

Towards Sustainable Businesses: Good Practices in Business Model, Risks and Opportunities Reporting in the EU

MAIN REPORT

Project Task Force on Reporting of Non-financial Risks and
Opportunities and Linkage to the Business Model (PTF-RNFRO)

October 2021

Disclaimer

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References to specific screenshots from corporate reports as good reporting examples do not imply that the overall sustainability reporting of the associated company is considered to be good. Screenshots from corporate reports may not provide all relevant information and further information and context may be provided in the associated corporate report. For each screenshot, a reference to the corporate report or other sources from which it was extracted is included.

This report and its supplement 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.

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FOREWORD



Introduction

The Project Task Force on Reporting of non-financial risks and opportunities and linkage to the business model (PTF-RNFRO) commenced its operation in September 2020 and is the second project of the European Corporate Reporting Lab @EFRAG (European Lab), which was established by the European Financial Reporting Advisory Group (EFRAG) following the call by the European Commission (EC) in its March 2018 Action Plan on Financing Sustainable Growth¹. 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.

The first project of the European Lab was undertaken by the Project Task Force on Climate-related Reporting (PTF-CRR) that issued its main report - [How to improve climate-related reporting](#) (herein referred to as PTF-CRR report) and its two Supplement documents; Supplement 1: [Climate-Related Reporting Practices](#) and Supplement 2: [Scenario Analysis Practices](#) in February 2020, after commencing its operation in Q1 2019.

For more information on the European Lab see www.efrag.org.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&from=EN>

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



Jean-Paul Gauzès

The work of the PTF-RNFRO is very relevant for EFRAG's wider sustainability work. Good reporting practices can point to the way forward and serve as a reference point for the various ongoing initiatives to develop Sustainability Reporting Standards as well as those that aim to increase the connectivity between reported financial and sustainability information.

Some of the identified good practices may go beyond what would be expected to be within the requirements of the Sustainability Reporting Standards that are being developed, which are meant to provide a baseline of the expected reporting by all companies. However, companies can learn from the PTF-RNFRO identified examples of good reporting practices and use these to improve their current reporting for the benefit of users and other stakeholders. This report also highlights and provides useful suggestions for stakeholders on the important and under-explored role of technology in reporting.

Finally, I want to take this opportunity to thank Mario Abela and Dawn Slevin, the co-chairs of the PTF-RNFRO for their able leadership and to all the PTF-RNFRO members for their effective collaboration and tremendous work over the last year notwithstanding having their ongoing regular professional job commitments and facing the challenges brought about by the pandemic.

Jean-Paul Gauzès

European Lab Steering Group Chairman and EFRAG Board President

By adopting the proposal for a Corporate Sustainability Reporting Directive (CSRD), the Commission has recognised that sustainability reporting is increasingly relevant for understanding the value that companies bring about for the company, its stakeholders and society at large.

This report shows that companies find it challenging to report on their business model and value chain. It also points out the lack of a common definition of the business model and its elements, and the variety of standards and frameworks currently used by reporting companies.

The findings of this report strengthen the call for the development of reporting standards that will give companies clarity on what and how to report. In this way, the PTF-RNFRO report supports and contributes to EFRAG's work on Sustainability Reporting Standards.

By identifying good reporting practices and providing tips, this report gives companies useful tools to start reflecting on how to improve reporting on their business model as well as risks and opportunities, even before the CSRD enters into force and the accompanying EU reporting standards are developed and adopted.

The real-life examples of good reporting and tips for the companies constitute a key part of the report. They have been selected following a very thorough process by the members of the Task Force, under the leadership of Dawn Slevin and Mario Abela. I want to join Jean-Paul Gauzès in thanking the PTF-RNFRO for this demanding and thorough work.



Alain Deckers

Alain Deckers

*European Lab Steering Group Vice-Chairman and European Commission DG FISMA
Head of the Corporate Reporting, Audit and Credit Rating Agencies Unit*

Preface from the PTF-RNFRO Chairs



Dawn
Slevin

Sustainability reporting is at an inflection point and commentators highlight the degree of greenwashing and the lack of robust and meaningful disclosures. The most recent package of reforms contained in the EC Sustainability Finance Strategy² demonstrates a clear and comprehensive commitment to financing the transition of the real economy to realise the sustainable development goals across the EU and foster global ambition and action. The Strategy sets out how the objectives of the European Green Deal are translated throughout the financial system and aims to ensure market transparency and to facilitate actors across all sectors of the economy to finance their transition, regardless of their starting point.

The suite of measures being implemented across Europe's financial system and real economy demand changes in business practices such that 'business as usual' can no

longer be assumed. Whilst all stakeholders including citizens, central banks, supervisors and government authorities have a responsibility, the focus of the PTF-RNFRO is to assist financial and non-financial companies to improve their reporting for the benefit of users and other stakeholders by showcasing good practices and identifying weaknesses.

Our work comes at a time of significant change across the EU and globally to enhance, standardise and mainstream sustainability reporting by companies. Initially, the concern for the PTF-RNFRO members was that our work would have had a limited impact in light of all these changes. However, regulatory changes necessarily intersect with practice and this report represents the current state of play and aims to address the inherent challenges that come with reporting sustainability information. For that reason, in addition to its use by preparers and users, we believe it sets a useful starting point for any standard-setting activity in this area. It is our view that disclosures will only improve once the issues being encountered in practice are identified and addressed.



Mario
Abela

It is always easy to conclude that practice needs to improve but the path to improvement takes a concerted effort from all the actors in the reporting ecosystem – it does not depend only on certain stakeholders such as investors to be clearer about their information requirements or for preparers to provide more quantitative and linked disclosures. It also depends on those setting and enforcing the rules along with assurance providers who need to play their role to drive better reporting outcomes.

This work and its robustness would not have been possible without the tremendous efforts of our PTF-RNFRO members – a group that because of the pandemic has only been able to meet remotely but who, nonetheless, worked incredibly hard to deliver this report. We are sincerely grateful for all the effort that has gone into this report which has, in many ways, made our job as co-chairs both manageable and enjoyable. A debt of gratitude is owed to the European Lab Steering Group for their guidance and support throughout the project, the EFRAG Secretariat, particularly Vincent Papa, who was our sounding board and always available to help us find solutions and to Saskia Slomp for helping us navigate through the requirements of the task.

It has been a great privilege to co-chair the PTF-RNFRO and we hope that you find the insights in the report and its supplement useful and that these will provide a sound basis for improving practice.

² https://eur-lex.europa.eu/resource.html?uri=cellar:9f5e7e95-df06-11eb-895a-01aa75ed71a1.0001.02/DOC_1&format=PDF

Acknowledgement

The PTF-RNFRO acknowledges the contribution of multiple stakeholders (preparers, users, non-governmental organisations-NGOs representatives, and academics) that provided feedback by responding to an online survey and/or` being interviewees, via participation at our outreach events, and through written submissions.

Stakeholders shared their practical insights on the current status of sustainability reporting, and this was an important input to our identification of the areas for improvement. Their feedback shone a light on the features of good strengths and weaknesses of current reporting practices and corroborated our key findings.

EXECUTIVE SUMMARY



Executive summary

Mandate

The PTF-RNFRO was asked to review the current state of play and identify good practices in the reporting of non-financial risks and opportunities and their linkage to the business model. The PTF-RNFRO mandate relates to a core disclosure requirement of the European Union (EU) Non-Financial Reporting Directive (NFRD) and its anticipated revision in the proposal for a CSRD. The PTF-RNFRO research was framed by the varied implementation of this legal requirement in Member States³. For this reason, our work extended beyond the management report to other reporting by companies to ensure a comprehensive stock-take of current practice. The focus was to identify good reporting practices so as to assist reporting entities to improve the quality of their sustainability (including related intangibles⁴) reporting practices. The work of the PTF-RNFRO should not be construed as providing guidance to companies.

For our purposes, the term ‘non-financial’ is synonymous with ‘sustainability (including related intangibles)’. Across the document, we also sometimes still use the term ‘non-financial’ even though it is an undefined⁵ term as it is applied in existing requirements (e.g., NFRD), in current reporting, and other stakeholder literature referred to in this report. We also use the term ‘sustainability’ synonymously with ‘Environment, Social and Governance (ESG)’.

Scope

The scope of our mandate is on sustainability (including related⁶ intangibles) reporting information but we only assess and comment on the reporting of intangibles in the context of the description of the business model and to the extent that intangibles are part of sustainability information (e.g., resources and relationships, reputational impacts, workforce issues). For the rest of this document, we collectively refer to the ‘reporting of sustainability (ESG) including related intangibles’ as ‘sustainability reporting’.

Reporting on any other types of intangibles that may be unrelated to sustainability (ESG) factors is not in the scope of our work. We note the extensive work that EFRAG with its Advisory Panel on Intangibles (API) have undertaken on the reporting of intangibles⁷. A recently published EFRAG Discussion Paper⁸ - *Better Information on Intangibles- Which is the Best Way to Go?* presents useful insights and a holistic view on the reporting of intangibles both within and outside the financial statements.

Furthermore, within the scope of this project, the PTF-RNFRO considered the application of possible technological solutions (structured data, multimedia and interactive technologies, satellite imagery, artificial intelligence-AI, blockchain and data management systems) for the preparation, distribution, and consumption of sustainability reporting information.

3 For a detailed summary of the transposition of the NFRD across member states see: <https://www.accountancyeurope.eu/publications/member-state-implementation-eu-nfi-directive/>

4 Intangibles are non-physical resources which, either alone or in conjunction with other tangible or intangibles resources, can generate a positive or a negative effect on the value of the organisation in the short, medium, and long term. (WICI Intangibles Reporting Framework, 2016). The proposal for a CSRD states that intangibles means non-physical resources that contribute to the undertaking's value creation.

5 The scope and placement of non-financial information, that is, information that sits outside of the financial statements remains undefined. The location of this information may be in the management report or in other reports outside of the legal filing. Stakeholders have noted the inappropriateness of the term ‘non-financial’ due to it being a negative definition against financial information.

6 [The March 2021 European Lab PTF-NFRS report](#) observed that intangibles which are not reflected through financial reporting are key to the processes of sustainable value creation and should be emphasised in sustainability reporting. The PTF-NFRS noted that Mainstream ESG disclosures and intangible disclosures are complementary and indissociable.

7 [EFRAG research project on better information on intangibles](#)

8 EFRAG, August 2021, [Better Information on Intangibles- Which is the Best Way to Go?](#)

Approach

Identifying good reporting practices is an inherently subjective exercise requiring judgements to be made. Accordingly, what were judged as good or leading reporting practices were assessed against a Practices Evaluation Approach, which was developed by the PTF-RNFRO after considering the attributes of useful sustainability information proposed within existing reporting frameworks, standards, and other guidance (See [Chapter 2](#)). The Practices Evaluation Approach was the basis for our selection of good reporting practices.

The detailed findings in this report are based on a review of the reporting practices of a sample of 44 EU companies alongside the feedback received from stakeholders (preparers, users and other stakeholders) through an online survey, interviews, written submissions, and outreach events. Although our findings are based on the review of a non-generalisable sample, the feedback from stakeholders during the outreach events showed that these findings are indicative of the state of play of reporting practices more broadly. The good reporting practices in the [Supplementary Document: Good reporting practices](#) were also identified from the noted sample.

