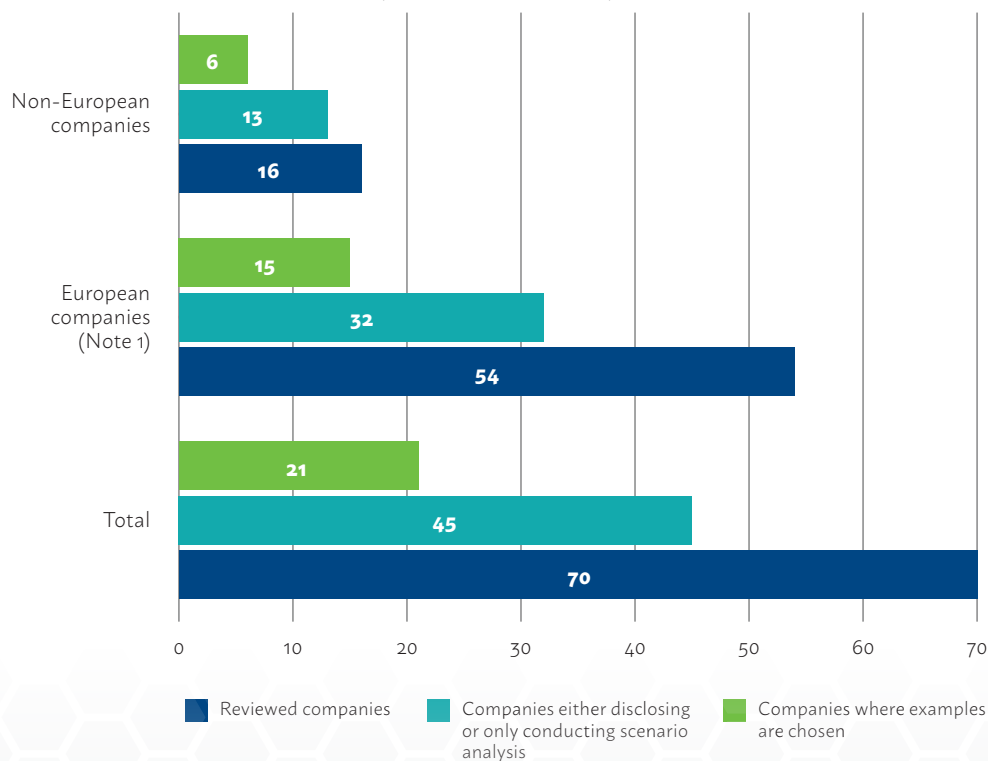


# Sample selection

« The combination of reviewing companies' scenario analysis reporting practices and feedback from the dialogue with stakeholders (see [Appendix 2: PTF-CRR approach - Dialogue with stakeholders](#)) has resulted in the inclusion of 38 examples from 21 of the 70 reviewed companies, as detailed in [Supplement 2: Scenario analysis practices](#). The charts below outline the companies reviewed by region and by sector.