Our assessment of the application of technological solutions (e.g., structured data, AI and other technologies highlighted in Chapter 6) was done through a review of policies (i.e. mandated requirements, regulations and other guidance) that influence the application of possible technological solutions. We also reviewed the disclosures of the sample of 44 companies and a few other companies outside the sample to assess their application of the possible technological solutions. During outreach, stakeholder feedback was also sought on the application of technology to enable connectivity between different reported information.

Key findings – challenges of sustainability reporting

Quality of disclosures

Set out below is a summary of the key findings on the challenges of sustainability reporting derived from our review of the sample companies and the feedback from the outreach.

Business model - performance and viability reporting (Detailed analysis in [Chapter 3](#))

- **Reporting on the business model is not holistically developed** and lacks sufficient information to allow for linkage to sustainability risks and opportunities over relevant timeframes, necessary for users to assess the long-term viability of business models. There are front-runners in this space, however, even leaders do not show a high level of sophistication on all aspects of reporting on their business model.
- **Disclosures of value creating aspects of the business model have found their way into corporate reporting**, although these are at an early stage of development where the focus remains on qualitative and descriptive disclosures. In terms of financially material information, current disclosure practices often **fail to provide content that can be used by capital providers to predict the future performance of the business**. And there was little evidence from the reviewed companies that sustainability-related intangibles are considered to be major drivers of value creation.
- **Destruction of value, such as may be caused by underestimation of environmental or social risks and/or inaction was also found to be inadequately developed and discussed in disclosures**. New methods of “value” and “impact” assessment are more inclusive of risks related to social and governance issues, and it remains difficult to relate the “direct” and “indirect” impacts of decisions on either the company or its stakeholders. We also note that even among the identified good reporting examples, opportunities are sometimes only presented as a way to mitigate value destruction.
- **Disclosures were sometimes found to lack a balanced perspective** and sometimes only portray positive impacts. Stakeholders expressed a need for a better balance between the reporting of positive and negative impacts and dependencies.

Sustainability risks, opportunities and linkage to performance, strategy (Detailed analysis in Chapter 4)

- **Sustainability risks are disclosed in various locations across corporate reports and lack coherence.** Current general practices lack a structured approach where risks are clearly linked to the business model. For example, companies rarely explain if, and how, their business model and strategy are resilient to environmental and social risks.
- **Sustainability opportunities are disclosed as part of material themes identified in sustainability reporting.** Accordingly, opportunities are often difficult to define with respect to risks and their connection to the business model.
- Generally, the PTF-RNFRO identified **less mature reporting of sustainability opportunities compared to sustainability risks, possibly suggesting that sustainability is perceived as a restraint on the business rather than an opportunity** for growth and development of the business. Stakeholder feedback shows an increasing recognition that sustainability is a relevant and necessary component of business models, but the leap is still to be made by some to move from construing it as a cost or risk rather than as an opportunity that brings potential new areas of growth.
- Although a majority of respondents to the PTF-RNFRO survey considered the application of the EU Taxonomy to investments as an opportunity to review/enhance their business models, only a **few of the reviewed companies report on their current alignment with the EU Taxonomy** or describe a future plan for its implementation.
- **A quantification of sustainability risks and opportunities is rarely disclosed**, even though it is essential for the evaluation and decision-making process of the business model. This finding is consistent with the conclusions of the PTF-CRR report⁹.
- Disclosures on sustainability risks and opportunities have **limited utility for users (investors and analysts) due to inadequate disclosure on the future cash flow implications of achieving sustainability targets and strategy.** Inadequate disclosures can mask how an entity's future cash flows are affected by changes to the business model, either positively or negatively.
- The link between **sustainability strategies and companies' financial objectives is quite limited.** Many companies tend to only report through a general qualitative statement or objectives associating their strategy with the Sustainability Development Goals of the United Nations General Assembly (SDGs), and a few report other factors such as adding value to specific stakeholders.

Furthermore, the stakeholder outreach highlighted that some of the trends observed in practice are driven by varied and nuanced factors such as data availability bias, potential liabilities and litigation risk, different perspectives on risks and opportunities by teams within companies working in isolation (i.e., in siloes) and the considerable challenge to distinguish a trend from an opportunity or risk.

Other key findings on sustainability reporting practices

Application of standards (Detailed analysis in Chapter 4 and Chapter 5)

- **Use of a variety of existing standards, guidance and frameworks was observed** in the reviewed companies. Furthermore, stakeholders including preparers and investors told us that they currently struggle with reporting requirements because of the vast array of voluntary frameworks, standards, and other guidance. In addition, the existing reporting requirements do not sufficiently articulate the disclosure objective that drives the reporting of sustainability information. This finding aligns with the

⁹ European Lab, PTF-CRR, 2020, How to Improve Climate-Related Reporting. <https://www.efrag.org/Assets/Download?assetUrl=/sites/webpublishing/SiteAssets/European%20Lab%20PTF-CRR%20%28Main%20Report%29.pdf>

European Lab Project Task Force for the elaboration of Non-Financial Reporting Standards report (PTF-NFRS report)¹⁰ conclusion that the large and increasing number of reporting requirements and frameworks, together with their heterogeneity (in scope, objective, implementation – voluntary or mandatory, technology, etc.), are a source of numerous inconsistencies in reporting practices.

- **Definitions differ and there is a varied use of terms across existing reporting standards, guidance and frameworks** which leads to ambiguity in how those terms are used in reports.

Application of technology (Detailed analysis in [Chapter 6](#))

- There is an **insufficient deployment of possible technological solutions** (e.g., structured data, AI and other technologies) to report sustainability information by the reviewed sample of companies.
- Due to companies being at the early stages of applying technological solutions for reporting sustainability information, we were only able to identify a few leading practices, and these are mentioned in Chapter 6 with details included in the *Supplementary Document*.
- Data technology has the potential to play a significant role in minimising the reporting burden such as managing data collection, dissemination, and verification, applying science-based targets, and enhancing and enabling the qualitative characteristics that define good disclosures. Relatedly, the PTF-NFRS report noted that from a digitisation perspective, the non-financial reporting ecosystem is diversified in many ways, inflating costs, creating operational and compliance risks, and ultimately hampering access to information by stakeholders. It recommended that to facilitate digitisation, the EU standard-setter should translate the architecture's classification and segmentation of sustainability disclosures into a digital taxonomy from the outset.

Credibility of information (targets and assurance) (Detailed analysis in [Chapter 5](#))

- **Absence or patchy application of science-based targets** when reporting on sustainability outcomes and impacts was a key issue identified. Standardisation of sector-specific definitions and metrics is needed in order to measure the degree of sustainability of activities and to steer actions and finance towards a sustainable economy.
- **Inconsistent use of third-party assurance on non-financial information.** Assurance is necessary to provide confidence to users that the corporate reporting process and controls produce information that is reliable, accurate and complete and the appropriate principles as specified by the selected reporting standards, guidance and frameworks have been properly applied. It was observed that there are large differences in the scope of assurance and application of assurance standards. Furthermore, the wording of the assurance report varied significantly across assurance providers¹¹. During the stakeholder-outreach interviews, assurance providers underlined the need to standardise the criteria of the assurance process for all sustainability matters.

Path to improvement

Based on the key findings, it is the view of the PTF-RNFRO that there is considerable scope for improving the quality and usefulness of reporting on sustainability risks and opportunities and their linkage to the business model. In [Chapter 7](#), we present what we consider to be needed steps in the path to improvement, specifically the need for:

- a **clearer** description of the business model and **linkage** to sustainability risks and opportunities;

¹⁰ European Lab, PTF-NFRS, March 2021, Current Non-Financial Reporting Formats and Practices. https://www.efrag.org/Assets/Download?assetUrl=%2FSites%2Fwebpublishing%2FSiteAssets%2FEFRAG%02520PTF-NFRS_A6_FINAL.pdf

¹¹ These findings were affirmed by a recent study undertaken by AICPA and IFAC (2021) <https://www.ifac.org/knowledge-gateway/contributing-global-economy/publications/state-play-sustainability-assurance>

- more emphasis on **reporting opportunities**;
- **quantification** of risks and opportunities and **cash flow generation**;
- better **connectivity of financial and sustainability information**;
- application of **evidence-based** and science-based targets;
- optimising the **use of available technologies**; and
- attaining credibility through third-party **assurance**.

In [Chapter 5](#) (Section 5.3), inspired by the feedback from outreach to stakeholders, **we also suggest sustainability reporting tips that companies can consider (i.e., do's and don'ts)**. These proposed steps and tips only represent the PTF-RNFRO views on how reporting practices related to sustainability risks, opportunities and the business model can be improved, and these should not be construed as guidance.

Learnings from the identified good reporting practices

The identified good practices are detailed in the [Supplementary Document: Good reporting practices](#). In Table 1 below, we summarise a selection of the key positive features of the good or leading practices as well as aspects of reporting that could be improved more broadly. We recognise that not all good or leading reporting practices that have been identified are relevant for all preparers and users, since they may be only applicable to specific industries or sectors and relevance changes over time.

We furthermore recognise that our study did not capture all companies that report using good or leading practices.

Table 1: Learnings from the identified good or leading practices

Analytical considerations	Positive features of good or leading practices	What could be better
Business model reporting		
Clarity and comprehensiveness of overall business model disclosure (i.e., value creation model)	<ul style="list-style-type: none"> • Concise and sufficient description of the business model's inputs, business activities, outputs, and impacts made with disaggregation by ESG categories. • Effective visual representation of the business model. • Distinguish between direct and indirect upstream and downstream inputs and outputs. • Have a connectivity table and additional contextualising information that shows how material sustainability topics affect different business segments. • Leverage technology (e.g., website interactivity features) to provide readers easy access to comprehensive business model-related information. 	<ul style="list-style-type: none"> • Some companies only provide partial business model related information and miss out on key elements (e.g., do not provide sufficient information on impacts, business activities). • There remains a need for disclosure that conveys the resilience of business models (i.e., going beyond only presenting a static view of the business model).
Disclosure of potential across time horizons	<ul style="list-style-type: none"> • A clear definition of short-, medium- and long-term horizons and goals related to these horizons. • Provide scenario analysis information with a definition of short, medium, and long term and the effects of carbon pricing on the value of the asset portfolio. • There is a clear alignment between the company's disclosed business planning timeframes and policy goals timelines. 	<ul style="list-style-type: none"> • Some of the disclosures only provide broad sectoral information of risks and opportunities across different timeframes and not company-specific information. • Some companies do not define what short, medium and long term means for them.

Analytical considerations	Positive features of good or leading practices	What could be better
Disclosure of dependencies and impacts	<ul style="list-style-type: none"> • Reader-friendly graphic presentation of the monetised impact for each of the six Integrated Reporting (IR) capital stakeholders showing positive or negative impact per IR capital category, and thereafter the net positive impact. • Transparent on the methodology applied for the determination of impacts. • Visually outline both positive and negative impacts on different stakeholders with a distinction by the six IR capitals. An explanatory note of how the visual depictions translate to monetary equivalents is provided. Highlight the impact on SDGs. • Are transparent about what went wrong. 	<ul style="list-style-type: none"> • In many cases, the description of impacts including links to SDGs is only done by generic statements. • Some companies could better outline positive and negative impacts. • For some companies, there is a need for a greater degree of quantification of impacts (i.e., going beyond only diagrammatic representations and a qualitative description of impacts). • Companies are generally not ranking or signalling what their top impacts and dependencies (resources and relationships) are.
Sustainability matters linkage to business model, strategy		
Disclosure of material sustainability matters that are likely to affect company performance	<ul style="list-style-type: none"> • Provide a clear link between identified Top 10 risks and opportunities and the company KPIs. • Have a connectivity table matrix that shows the interrelationship between sustainability issues and KPIs. • Provide information on an available lending facility whose margin depends on fulfilling emission targets and this shows how impacts on the environment can translate to material financial information. 	<ul style="list-style-type: none"> • Some companies have an insufficient quantification of the effect of sustainability matters on company performance and KPIs. • It being hard to link identified sustainability matter to performance KPIs due to fragmentary reporting and in the absence of a connectivity map.
Disclosure of sustainability risks	<ul style="list-style-type: none"> • Provide a succinct summary of different categories of sustainability risk exposure and risk mitigation measures. • Disclose the level of risk across the value chain including that faced by suppliers and contractors. Quantifies sustainability risk exposures in terms of impact on financial performance. • There is connectivity between financial and sustainability information with a clear link between the information in the annual report and the sustainability report. 	<ul style="list-style-type: none"> • Some companies only qualitatively describe their risk exposure. • Some companies could better show the possible effect of sustainability risks on financial performance. • There is a need to disclose how sustainability risk exposures may affect the company's financial position (i.e., the resilience of balance sheets).
Disclosure of sustainability opportunities	<ul style="list-style-type: none"> • Quantifies opportunities at a macro-level. • Are specific on revenue potential (e.g., percentage of green revenues), and the opportunities related to different products and business segments. 	<ul style="list-style-type: none"> • Some companies only qualitatively describe their opportunities. • Some companies could better show the possible effect of sustainability risks on financial performance. • The companies could highlight opportunities across short-, medium- and long-term timeframes. • Some companies only describe opportunities in non-monetary units and for these companies, it would also be helpful to have monetised information. • Information on business segmental or product level opportunities would be insightful. • Reporting on circular economy and other sustainability opportunities tend to be less mature than reporting on climate-related opportunities.
Disclosure of sustainability strategy, targets, KPIs, and progress	<ul style="list-style-type: none"> • Describe how the company's business model is linked to SDG targets. • Link external macroeconomic environment, strategic sustainability issue and ambitions/targets. • Identify and rank material issues and link these to targets and KPIs. • Succinct presentation of economic value creation and sustainability topics KPIs with multi-year comparatives and also highlights research and development spend on sustainable innovations. • Provide a triple bottom line (financial and non-financial bottom line) presentation. • Provide detailed KPIs for different sustainability topics on a multi-year basis. 	<ul style="list-style-type: none"> • Some companies do not sufficiently outline monetised effects in their presentation of KPIs. • Targets and commitments are often described using generic language.

Report structure

The following describes the layout and content of this report:

- **Chapter 1** provides an overview of **why** this project was undertaken, **what** it attempts to address and **who** it aims to assist including by providing a **SMEs perspective**.
- **Chapter 2** sets the context providing an understanding of practices and describes the **Practices Evaluation Approach** that the PTF-RNFRO applied to identify good reporting practices.
- **Chapter 3** reviews the strengths and weaknesses of **reporting on the ‘Business Model’**.
- **Chapter 4** reviews how **sustainability risks and opportunities and links to strategies, targets and performance are evaluated**, and consider how these core elements of sustainability reporting are connected or linked.
- **Chapter 5** considers **what is driving the reporting practices**, using insights from a wide range of financial and non-financial preparers, users, and other stakeholders such as accountancy professionals, academics and representatives from NGOs.
- **Chapter 6** elaborates on the possible **technological solutions in reporting sustainability information** and considers to what extent these technologies are used currently as well as the future outlook.
- Finally, **Chapter 7** proposes **ways to improve practices**, based on the perspective of the PTF-RNFRO evaluation of reporting practices and feedback from stakeholders.

Appendices to this report

- **Appendix 1 – Terms, definitions and abbreviations** (used in this report and the *Supplementary Document*)
- **Appendix 2 – Methodology applied in the review of good reporting practices**
- **Appendix 3 – Practices Evaluation Approach Matrix**
- **Appendix 4 – PTF-RNFRO Members and support team**
- **Appendix 5 – References**

This report has a [Supplementary Document: Good reporting practices](#), which includes **30 examples of good reporting practices on sustainability risks, opportunities and business model** from recently published integrated reports, annual reports, management reports and sustainability reports and related documents. The *Supplementary Document* explains why these examples were chosen, what could be improved, and it provides links to the source documents. The *Supplementary Document* also includes **seven examples of the application of technological solutions** in reporting sustainability information.

CHAPTER 1

PROJECT BACKGROUND

1. Project Background

1.1 Why focus on sustainability reporting?

Corporate reporting continues to evolve to address not only the financial drivers of value creation but also the sustainability dimensions of business activities. More recognition is being given by policymakers, companies and capital providers to the externalities or impacts that business activities have on people and the planet (which remain largely unaccounted for). These sustainability¹² factors can seriously impede a company's business model if they are not understood and appropriately addressed. Conversely, some companies are adapting their business models beyond a 'do no harm' approach to having a substantial positive impact generating value from these new business opportunities. This is currently the exception but increasingly will need to become the norm.

As a result of this evolution, there is a growing appetite from capital providers in Europe and beyond for high-quality (i.e., relevant/material, reliable, comparable, and consistent) company-reported information on sustainability risks and opportunities and how they impact the viability of the business model. It is well-accepted that better and more meaningful disclosures are likely to result in more informed decision-making on capital flows including redirecting them to facilitate the transition to more sustainable business models.

The NFRD¹³ has been the main legal requirement, to date, for the reporting of sustainability information in the EU. The NFRD is intended to be recast and revised by the proposal for a CSRD¹⁴. The NFRD identifies sustainability issues including the environment, social and employees, human rights, bribery, and corruption, along with a requirement to disclose information about their business model, policies (including implemented due diligence processes), outcomes, risks and risk management, and key performance indicators (KPIs) relevant to the business. In its current form, the NFRD does not introduce or require the use of a non-financial reporting standard or framework, nor does it impose detailed disclosure requirements such as sector-specific indicators. However, the NFRD requires companies to disclose both how sustainability issues may affect the company, and how the company affects society and the environment – referred to as double materiality.

In discussions about sustainability reporting, the topic is often mixed up with the reporting on intangibles. Under existing reporting requirements despite widespread recognition that intangibles make up the majority of the value of a company¹⁵, outside of acquisitions and certain exceptional circumstances, they remain unaccounted for. It highlights that business model reporting remains somewhat incomplete by not articulating the role and function of intangible assets. This topic is considered further in [Chapter 3](#).

The challenge for companies in preparing corporate reports is to advance a model for transparency, which is focussed, clear and flexible enough to incorporate the unique value creation of an enterprise, while at the same time providing consistency and reliability to allow users to compare, benchmark and rate performance against sustainability criteria. This is the essence of sustainability reporting and the key to its success is simplicity in explaining how it contributes to the creation (and destruction) of value not just for shareholders but for wider stakeholders. EU law is in the process of strengthening what constitutes a stakeholder of a company (see work on corporate governance¹⁶).

¹² Our view is that the sustainability of a business model is inextricably linked to its positive contribution to people and planet.

¹³ It is noted that the transposition of the NFRD across Member States has been uneven as identified in this study by Accountancy Europe (2018) [Member State Implementation of the NFI Directive](#)

¹⁴ The proposed CSRD was adopted by the EC on 21 April 2021, and is tabled for negotiations in the European Parliament and Council of Ministers at the time of this PTF-RNFRO report. The European Parliament and the Council will adopt the CSRD directive following negotiations. The EC has prepared a useful Q&A on the proposal which is available at: https://ec.europa.eu/commission/presscorner/detail/en/QANDA_21_1806

¹⁵ See the often-quoted Ocean Tomo periodic survey on intangibles: <https://www.oceantomo.com/intangible-asset-market-value-study/>

¹⁶ See Study undertaken by the EC available at: <https://op.europa.eu/en/publication-detail/-/publication/e47928a2-d20b-11ea-adf7-01aa75ed71a1/language-en>. A study of practice was undertaken by DNV and WBCSD which specifically addresses the issue of a company's stakeholders. The full report is available at: <https://www.wbcd.org/content/wbc/download/12423/185307/1>

1.2 What did the project address?

This project arose from a 2019 public agenda consultation held by the European Lab Steering Group which identified a need for examples of good practices on the reporting of non-financial risks and opportunities and linkage to the business model.

Robust reporting on sustainability risks, opportunities, and the sustainability of business models over time, including sources of competitive advantage, is a core input in the assessment of companies' performance and viability by capital providers. However, reporting on these issues has proven to be a significant challenge for companies primarily because:

- the EU and national legal requirements along with voluntary reporting frameworks, standards and guidance address the reporting on business models and related risks and opportunities, each with different approaches and emphasis;
- companies are more experienced in a backward-looking analysis of their impacts and performance rather than a forward-looking estimation of the impacts of their strategy and investments. As a consequence, the tools currently available for forward-looking analysis are not mature enough to safeguard accurate and specific results particularly in the assessment of the indirect impacts as in the case of value chains; and
- there is an expectation from stakeholders for companies to disclose how they address these risks because they are increasingly understood to be as material as other risks, although sometimes their impact can be over a longer time horizon. A number of reviews of both EU and global companies' reporting practices have shown that there is scope for improvement¹⁷.

For these reasons, this project was established to consider linkage across three main areas:

- the articulation of a company's business model;
- sustainability (ESG) risks and opportunities and related intangibles. As noted earlier, the reporting of sustainability and related intangibles is collectively referred to as 'sustainability reporting'; and
- the deployment of technology to facilitate and enhance reporting of sustainability information.

This report provides a balanced and holistic approach in its assessment and sharing of reporting practices. It aims to respond to the challenge of reporting complex environmental and social factors that generate sustainability risks and opportunities and informing stakeholders as to their long-term performance and position. To this end, it can help to contribute to good practices on the reporting of sustainability risks, opportunities, and the sustainability of business models over time, and sources of competitive advantage. It was beyond the scope of the project to consider or interpret existing or future reporting requirements or provide any material that could be construed as being authoritative guidance. The findings and suggestions made in this report reflect the collective expertise of the PTF-RNFRO members who were drawn from a wide range of professional backgrounds and represent different countries across the EU.

The earlier European Lab project on Climate-related Reporting by the PTF-CRR that issued its report in early 2020 only represents a sub-set of the topics covered in this report, as climate-related reporting is part of the broader environmental factors considered here.