### SAMPLE BY REGION

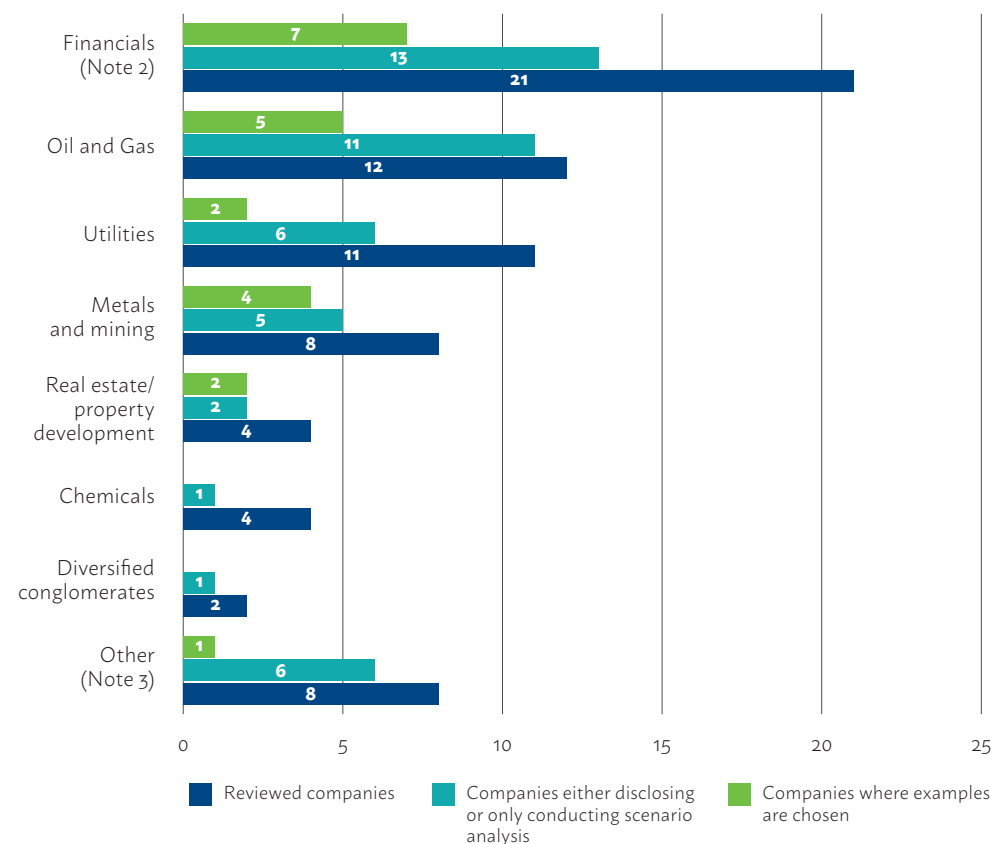
(number of companies)



Note 1 - Companies with headquarters and operations in the European Economic Area or Switzerland.

### SAMPLE BY SECTOR

(number of companies)



Note 2 - Banking, insurance and pension funds.

Note 3 - Agriculture, automotive, consumer, retail, packaging, beverages, transportation, equipment manufacturer

# Sample selection

## Examples

The PTF-CRR review of 149 companies led to the selection of 58 examples from 30 of these companies as outlined in the table below, which are included in the supplements to this document ([Supplement 1: Climate-related reporting practices](#) and [Supplement 2: Scenario analysis practices](#)).

Category	Company name	Supplement 1 section	Supplement 2 section	Market capitalisation*
Companies considered for general review of climate-related disclosures	<b>ABN AMRO</b>	<b>Metrics and targets</b>		Mid cap
	<b>Allianz</b>	<b>Metrics and targets</b>		Large cap
	<b>Atos</b>	<b>Governance</b>		Mid cap
	<b>Enel</b>	<b>Governance</b> <b>Strategy</b>		Large cap
	<b>Kering</b>	<b>Strategy</b>		Large cap
	<b>L'Oréal</b>	<b>Metrics and targets</b> (two examples)		Large cap
	<b>M&amp;S</b>	<b>Metrics and targets</b>		Mid cap
	<b>SCOR</b>	<b>Governance</b> <b>Metrics and targets</b>		Mid cap
	<b>Vallourec</b>	<b>Governance</b> <b>Strategy</b>		Small cap
Companies considered for general review of climate-related disclosures and in-depth review of scenario analysis reporting	<b>Aviva</b>	<b>Governance</b> <b>Risk management</b>	<b>Time horizon</b> <b>Models and data</b>	Large cap
	<b>AXA</b>	<b>Strategy</b>	<b>Scenario outputs and business decisions</b> <b>Quantification and monetisation of scenario outputs</b>	Large cap

\*Market capitalisation greater than €15 billion (large cap), between €2 billion and €15 billion (mid cap), and less than €2 billion (small cap).