¹⁷ For example; 2018 [CDSB report](#), 2019 [Alliance for Corporate Transparency report](#)

As detailed in the [Supplementary Document: Good reporting practices](#), this project has identified 30 examples of good reporting practices from 22 companies after the review of a sample of 44 companies. The selected examples are spread across financial and non-financial industries/sectors:

- The financial industry/sector examples of good reporting practices are from banking and insurance/asset management firms.
- The non-financial examples of good reporting practices are from the following industries/sectors: automotive, biotechnology, chemicals, construction, consumer goods, electronic component and equipment, equipment distributor, energy, forest products and paper, industrial products, infrastructure, mining, pharmaceutical, professional services and utilities.

Geographically, most of the selected companies operate internationally with headquarters located across twelve EU Member States and the UK¹⁸.

The approach to the sample selection was developed to ensure that examples were independently selected and that a collective PTF-RNFRO assessment of the suitability of any example – informed by individual members’ expert judgement – was the sole criterion for including examples ([see Appendix 2](#)). The PTF-RNFRO selection of examples was further informed by feedback obtained during the stakeholder outreach events. In applying its methodology, the PTF-RNFRO did not aim to identify all existing good practices across the universe of companies.

1.3 What is the purpose of this document?

This report is intended to shine a light on current reporting of the business model and links to the risks and opportunities that flow from its operations in creating value for the company and its stakeholders¹⁹. Value creation with a focus beyond the generation of cash flows is not a new idea but there remains insufficient attention given to the impacts, dependencies, and vulnerabilities of corporate activities. The intention is that by sharing good practices and reporting challenges, this report will contribute to better information being disclosed by companies to support decision-making and accountability. That, in turn, can contribute to a positive change in behaviour, encourage responsible and sustainable businesses, and drive better use of resources, promote well-being, and a more efficient allocation of capital with a mind on intergenerational equity and stewardship. As noted in EC Sustainable Finance Strategy, with the scale of the sustainable investment required, the main objective of the sustainable finance framework is to channel private financial flows into relevant economic activities. Europe needs €230 bn annually for the sustainable transformation²⁰ and reporting is an important part of the equation of enabling the needed capital flows.

The present and immediate issues of people and planet are at a critical juncture²¹ and continues to evolve presenting both risks and opportunities for businesses. Half a century ago, the Club of Rome Report²² ‘Limits to Growth’ (1972) opened the debate on our planetary boundaries²³. Since then, the global population has increased two-fold from approximately 3.8 billion people to 7.8 billion and is estimated to grow to approximately 9.7 billion²⁴ by 2050. During this same half-century, the proportion of the world’s population living in extreme poverty dropped significantly as the Global National Income (GNI) per capita increased. This welcome economic prosperity was, however, also accompanied by an average increase of 1.6% per

18 List of Countries: Austria, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Spain, Sweden, United Kingdom

19 Consistent with the double-materiality principle – value creation is considered from both the perspective of the business and its stakeholders who are impacted by its activities. A vivid example of this is contained in the FOLU report which highlights that the global food and land use system generates around \$10 trillion in value for companies but that is counterbalanced by the externalisation of costs to people and planet of around \$12 trillion caused by obesity, undernutrition, and environmental impacts. See <https://www.foodandlandusecoalition.org/wp-content/uploads/2019/09/FOLU-GrowingBetter-GlobalReport.pdf>

20 Christine La Garde, President European Investment Bank, Commission Conference on CSRD 6 May 2021

21 [International Panel on Climate Change \(IPCC\) Sixth Assessment Report \(AR6\)](#)

22 <https://www.clubofrome.eu/limits-to-growth-the-30-year>

23 <https://www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/about-the-research/the-nine-planetary-boundaries.html>

24 UN Data <https://data.un.org>

year of carbon dioxide equivalent CO₂e emissions²⁵ as highlighted in the Global Greenhouse Gas Emissions website²⁶. Tied to the imperative for decarbonisation, the EU has made a number of ambitious commitments, in particular, to become the first climate-neutral continent by 2050 and to reduce greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. The EU also aims to strengthen its resilience to climate change, to reverse biodiversity loss and the broader degradation of the environment.

Globally, economic growth has not been decoupled from resource consumption and the emergence of a global affluent middle class has added further pressure to an already unsustainable pattern²⁷. As an example, during 2019, just 12% of material inputs were recycled by the EU Member States²⁸ (EU27), underlining the need for a more circular economy. Emissions of greenhouse gases, combined with water stress, land-use change, biodiversity loss and pollution has significantly impacted upon the conservation status of EU habitats²⁹. The current approach to business has been described as unsustainable³⁰. If the rising trend in environmental-related impacts persists, the goals of the Paris Agreement under the United Nations Framework Convention on Climate Change (Paris Agreement) will become difficult to meet and the achievement of the SDGs will be placed at risk³¹.

Poor environmental practices, degradation of natural resources and climate change have adverse social impacts including property damage, loss of social cohesion, poverty, war and famine. Under new EU Sustainable Finance regulations, an investment by any company in countries that are subject to environmental and/or social violations is considered an adverse sustainability action and is required to be disclosed by investors³². This shows first-hand, at a time when companies are increasing their awareness and social responsibility, how financial market participants are compelled to enact their sustainability policies.

Companies need to transform in order to increase their resilience to risks and growth potential. To support the Green Deal objective, EU companies need to demonstrate robust governance and risk management and an alignment of their value creation opportunities and business model with sustainability goals through high-quality corporate reporting.

Increasingly, companies which show they are aligning with a low carbon, more resilient and sustainable economic model are more likely to be favoured by investors, more likely to have cheaper access to capital, and more likely to be trusted sourcing partners with other companies. The ongoing COVID-19 pandemic has accelerated the focus on sustainability actions and the need for disclosing such actions in a consistent, comparable, and connected manner. It is important to ensure that this will be a verifiable commitment taken at the highest level of corporate hierarchy and evidenced with public information that can be comparable and auditable.

However, corporate reporting practices have not kept pace with the need for companies to demonstrate not only their financial performance but also the impacts they have on society and the environment. The challenge remains for companies to improve their reporting practices to match the policy reforms in the EU.

Good reporting is more than a legal requirement; it provides an opportunity for a company to communicate its financial health and sustainability over the short, medium, and long term, and to engage with a full spectrum of stakeholders. Reporting is also useful for preparers to communicate the effectiveness of their sustainability strategies and monitor the reporting of their peers.

25 [IPCC AR4 Report](#)

26 Our World in Data: [Global Greenhouse Gas Emissions](#) emissions rose from 28.7 giga-tonnes (Gt)CO₂e in 1970 to 39.4 GtCO₂e in 1990 and 49.36 GtCO₂e in 2016)

27 Panel, I. R., 2019, Global Resources Outlook 2019: Natural Resources for the Future We Want, No ISBN: 978-92-807-3741-7, United Nations Environment Programme

28 <https://www.eea.europa.eu/media/infographics/schematic-representation-of-limits-of/view>

29 European Environment Agency Data & Maps (https://www.eea.europa.eu/data-and-maps/daviz/conservation-status-of-habitats-at#tab-chart_1)

30 <https://www.eea.europa.eu/themes/sustainability-transitions/drivers-of-change/growth-without-economic-growth>

31 Panel, I. R., 2019, Global Resources Outlook 2019: Natural Resources for the Future We Want, No ISBN: 978-92-807-3741-7, United Nations Environment Programme

32 Sustainable Finance Disclosure Regulation, Report on Draft Regulatory Technical Standards 'indicators applicable to investments in sovereigns and supranationals, Joint Committee of the European Supervisory Authorities JC 2021 03, 2 February 2021

In light of these needs, the purpose of this report and the [Supplementary Document: Good Reporting Practices](#) is to help companies to improve their sustainability reporting and other non-financial disclosures by sharing examples of good reporting practices, as well as giving an indication of the reporting practices to avoid. The identified good reporting practices can enable companies to benchmark and improve their practices.

1.4 SMEs perspective

Small-and-medium-sized enterprises (SMEs) are critical to the European economy and the achievement of the goals and ambitions of the EU Green Deal. The PTF-NFRS report notes that these entities, which represent 99.8% of all businesses in the EU non-financial business sector, are a major part of the economic landscape, and are confronted with risks and opportunities, e.g., transitional or physical climate risks, and impacting society and the environment.

The European Federation of Accountants and Auditors (EFAA) for SMEs has highlighted that these entities are increasingly facing requests for sustainability information³³ – often from those that lend them money and large companies that buy their products and services – and that collecting and sharing sustainability information will become a common business practice for companies irrespective of size. Similarly, the PTF-NFRS report points to SMEs as being key stakeholders of financial institutions, as they may rely upon external financing in the form of bank loans and/or equity from investment companies at some point in their development (e.g., growth, succession, initial public offering). Financial institutions being themselves subject to increasingly demanding sustainability reporting requirements, will inevitably cascade these requirements down to SMEs – borrowers or investees, who will then have to provide this sustainability information in order to maintain access to financing and investment.

In effect, the trickle-down effect from SMEs value chain partners and the EU Taxonomy and Disclosure Regulations will result in these entities being increasingly exposed to sustainability information requests from their stakeholders.

Accordingly, SMEs were within the scope of the PTF-RNFRO mandate to identify good reporting practices. However, the reporting by SMEs is less mature than it is for the larger companies, and this made it difficult for the PTF-RNFRO to identify good practices from this important sector. We note that the larger companies tend to have had several years of experience and experimentation with sustainability reporting and are more likely to have good or leading reporting practices than is the case with SMEs.

Nonetheless, being able to articulate the business model, risks and opportunities is central to the success of any business including SMEs. Furthermore, the proposal for a CSRD included SMEs listed on regulated markets in its scope, meaning that they are likely to be required to report sustainability information. The CSRD proposal foresees a requirement for the EC to adopt sustainability reporting standards for SMEs by October 2023. The proposed CSRD foresees that SMEs listed on regulated markets- can choose between using the proportionate SME standards or standards for large companies. Although co-legislators (the European Parliament and Council of Ministers) have not taken the final decision, we anticipate that the findings of our report will also be a useful reference point for SMEs.

As pointed out in a written submission from the International Federation of Accountants (IFAC), SMEs are not a homogenous group and their ability and interest to voluntarily prepare sustainability reports will depend on multiple different factors, including their size, sector, ownership, business models, and resource limitations. Certain SMEs, including not-for-profit organisations, may see the benefits of creating greater trust and credibility with customers, suppliers, other stakeholders, and society, or being able to access finance that may otherwise be unavailable, such as public grants that require a procurement application. There may also be advantages in attracting and retaining employees who want to work for organisations that set out to have a positive impact on the environment and society. Relevant, timely, comparable, and accurate sustainability information can assist SMEs to think holistically about their strategy and business models. This information can

³³ <https://efaa.com/wp-content/uploads/2021/06/2021041-1.pdf>

clarify opportunities and risks related to impacts on the environment and people and better inform decisions and investments.

Similarly, an Accountancy Europe³⁴ paper on SMEs risk management noted that not actively assessing and considering the business' sustainability impacts (including production methods and delivery, access to raw materials etc.) may lead to obsolete business models. It also notes the risk of stranded assets faced by SMEs. And that the ongoing COVID-19 outbreak and its impact on supply chains and markets is yet another demonstration of why robust supply chain awareness and management matter.

In this observation of the potential usefulness of the identified good reporting practices for SMEs, the PTF-RNFRO has not overlooked that SMEs need to be subject to proportionate reporting requirements as recommended in the PTF-NFRS report and emphasised by both SME United³⁵ and EFAA.

34 Accountancy Europe, July 2020, [SME Risk Management Sustainability](#)

35 SMEunited, July 2021, [SMEunited publishes first assessment of the Corporate Sustainability Reporting Directive.](#)

CHAPTER 2

UNDERSTANDING AND EVALUATING PRACTICE



2. Understanding and evaluating practice

2.1 Introduction

Identifying good practices in sustainability reporting is, by its very nature, a subjective undertaking and the interpretation of what is a good reporting practice depends on the context of the reader. Whilst some degree of subjectivity is unavoidable, the assumptions and criteria used by the PTF-RNFRO are set out below in the Practices Evaluation Approach, which provides a basis for the evaluation of good reporting practices in this report. The Practices Evaluation Approach is not intended as guidance.

2.2 Practices Evaluation Approach development

The objective of the Practices Evaluation Approach was to establish a set of principles or attributes for identifying disclosures with characteristics of useful sustainability reporting information. The information attributes were drawn from well-accepted reporting frameworks and for each attribute, content elements are specified to help in the assessment of disclosures.

The fundamental assumptions, the qualitative characteristics and the criteria included in the Practices Evaluation Approach have been defined through the integration of the concepts provided by the Conceptual Framework for Financial Reporting³⁶, also considering the International Accounting Standards Board (IASB) project to revise the Practice Statement on *Management Commentary*³⁷, with the common principles underlying the major non-financial reporting frameworks, standards and other guidance.

As a result, the Practices Evaluation Approach developed by the PTF-RNFRO includes:

- a first layer of qualitative characteristics which is consistent with those provided for financial reporting information; and
- a second set of criteria, that are specific for sustainability reporting, mainly derived from the assessment performed by the Corporate Reporting Dialogue (“CRD”) and from all the most common frameworks and guidance for sustainability reporting.

The development comprised of the following steps:

- understanding if all the fundamental qualitative characteristics for financial reporting (i.e., the **relevance and faithful representation**, supported by the four enhancing qualitative characteristics of **understandability, verifiability, reliability and comparability**) could be applicable to sustainability reporting³⁸,
- applying all these qualitative characteristics to the reporting practices identified in the business model and related risks and opportunities, in analogy with the assessment performed by the IASB’s project to revise the Practice Statement on *Management Commentary* where such concepts have been proposed.

36 The Conceptual Framework for Financial Reporting, as revised in 2018, helps to ensure that IFRS Standards are consistent and that similar transactions are treated in the same way. The scope of Conceptual Framework for Financial Reporting is to provide useful information for “Primary users” (i.e., all the existing and potential investors, lenders and other creditors, that make their own decisions relating to provide resources to the entity based on the general-purpose financial statements), about the reporting entity’s assets, liabilities, equity, income and expenses).

37 This is one of the IASB’s current projects and an Exposure Draft was published in May 2021 and is one of the projects that aims to promote better communication in financial reporting.

38 Analysing the recent evolution in corporate reporting, including the Consultation Paper issued by the IFRS Foundation about sustainability reporting that confirmed the qualitative characteristics of financial statements could inform the qualitative characteristics useful in sustainability reporting. Whilst the relevance of the qualitative characteristics for financial information appears to be equally applicable to sustainability reporting information the common focus is in serving the needs of capital providers. Furthermore, the application of those characteristics is likely to require further elaboration in their application to sustainability reporting information, given its diverse nature.

The Practices Evaluation Approach development also integrated:

- the principles that participants to the CRD considered as being fundamental in its paper on the value of transparency and accountability³⁹;
- the EU Non-Binding Guidelines⁴⁰ issued by the EC in 2017;
- the Sustainable Development Goals Disclosure (SDGD) Recommendations⁴¹ published by Chartered Accountants Australia & New Zealand (CAANZ), Association of Chartered Certified Accountants (ACCA), Institute of Chartered Accountants of Scotland (ICAS), International Federation of Accountants (IFAC), International Integrated Reporting Council (IIRC), World Benchmarking Association (WBA) in January 2020;
- the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)⁴²; and
- the World Intellectual Capital Initiative (WICI) Intangibles Reporting Framework⁴³, which was published by the WICI in 2016.

The Practices Evaluation Approach attributes are consistent with the conclusions in the PTF-NFRS report, which confirmed that the characteristics associated with the quality of financial information are not fundamentally different from the attributes of non-financial (sustainability) information. The Practices Evaluation Approach also provides **key content elements** considered necessary to assess disclosures on risks and opportunities and their linkage to the business model as elaborated further below and in [Appendix 3](#).

39 See <https://corporatereportingdialogue.com/publication/understanding-the-value-of-transparency-and-accountability/>

40 The EU Non-Binding Guidelines aim is to help companies disclose high quality, relevant, useful, consistent and more comparable information about non-financial information, and in particular, ESG matters.

41 The SDGD recommendations aim to establish best practice for corporate reporting on the SDGs by developing both Fundamental Concepts and Principles for disclosure, that are derived from the widely adopted: TCFD recommendations, GRI Standards and IIRC IR Framework.

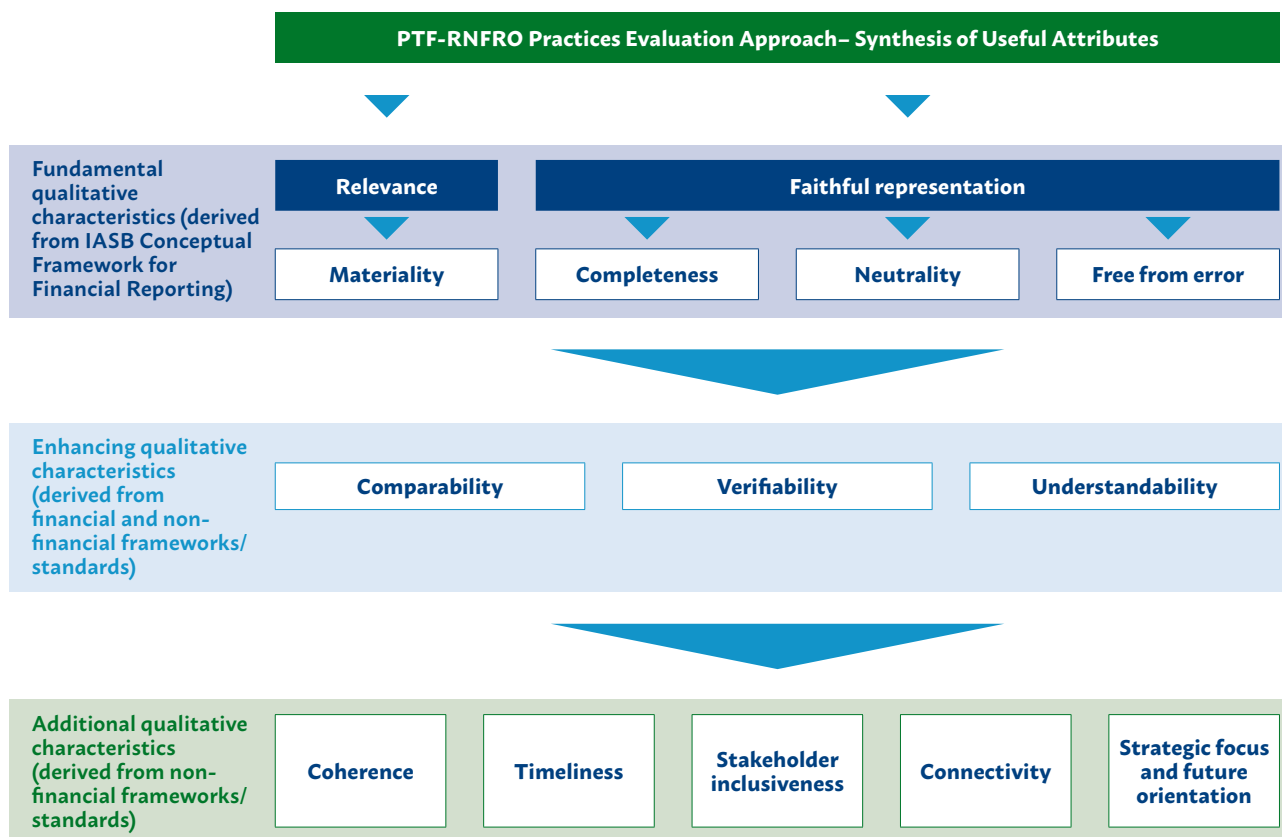
42 The TCFD recommendation were published in June 2017 for disclosing clear, comparable and consistent information about the risks and opportunities presented by climate change.

43 The WICI Framework is included because it is the only existing global framework for the reporting of intangibles. It aims to foster and facilitate reporting on how organisations create and/or identify, manage, combine and utilise their unique intangibles in order to generate value and achieve business sustainability.

2.3 Practices Evaluation Approach attributes, content elements and application

Key attributes for sustainability reporting information

Figure 1: PTF-RNFRO Practices Evaluation Approach – key attributes



Source: PTF-RNFRO Meta-synthesis of good financial reporting and non-financial (sustainability) reporting principles and characteristics.

Based on both the fundamental assumptions of the going concern and long-term value creation for investors and other stakeholders, the following characteristics are included as the Practices Evaluation Approach attributes used to identify examples of reported high-quality information on the business model and sustainability risks and opportunities.

Fundamental qualitative characteristics/attributes

- **Relevance/materiality** – information that is capable of making a difference to the decisions made by users of the information. For our purposes, materiality means “double materiality”.
- **Faithful representation**
 - **Completeness** – requiring the reporting of all material information identified for the relevant topics;
 - **Free from Error** – being free from material error and without bias; and
 - **Neutrality** – information is not presented in a way that increases the probability that it is received favourably or unfavourably by the users.

Enhancing qualitative characteristics/attributes

- **Comparability** – includes **consistency** of the basis of presentation, methodologies, metrics and reporting units which should be the same from year-on-year, also allowing comparison with other reporting entities;
- **Reliability/verifiability** – preparing information through processes and internal controls that ensure the quality of the information and allow for examination of the information reported; and
- **Understandability/clarity** – information that will be understandable and accessible to the users including a certain level of conciseness also including cross-references between reports.