# Sample selection



Category	Company name	Supplement 1 section	Supplement 2 section	Market capitalisation*
Companies considered for general review of climate-related disclosures and in-depth review of scenario analysis reporting (continued)	<b>CNP Assurances</b>	<b>Strategy</b>	<b>Maturity assessment and scope</b> <b>Models and data</b>	Mid cap
	<b>Eni</b>	<b>Governance</b>	<b>Governance and strategy on scenarios</b> <b>Scenario outputs and business decisions</b>	Large cap
	<b>Equinor</b>	<b>Risk management</b>	<b>Maturity assessment and scope</b> <b>Quantification and monetisation of scenario outputs</b>	Large cap
	<b>South32</b>	<b>Risk management</b>	<b>Maturity assessment and scope</b> <b>Time horizon</b> <b>Physical risk scenarios</b> <b>Scenario selection</b>	Large cap
Companies considered only for in-depth review of scenario analysis reporting	<b>Arcelor Mittal</b>		<b>Assumptions</b>	Large cap
	<b>ATP</b>		<b>Assumptions</b> <b>Models and data</b>	Unlisted
	<b>BHP Billiton</b>		<b>Quantification and monetisation of scenario outputs</b>	Large cap
	<b>BP</b>		<b>Governance and strategy on scenarios</b>	Large cap
	<b>Commonwealth Bank of Australia</b>		<b>Physical risk scenarios</b>	Large cap
	<b>Citibank</b>		<b>Assumptions</b> <b>Maturity assessment and scope</b> <b>Models and data</b>	Large cap
	<b>EDP</b>		<b>Scenario selection</b>	Large cap
	<b>Galp</b>		<b>Scenario selection</b>	Large cap
	<b>Iberdrola</b>		<b>Scenario selection</b>	Large cap
	<b>Lendlease</b>		<b>Quantitative vs. qualitative scenarios</b>	Large cap
	<b>Landsec</b>		<b>Physical risk scenarios</b>	Mid cap

\*Market capitalisation greater than €15 billion (large cap), between €2 billion and €15 billion (mid cap), and less than €2 billion (small cap).



# Sample selection



Category	Company name	Supplement 1 section	Supplement 2 section	Market capitalisation*
Companies considered only for in-depth review of scenario analysis reporting (continued)	<b>Oil Search</b>		<b>Quantitative vs. qualitative scenarios</b> <b>Assumptions</b> <b>Maturity assessment and scope</b>	Large cap
	<b>Rio Tinto</b>		<b>Maturity assessment and scope</b> <b>Time horizon</b> <b>Scenario selection</b>	Large cap
	<b>Societe Générale</b>		<b>Quantitative vs. qualitative scenarios</b> <b>Time horizon</b>	Large cap
	<b>Unilever</b>		<b>Governance and strategy on scenarios</b> <b>Models and data</b>	Large cap