The above characteristics are also mentioned in the PTF-NFRS report⁴⁴ as necessary characteristics of sustainability information. In addition, the Practices Evaluation Approach encompasses the following additional qualitative characteristics specific for sustainability reporting:

- **Coherence** of corporate reporting as a whole with clear links between the management report and non-financial statement. This allows information to be more useful, relevant and cohesive and the management report to be viewed as a single, balanced and coherent set of information (see the EU Non-binding guidelines)⁴⁵;
- **Connectivity** with financial information in order to provide a holistic view of the combination, interrelatedness and dependencies between all the factors that affect value creation;
- **Strategic focus and future orientation** providing insights about the strategy and its links with the value creation in the short, medium and long term;
- **Stakeholder inclusiveness** giving information about the relationship with key stakeholders, and how their interests have been taken into account; and
- **Timeliness** of the information that should be given to stakeholders in a timely manner to influence their decisions and preferably with aligned schedules for financial reporting and sustainability reporting. Timeliness is derived from CRD frameworks, and in particular from Global Reporting Initiative (GRI), whose definition is wider than the one provided by the IASB Conceptual Framework for financial reporting.

During the two-held PTF-RNFRO outreach events⁴⁶, stakeholders affirmed the importance of the above-noted Practices Evaluation Approach information attributes. Specifically, they noted that good practice examples should have clarity and context on the company's value chain and clearly outline strategic objectives, they emphasised the importance of connectivity between financial and non-financial information in telling the value story, and the importance of faithful representation and neutrality or balance in, for example, reporting of impacts on stakeholders.

Practices Evaluation Approach – content elements

The Practices Evaluation Approach content elements are defined on the basis of the available frameworks, standards and guidance. The focus was principally on the IIRC IR Framework, the NFRD, the TCFD recommendations and sustainability standards such as Global Reporting Initiative (GRI) Standards and

44 The PTF-NFRS main report dated 8 March 2021 describes the necessary characteristics of reported sustainability information, namely: (i) relevance, (ii) faithful representation, (iii) comparability, (iv) understandability and (v) reliability/verifiability https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FEFRAG%2520PTF-NFRS_MAIN_REPORT.pdf

45 This is also confirmed by the PTF -NFRS report that proposes all dimensions of corporate reporting need to be interconnected under an integrated approach (Proposal #28), and by the IASB in the Exposure Draft (ED) on *Practice Statement 1: Management Commentary*, according to which management commentary should include the information necessary for investors and creditors to assess all the implications that a single matters may have on different areas of content of the management commentary (ED paragraphs 13.27-13.30).

46 PTF-RNFRO Outreach event report <https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FSummary%2520report%2520-%2520PTF-RNFRO%2520webinar%252025%2520May%25202021.pdf>

Sustainability Accounting Standards Board (SASB) Standards, but also included other standards, consultation papers and (expected) regulations.

In terms of the application of the Practices Evaluation Approach, the following content elements are likely to be relevant for users of the reported sustainability information:

- a comprehensive description of the business model;
- the short, medium, and long-term potential of the business model;
- the business model's dependencies and impacts on sustainability issues;
- material sustainability issues that are likely to impact the company performance;
- the exposure to sustainability risks;
- the sustainability opportunities;
- the sustainability strategy, targets, KPIs, its monitoring and progress; and
- other aspects related to the contributions to the UN SDGs targets, the eventual sustainability reporting assurance and the alignment with the EU Taxonomy or future plan for its implementation.

The Practices Evaluation Approach Matrix in [Appendix 3](#) further highlights content elements for each attribute. These elements formed the basis of the PTF-RNFRO's evaluation of the reporting practices, as further described in [Appendix 2](#) and the *Supplementary Document*.

Applying Practices Evaluation Approach attributes and content elements in assessing reporting practices

How can the Practices Evaluation Approach attributes and content elements be applied to identify good reporting practices? The stated attributes or principles are primarily assertions made by companies' management whilst reporting. That said, a reviewer of reports can assess whether there is evidence within the reports that substantiate these management assertions.

Good reports are transparent and have readily identifiable evidence of management fulfilling these assertions. For example, the inclusion of material information will be supported by companies explaining how materiality is determined, what the material items are and why these are material. Verifiability will be supported by evidence of assurance and can be demonstrated by disclosure of methods used to determine disclosed data. Understandability will be supported by a reader-friendly presentation of information. Connectivity can be demonstrated by the disclosure of the financial impacts of sustainability factors. Stakeholder inclusiveness will be evident in the disclosure of impacts to different stakeholders.

The consideration of the Practices Evaluation Approach attributes and content elements was made when identifying good reporting practices as reflected in the explanations for the selection of the examples contained in the [Supplementary Document: Good reporting practices](#). Furthermore, as the use of technology in reporting is in the scope of the project, [Chapter 7](#) - Section 7.5 and [Appendix 3](#) highlights how technology solutions are associated with each of the Practices Evaluation Approach attributes.

Location of sustainability reporting information

In addition to how high quality of information can be achieved, one of the most common issues faced when disclosing sustainability information is whether all information relevant to capital providers and other stakeholders is to be presented in a single report or multiple reports.

In this regard, both the assessment of the current practice and the stakeholder engagement show that differences in practice exist in the disclosure of sustainability issues and their linkage to financial information:

- disclosing all information of interest to shareholders and other stakeholders in a single document defining material sustainability information and discussing their relevance in the context of financial information; and
- disclosing financial and sustainability issues in separate reports with specific linkages from one report to another.

Regardless of where the information is located, materiality serves as the basis for selecting information to be presented based on the specific intended users of the report. Yet, materiality assessments are a key process to assess a business model as it is the process that will feed the target-setting and decision-making process.

Based on that, when selecting good practices, consideration was given to the preparation of single and multiple reports, exploring the way to effectively connect sustainability to financial information regardless of the location of disclosure.

In terms of location of sustainability reporting information, what is relevant for the selection of good reporting practices is not whether they are disclosed together with financial information in one report (e.g., the management report) or in several reports. Rather the key issue is the way the information is connected between financial and sustainability information.

The assessment of the good reporting practices shows examples of the “**Core & More**”⁴⁷ approach (e.g., **ABN Amro, Enel**) as a presentation concept in corporate reporting, whereby the organisation and separation of information are based on the importance for users and is made between:

- a **Core Report**, that is intended to be an executive report that hosts the most relevant and material information about the entity, providing a holistic picture of the reporting organisation (e.g., management report/integrated report/sustainability report); and
- **one or several More Reports**, that capture more detailed and supplementary information (e.g., full financial statements, full corporate governance reports, full sustainability reports, etc.).

While the information provided by the Core Report would be targeted to the main stakeholders of the organisation, including but not limited to investors and creditors, the information provided by More Reports would be of interest to a more specific audience.

2.4. Identified good reporting practices

In Table 2 below is a summary of the identified good reporting practices that were identified after taking account of the Practices Evaluation Approach attributes and content elements (see [Supplementary Document: Good Reporting Practices](#) for more details- 30 examples are selected from 22 companies after the review of a sample of 44 companies).

⁴⁷ Accountancy Europe (2017) developed the “Core and More” approach as way of removing clutter from annual reports. See full report: <https://www.accountancyeurope.eu/publications/core-more-smarter-corporate-reporting/>

Table 2: Summary of good reporting practice examples

Analytical considerations	Good or leading reporting practice examples
Business model reporting	
Business model reporting: clarity and comprehensiveness of value creation description	<ul style="list-style-type: none"> • Neste (Energy) • Stora Enso (Forest products and paper) • Schneider (Electronic component and equipment) • FMO (Development banking)
Business model reporting: potential across time horizons	<ul style="list-style-type: none"> • Allianz (Insurance) • Schneider Electric (Electronic component and equipment) • Orsted (Energy)
Business model reporting: dependencies and impacts	<ul style="list-style-type: none"> • SGS (Business support services) • EnBW (Electric and gas utilities) • ABN Amro (Diversified banking) • DSM (Chemicals)
Reporting sustainability matters linkage to business model, strategy	
Sustainability matters effects on company performance	<ul style="list-style-type: none"> • EnBW (Electric and gas utilities) • Arcadis (Consulting engineering and construction) • ABN Amro (Diversified banking) • SGS (Business support services) • Norsk Hydro (Aluminium and renewable energy)
Sustainability risks	<ul style="list-style-type: none"> • Enel (Energy) • Schneider (Electronic component and equipment) • AB Volvo (Automotive) • Novozymes (Pharmaceutical and biotechnology) • BNP Paribas (Diversified banking)
Sustainability opportunities	<ul style="list-style-type: none"> • Enel (Energy) • Schneider (Electronic component and equipment) • CH Hansen (Bioscience) • Acciona (Energy and infrastructure) • Signify (Industrial products-electrical equipment)
Sustainability strategy, targets, KPIs, and progress	<ul style="list-style-type: none"> • Acciona (Energy and infrastructure) • Peugeot (Automotive) • Lenzing (Chemicals) • GlaxoSmithKline-GSK (Pharmaceutical)

* the listing of companies within each category of Table 2 does not indicate a ranking. It is the order of presentation in the Supplementary Document: Good reporting practices

BUSINESS MODEL REPORTING



3. Business model reporting

3.1 Introduction

Businesses today have shifted away from referring to profitability alone in describing how they create value for the company and stakeholders⁴⁸. As part of the changing discourse, the mechanism for discussing the value creation process is to refer to a company's business model. There is no clear definition in legislation or the academic literature on what constitutes a business model or how it should be depicted. It is generally understood and explained in frameworks such as the IIRC IR Framework to be how a company creates, captures, and distributes value. Emphasis has been placed on aspects of value that extend beyond changes to financial resources but also to non-financial resources such as employees, customers, suppliers, communities and the environment and intangibles⁴⁹. The business model is increasingly used to describe the key aspects of value creation encompassing how a company operates and its impacts, dependencies (e.g., resources and relationships), and vulnerabilities.

Given the importance of the business model for all stakeholders it has become a focal point for reporting requirements and providing the central organising idea for explaining a company's resources, relationships, and the outcomes of its activities. The financial statements provide a partial view of value creation showing the changes in recognised assets and liabilities. The management report, in a European context, is intended to provide an understanding of the business and the social and environmental context. More specifically, the relationship between risk and opportunities and a company's business model is intended to signal its durability over time. The resilience of business models is highly relevant to stakeholders because it helps to understand the nature of their ongoing relationship with the entity and how it is transitioning to operate within new norms of social and environmental behaviour. For example, business models that can take advantage of renewable energy, and/or reduce their land-take, are better equipped to transition to operating in a net-zero carbon economy.

Depicting a company's business model for reporting purposes is a challenging requirement as it hinges on an understanding of what characteristics of the value creation process are likely to be most relevant for stakeholders. From the research done by the Alliance of Corporate Transparency, a review of 1,000 EU company reports showed that around 33% of companies failed to disclose their business model in the management report. That represents a significant degree of non-compliance with the NFRD but may be indicative of companies not having a clear understanding on how to depict their business model for reporting purposes and what aspects are likely to be most relevant for their stakeholders. The drivers of current reporting practices are discussed further in [Chapter 5](#).

3.2 Key findings

Information about the business model can generally be found in integrated reports and annual reports. In many cases, the disclosure is replicated in sustainability reports.

Business model description

The good reporting practices selected from our sample of companies (see [Supplementary Document: Good reporting practices](#)) were identified as providing a clear and comprehensive description of their business model inputs (resources and relationships), activities including value chain description, outcomes (e.g. products and performance KPIs), and impacts on stakeholders. Linkage to other content in the report was also another way of achieving meaningful business model reporting. As the criteria for selecting examples were not exhaustive, some examples of good practices may not have been considered.