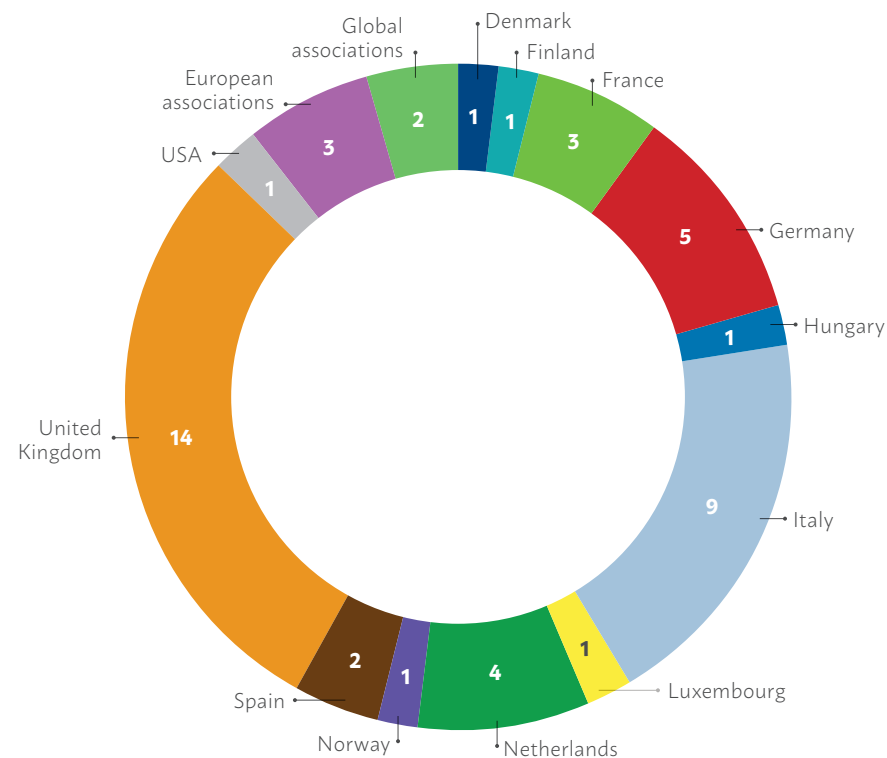
\*Market capitalisation greater than €15 billion (large cap), between €2 billion and €15 billion (mid cap), and less than €2 billion (small cap).

# Dialogue with stakeholders

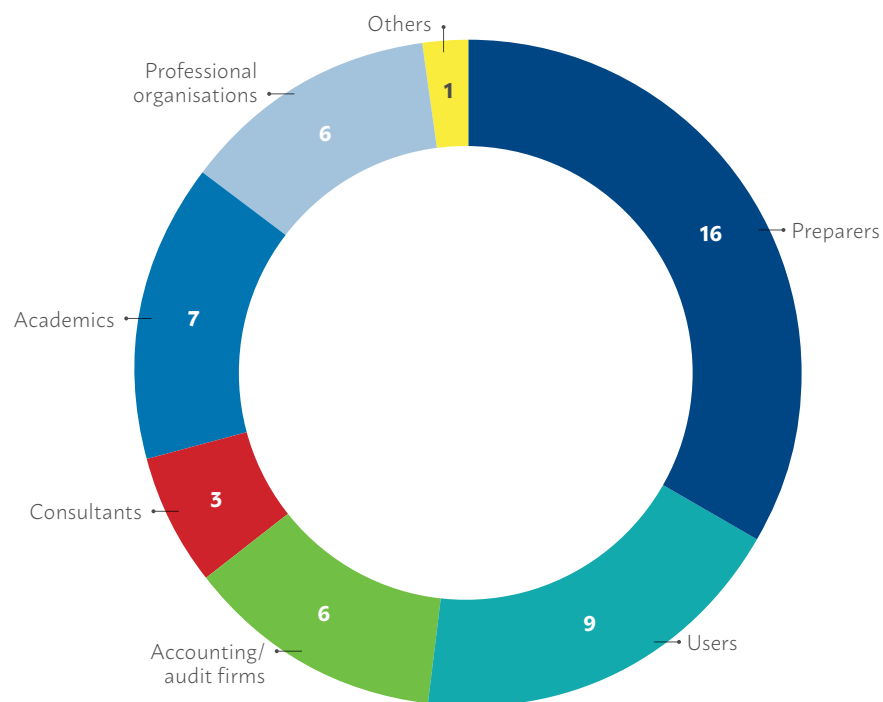
The aim of the dialogue with stakeholders was to obtain practical insights on the good reporting practices (and potential areas for improvement) identified by the PTF-CRR, and any other reporting practices and examples that the interviewed stakeholders may be aware of from their professional experience. An open call for participation of interested stakeholders was published, looking for a group of different profiles including, but not limited to, preparers, users, academics, and NGOs. In total, 48 interviews were conducted by the PTF-CRR.

The charts that follow provide a breakdown of the interviews by country and stakeholder category.

**INTERVIEWS BY COUNTRY**  
(numbers)



## INTERVIEWS BY STAKEHOLDER CATEGORY (numbers)



Interviewed stakeholders were provided with a selection of examples of good reporting practices in advance. These examples resulted from the review of corporate reports as explained in [Appendix 2: PTF-CRR approach – Scope and methodology](#), together with specific sets of questions depending on whether the stakeholder was a preparer, user or other stakeholder. Stakeholders were offered the possibility to discuss: climate-related disclosures other than scenario analysis information; scenario analysis information only; or both topics. The main purposes of the interviews were to:

- Obtain the interviewee’s opinion about climate-related reporting in general and its challenges;
- Confirm the good reporting practices among the selection of examples sent in advance;
- Discuss what the interviewee liked most in the examples;
- Discuss possible improvements to the examples;
- Identify additional examples of good reporting practices; and
- Provide further insights into the preparer and user perspectives on good reporting practices across the topics outlined in [Appendix 2: PTF-CRR approach – Scope and methodology](#).

In the interviews, stakeholders were not asked to address the relevance of the good reporting practice examples identified by the PTF-CRR, but rather to provide more insight and context, as practitioners, users or otherwise interested parties, about their usefulness.

# Dialogue with stakeholders

« The dialogue with stakeholders gave valuable input for the discussion of preparer and user perspectives provided in the two supplements to this document ([Supplement 1: Climate-related reporting practices](#) and [Supplement 2: Scenario analysis practices](#)). The level of expertise of the interviewed stakeholders, combined with the PTF-CRR members' in-depth knowledge, allowed for rich discussions and valuable insights about preparer and user perspectives regarding good climate-related reporting practice examples.

APPENDIX 3:  
**OTHER FRAMEWORKS  
MENTIONED IN  
COMPANY REPORTS**



# Other frameworks mentioned in company reports

Through the review of corporate reports for the purposes of its project, the PTF-CRR identified the following list of standards and frameworks used by companies for climate-related reporting<sup>7</sup>:

- [CDP \(formerly the Carbon Disclosure Project\)](#)
- [Climate Disclosure Standards Board \(CDSB\) Framework](#)
- [European Bank for Reconstruction and Development \(EBRD\) and the Global Centre for Excellence on Climate Adaptation \(GCECA\) – Advancing TCFD guidance on physical climate risks and opportunities](#)
- [Framework for Impact Statements \(FIS\), Impact Institute](#)
- [Global e-Sustainability Initiative \(GeSI\)](#)
- [Global Reporting Initiative Sustainability Reporting Standards \(GRI Standards\)](#)
- [Greenhouse Gas \(GHG\) Protocol](#)
- [International Integrated <IR> Framework, International Integrated Reporting Council \(IIRC Framework\)](#)
- [IPIECA, API and OGP \(IPIECA\) Oil and gas industry guidance on voluntary sustainability reporting](#)
- [Polish Non-financial Information Standard \(Standard Informacji Niefinansowych, SIN\)](#)
- [Principles for Responsible Banking, UNEP Finance Initiative](#)
- [Principles for Responsible Investment \(PRI\)](#)
- [Responsible Care Management Framework](#)
- [Sustainable Development Goals, 2030 Agenda for Sustainable Development – United Nations General Assembly \(UN SDGs\)](#)
- [Sustainability Accounting Standards Board \(SASB\) Standards](#)
- [The Sustainability Code, German Council for Sustainable Development \(RNE\)](#)
- [United Nations Global Compact \(UNGC\)](#)

<sup>7</sup> Examples of existing reporting frameworks are also included in:

- Recital 9 of the [NFRD](#)
- The Introduction to the [EC Guidelines on non-financial reporting](#)
- Section 2.5 of the [EC Guidelines on non-financial reporting: Supplement on reporting climate-related information](#)