48 See the work on the Future of the Corporation, British Academy <https://www.thebritishacademy.ac.uk/programmes/future-of-the-corporation/>

49 Intangible assets because of their nature and existing financial reporting requirements span both financial and non-financial concepts of value.

With regard to intangibles, **a limited number of companies show clear linkage or relationship between intangibles and their business model.**

In the reviewed sample of companies, the business model is linked to business risks, opportunities and impacts that affect the business' value creation for stakeholders. **A majority (75%) of the reviewed companies portrayed this in the form of a chart, graph, table, or diagram and often supplemented by a narrative description.** The use of summaries, tables and visualisations are key to the reader's understanding of relationships.

An explanation of the sustainability of the business model and its potential to continue beyond the current period is often not part of the business model description. Long-term value creation is only mentioned if based on a strategy or business model that integrates sustainability or even is driven by sustainability. Even looking at companies identified as providing good practices, these long-term value creation aspects are sometimes missing and, in most cases, consist of high-level conceptual qualitative disclosure.

Long-term targets are linked to climate change and net-zero ambitions, while short- and mid-term goals describe the roadmap to get there. Sustainability targets often consider mid-term timeframes and include short-term goals as creating the direction of travel. **Short-term potential would be expected to be linked to the short-term financial potential as part of savings or investments in the budget process, however, this link is not often made.**

It appears that **many companies rely on the use of either reporting frameworks or standards or authoritative guidance to interpret and guide their business-model-related disclosures.** The majority of good practices concerning the descriptions of a business model's impacts and dependencies on intangibles such as resources and relationships can be found in integrated reports based on the IIRC IR Framework that provides a useful approach of visualisation, i.e., diagram(s). The GRI Standards helps with indicators and targets in the visualisation, where a combination of frameworks lead to more comprehensive information. The NFRD mandated requirements helps to bring in the double materiality perspective which supports the disclosure of sustainability risks. [Chapter 4](#) has a summary of findings on the extent of reliance on either frameworks or standards or authoritative guidance by the sample of reviewed companies.

Reporting on dependencies and impacts

A majority (75%) of the reviewed companies disclosed both positive and negative dependencies and impacts, and a minority (20%) only disclosed positive dependencies and impacts. Dependencies are mainly focused on human capital, climate change and energy but also innovation, customer and financial capital are often mentioned.

Reporting on impacts reflects the double materiality perspective (impact materiality and financial materiality). In the sample of reviewed companies, **impacts are often portrayed as the last step of the business model description (after inputs, outputs, and outcomes), and thus not always clearly linked with sustainability risks and opportunities related to the business model.** Although these elements are overlapping and financial materiality arises from impacts, companies could more clearly link impact back to their business model, using risks and opportunities. Impact is considered especially on human capital, customer, climate change and energy, but also impact on water has been mentioned next to financial results. This means that **a lot of other impacts – looking at the SDGs or the planetary boundaries – are rarely reported, for example, biodiversity or pollution control.**

The review of companies also shows that **impacts are often described in generic terms and even when a link to SDGs is made, there is often a lack of information on the specific impacts on different SDGs.** However, a few companies have started to report their quantified and monetised impacts on different stakeholders. These include **SGS** with a value-added statement disclosure and **ABN AMRO** in its Impact Report (see **Examples 3.1** and **3.3**- [Supplementary Document: Good reporting practices](#)).

CHAPTER 4

SUSTAINABILITY MATTERS LINKAGE TO PERFORMANCE, STRATEGY

EFFICIENT

ENERGY-SAVING

SUSTAINABLE

INNOVATIVE

4. Sustainability matters linkage to performance, strategy

4.1 Introduction

As mentioned in the Executive Summary, although the scope of the PTF-RNFRO was on sustainability including related intangibles reporting, the primary focus of the PTF-RNFRO project and the detailed analysis in this chapter is on sustainability reporting information (i.e., ESG information) and intangibles are only captured to the extent that they are part of sustainability information (e.g., workforce issues, reputational impacts). Any types of intangibles that are unrelated to sustainability factors are not in the scope of this report. As noted, EFRAG has recently issued a Discussion Paper⁵⁰ - *Better Information on Intangibles- Which is the Best Way to Go?* - that provides detailed and holistic insights on the reporting of intangibles both within and outside the financial statements.

Below are the findings from our review on how in the reporting of the selected sample of companies, sustainability risks and opportunities are linked to business model outcomes (financial and sustainability KPIs) and the business strategy including targets.

4.2 Key findings

Top sustainability topics

In analysing the disclosures across the annual, integrated, and sustainability reports published by our sample of 44 companies using Datamaran⁵¹, the following topics listed in Table 3 were the most frequently mentioned in these companies' filings.

Table 3: Top 10 most frequently mentioned sustainability topics in reviewed companies

Business ethics
Employee incentives and benefits
Greenhouse gas (GHG) emissions and reductions
Transition to renewable energy
Investor relations
Energy use, conservation and reductions
Board effectiveness
Climate change risks and management
Fair and inclusive workplace
Human rights

*The above topics are listed in order of ranking in the frequency of being mentioned.

50 EFRAG, August 2021, *Better Information on Intangibles- Which is the Best Way to Go?*

51 Datamaran leverages a patented Natural Language Processing (NLP) technology to identify and analyse the narrative around sustainability topics in a variety of publicly available sources, including corporate annual reports, mandatory regulation and voluntary policies, news and online media.

Summary of findings

Table 4 below summarises some of the key findings from the reviewed sample of companies.

Table 4: summary of findings

Sustainability risks	Sustainability opportunities	Sustainability strategies, targets and business model outputs (KPIs)
95% describe principal risks and risks controls	88% included sustainability opportunities	88% of companies disclosed their sustainability strategies, including specific and clear reporting on targets, associated to measurable KPIs, timeframe, and reporting on progress
57% include risk likelihood over short, medium and long terms	<29% provide any quantification of opportunities	93% of companies tended to only report through a general qualitative statement or objectives associating their strategy with the SDGs or with other factors such as adding value to specific stakeholders (34%)
<50% include top 5 sustainability risks		<25% disclose alignment with taxonomy
Climate change risks and management opportunities were identified by over 42% of the analysed companies		
<20% quantify risks		
<19% present all material sustainability risks		

Sustainability risks and opportunities

Below are the main findings from the review of the sample companies for their sustainability risks and opportunities. Most companies disclose their material sustainability issues, often using a materiality matrix, including disclosing both risks and opportunities related to these material sustainability issues.

The disclosure of risks and opportunities lacked balance and was presented inconsistently across companies. **Over 95% of the reviewed companies described their most relevant risks and risk controls.** However, less than 19% of companies provided complete disclosure of their exposure to sustainability risks, including describing their management metrics, timeframe, and financial impacts.

Many (57%) of the reviewed companies described the risk likelihood in the short, medium, and long-term. However, not all companies provided an adequate timeframe reference for when each risk is most likely to materialise.

The disclosure by companies of their sustainability risks was frequently not comparable and lacked appropriate quantification. Less than 20% of the companies analysed used quantitative metrics for describing the level of risk exposure. Reporting on sustainability risks could be improved by using quantitative metrics such as Value at Risk (VaR), in order to describe the measurement and control of the level of risk exposure to financial loss within a company or portfolio.

Less than 50% of reviewed companies reported their top five sustainability risks, and also described their risk mitigation plans to avoid, transfer, or reduce their impact.

Companies predominantly consider sustainability issues as risks to be managed, rather than a business opportunity for gaining competitive advantage. Furthermore, although **most of the reviewed companies (88%) identified sustainability opportunities, less than 29% provided a high-quality description including specific metrics**, management approach, timeframe, and a clear valuation of the business opportunity. **Climate change risks and management opportunities were identified by over 42% of the reviewed companies.** However, these disclosures are often incomparable and usually accompanied by diverse and vague sustainability opportunities.

The linkage between sustainability risks and opportunities related to the business model is poorly developed and mostly conceptual.

Linkage to performance and sustainability strategy

Over 88% of the reviewed companies disclosed their sustainability strategies, including specific and clear reporting on targets, associated to measurable KPIs, timeframe, and reporting on progress made. However, in order to properly link such strategies with value creation, **most (93%) companies tended to only report through a general qualitative statement or objectives associating their strategy with the SDGs**, or with other factors such as adding value to specific stakeholders (34%). The link between these strategies and companies' financial objectives was quite limited.

In terms of ambitions/targets, companies tended to refer to globally recognised standards of commitments to stakeholders' value creation (United Nations Global Compact (UNGC), SDGs).

There is often no distinction between sustainability matters that are material to value creation and topics that impact broader stakeholders. **SGS's value creation model (Example 4.4 in [Supplementary Document: Good reporting practices](#))** helps to distinguish between these, whilst **Arcadis' connectivity matrix (Example 4.2)** – which is identified as good practice on other features – does not make the distinction.

Finally, **less than 25% of reviewed companies, reported on their current alignment with the EU Taxonomy** or described a future plan for its implementation. Conversely, 67% of companies that responded to the PTF-RNFRO survey considered that the application of the EU Taxonomy to investments was an opportunity to review/enhance their business models (refer to [Chapter 5](#)). Given the time lag between published reports analysed in the sample and the more recent survey, this suggests that awareness and momentum for reporting in alignment with the EU Taxonomy is rapidly gaining traction.

Reliance on sustainability reporting frameworks/standards/guidance

In terms of frameworks, companies mostly referred to the GRI Standards and TCFD recommendations. The IIRC-IR Framework, SASB Standards and NFRD were also mentioned in several instances. The framework comparisons outlined in the 'Statement of Intent to work together towards comprehensive corporate reporting'⁵² (Formerly Carbon Disclosure Project (CDP), Climate Disclosure Standards Board (CDSB), GRI, IIRC, SASB) helps to identify the different orientation of each of the frameworks. Even where similar frameworks are followed, comparability of sustainability issues and related risks and opportunities is low between companies, even in the same industry.

52 CRD, Statement of Intent <https://29kjb3armds2g3gi4lq2sx1-wpengine.netdna-ssl.com/wp-content/uploads/Statement-of-Intent-to-Work-Together-Towards-Comprehensive-Corporate-Reporting.pdf>

In Table 5 below are the top-five frameworks used for sustainability reporting by companies included in the sample:

Table 5: Top 5 non-financial reporting frameworks, guidance or mandated requirements applied in reviewed sample⁵³

Voluntary frameworks and reporting requirements	Number (out of 44)	%
Voluntary reporting frameworks		
GRI Sustainability Reporting Standards	40	93%
UN Global Compact	32	74%
TCFD	31	72%
IIRC IR Framework	19	44%
Mandated reporting requirements		
NFRD ⁵⁴	11	26%

The above finding aligns with the review of the PTF-NFRS⁵⁴ that highlights studies by ACCA and Alliance for Corporate Transparency showing GRI Standards, TCFD recommendations and SDGs to be most commonly applied frameworks/standards/guidance amongst EU companies. The PTF-NFRS report highlights a relatively significant use (53%) of national standards including the national transposition of the NFRD, which is only slightly lower than the use of GRI Standards (54%).