APPENDIX 4:

# PUBLICATIONS FROM OTHER INITIATIVES WITH CLIMATE-RELATED REPORTING EXAMPLES

# Publications from other initiatives with CRR examples

The following are some of the publications available from other initiatives that also include climate-related reporting examples:

- [TCFD: 2018 Status report](#), TCFD, September 2018
- [Practical guide for Scenario Analysis in line with TCFD recommendations](#), Ministry of the Environment, Government of Japan, March 2019
- [TCFD: 2019 Status report](#), TCFD, June 2019
- [TCFD Good Practice Handbook](#), CDSB and SASB, September 2019
- [Climate related corporate reporting – where to next?](#), Financial Reporting Lab, October 2019
- [Climate-Related Financial Disclosures –The Use of Scenarios](#), Massachusetts Institute of Technology, November 2019

APPENDIX 5:

# REFERENCES

# References

[Directive 2014/95/EU – the EU Non-financial Reporting Directive](#)

[European Commission guidelines on non-financial reporting, June 2017](#)

[Recommendations of the Task Force on Climate-related Financial Disclosures, June 2017](#)

[Climate scenarios demystified – A client scenario guide for investors, CICERO Climate Finance, February 2018](#)

[European Commission Guidelines on reporting climate-related information, June 2019](#)

APPENDIX 6:

# ACRONYMS AND ABBREVIATIONS



# Acronyms and abbreviations

2°C	2° Celsius	IEA	International Energy Agency
ADEME	French Environment & Energy Management Agency	IIGCC	Institutional Investors Group on Climate Change
BNEF	Bloomberg New Energy Finance	IPCC	Intergovernmental Panel on Climate Change
IIRC	International Integrated Reporting Council	KPI	Key Performance Indicator
Cap (large-cap, mid-cap or small-cap)	Market capitalisation (large, medium or small)	MIT	Massachusetts Institute of Technology
C2ES	Centre for Climate and Energy Solutions	NBGs	European Commission's non-binding guidelines on non-financial reporting
CDP	Formerly Carbon Disclosure Project	NFRD	Directive 2014/95/EU – the EU Non-Financial Reporting Directive
CDSB	Climate Disclosure Standards Board	NGO	Non-Governmental Organisation
COP21	21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC). See also <i>Paris Agreement</i> below.	OECD	Organisation for Economic Co-operation and Development
CRR	Climate-related Reporting	Paris Agreement	Paris Agreement under the United Nations Framework Convention on Climate Change (also called Paris Climate Agreement or COP21)
EBRD	European Bank for Reconstruction and Development	PRI	Principles for Responsible Investment (PRI)
E P&L	Environmental profit and loss account	PTF-CRR	European Lab Project Task Force on Climate-related Reporting
ESG	Environmental, social and governance	RCP	Representative Concentration Pathway
European Lab	European Corporate Reporting Lab @EFRAG	SASB	Sustainability Accounting Standards Board
European Lab SG	European Lab Steering Group	SBT; SBTI	Science Based Targets; Science Based Targets Initiative
FSB	Financial Stability Board	SDGs/UN SDGs	Sustainable Development Goals of the United Nations General Assembly
G20	Group of Twenty nations	SDS	Sustainable Development Scenario
GeSI	Global e-Sustainability Initiative	TCFD	Task Force on Climate-related Financial Disclosures
GHG	Greenhouse gas	TRE	Thomson Reuters Eikon
GICS	Global Industry Classification Standard	UN	United Nations
GRI	Global Reporting Initiative	UNGC	United Nations Global Compact
I4CE	Institute for Climate Economics	UNEP	United Nations Environment Programme
IAMs	Integrated Assessment Models	VaR	Value at Risk
IAS/IFRS	International Accounting Standards/International Financial Reporting Standards	WEM	World Energy Model