Assurance and information placement

Third-party assurance of sustainability data reported is common practice in over 95% of reviewed companies. In addition, we found that, for the reviewed companies, there is **diversity in the location** of reporting sustainability risks and opportunities that are linked to the business model. The annual, integrated and sustainability reports are the most common reports with this information.

⁵³ This low incidence could be due to companies that comply with the transposed NFRD requirements within Member State regulations not disclosing that they comply with the NFRD.

⁵⁴ European Lab, PTF-NFRS, 2021, Current Non-Financial Reporting Formats and Practices – Page 16
https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FsiteAssets%2FEFRAG%2520PTF-NFRS_A6_FINAL.pdf

CHAPTER 5

WHAT IS DRIVING REPORTING PRACTICES?



5. What is driving reporting practices?

5.1 Introduction

Different forms of stakeholder outreach feedback were analysed to identify key themes relevant to the business model, risks and opportunities, performance targets and the application of reporting principles. In this chapter, we present the findings from the outreach (Section 5.2) and propose a set of sustainability reporting tips (Section 5.3).

Overview-stakeholder survey and interviews

The analysis of disclosures provided a snapshot of current practice but did not provide insights about what was driving current reporting practices. To gain deeper insights about why there was a limited number of good practices and what factors are driving current sustainability reporting practices, the PTF-RNFRO conducted an online survey⁵⁵ from February to April 2021 and 85 responses were received across different categories of respondents including primarily users and preparers, as well as others (including auditors, accountants, academics, representatives from civil societies and other NGOs).

This online stakeholder survey findings summarised below show diversity in reporting practices. In addition, the PTF-RNFRO conducted interviews with representatives from a selection of organisations (reporting companies, stakeholder associations) deemed to have insights on good or leading sustainability reporting practices. Some of the interviewees were from the sample of reviewed companies.

The overall message from this stakeholder engagement was that current practice is much more nuanced as are the reasons for inconsistencies and apparent shortcomings in reported information. The detailed feedback from the survey and interviews is in Section 5.2 below

Overview- outreach events

In addition to the survey and interviews, two stakeholder outreach events, one closed and one public, were held on 21 and 25 May 2021, respectively to gain further insights. The outreach events served as a way of corroborating the key findings from the review of the sample companies and the feedback from the survey and interviews.

5.2 What did stakeholders tell us?

Detailed findings from stakeholder survey and interviews

The detailed findings from the stakeholder survey and interviews are broken down into the following sub-headings:

- double materiality;
- business model reporting;
- connectivity;

⁵⁵ PTF-RNFRO Stakeholder Outreach Questionnaire- *Information Needs and Expectations of Users* <https://forms.office.com/Pages/ResponsePage.aspx?id=un12RwfNcUOirniLTGGEDpTQIDa4QJJCm7CsSODgizFUMEhaVVNYtkZIVkhSOFRTWIMyOUY5MTUyQS4u&wdLOR=cDBoC4990-DCDo-46BA-9F9C-4EE064246F9D>

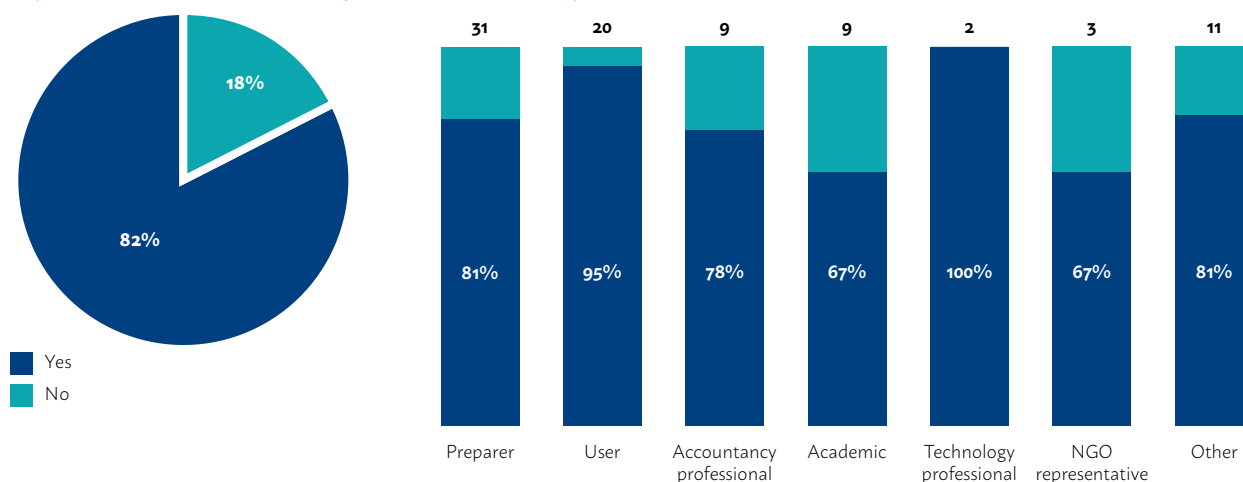
- risks and opportunities;
- application of frameworks, standards and thresholds;
- reliability/verifiability;
- location; and
- reporting practices to avoid (greenwashing).

Double materiality⁵⁶

- As per Figure 2, **most respondents to the survey (82%) use the double materiality concept** and about **81% of preparers disclose a materiality matrix** within their reports.
- On the other hand, only 40% of users and 33% of academics use the matrix in their analysis.
- The majority of views about the materiality threshold used for ESG matters refers to business-related, risk-related and financial-related thresholds (18%, 16% and 12% respectively).

Figure 2: Double materiality

Do you take into account the concept of double-materiality?



Interview feedback: Interviewees that were preparers consistently referenced the GRI Standards as their initial starting point in assessing materiality. Their second step included a financial/business materiality matrix based on a value creation process according to principles of the IIRC IR Framework, SASB Standards, and TCFD recommendations.

The interviewees indicated that they systematically gathered stakeholder feedback and presented detailed materiality assessment findings to different types of stakeholders on an annual basis. They noted that their process of stakeholder engagement has significant input from various teams, such as investor relations, client relations, and risk management teams and stakeholders are segregated into investor stakeholders and other stakeholders. Some companies use the AA 1000 SES Stakeholder Engagement Standard⁵⁷ to guide and define the stakeholder engagement process.

The preparer interviewees indicated that their materiality process had been subject to external assurance.

In some instances, materiality is the methodology to define the scope and the boundaries of the disclosures to stakeholders, as there are different judgements of what constitutes material, dependent upon the audience.

⁵⁶ Questions 5,6 and 7 of the "PTF-RNFRO Stakeholder Outreach Questionnaire- Information Needs and Expectations of Users".

⁵⁷ See <https://www.accountability.org/standards/>

The interviewees indicated that they consider the entire value chain while evaluating double materiality. They observed that reliance on regulatory requirements alone falls short of the lifecycle approach and represents a single materiality perspective. One interviewee commented that: “The compliance approach tends to focus on owned/controlled activities whether local, such as permits (environmental) or health and safety impacts/issues, or wider sustainability risks/impacts on the company (and its financial performance), not the impacts of the company on the environment/society”.

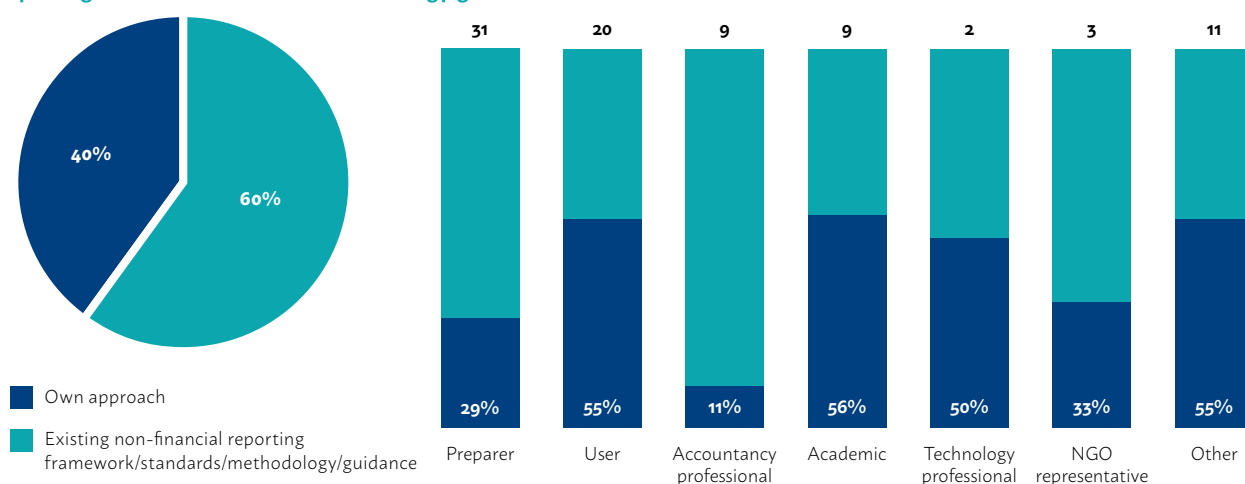
The interviewees identified materiality as a quickly evolving field and noted they are transitioning from double materiality to a ‘dynamic materiality’ approach with the help of frameworks and guidance such as the IIRC IR Framework and SASB Standards. Whilst these notions lack consensus about what they mean – dynamic materiality⁵⁸ generally refers to the need to constantly reassess what is material as this is likely to change over time. For instance, the impact of the global pandemic would not have been considered as material by businesses in 2019 but that significantly changed with the spread of COVID-19 from early 2020.

Business model reporting

Respondents were asked whether they used their own approach or an existing non-financial reporting framework, standards, methodology, or guidance when describing their company’s business model. The survey results showed that **60% of respondents rely on an existing framework**, whilst the remaining use their own approach (Figure 3).

Figure 3: Business model reporting

With regards to describing the business model, have you developed your own approach or are you using existing non-financial reporting framework/standards/methodology/guidance?



Respondents were asked what they considered to be the most important components of the business model that should be reported. The qualitative responses showed a wide variation in the views and practices of companies in terms of identifying the most important components of their business model.

On the one hand, a small number of preparer survey respondents (companies) expressed the opinion that they are “not sure the business model reporting is important”, or “for the report user it is often close to useless”. When it comes to the depiction of the business model, one interviewee commented: “it is often reduced to a children’s drawing...made together with the marketing department”, or some failed to grasp the question. Others indicated that the business model is simply a statement that includes a description of sustainability risks related to the business model, the due diligence management systems, policies and procedures.

58 A 2020 WEF publication made reference to the notion of dynamic materiality. “What is financially immaterial to a company or industry today can become material tomorrow, a process called “dynamic materiality” WEF 2020 http://www3.weforum.org/docs/WEF_Embracing_the_New_Age_of_Materiality_2020.pdf

On the other hand, the majority of preparer survey respondents noted that, to some degree, their business model disclosure explained their company's sustainability value proposition, value chain, supply chain, risks and opportunities, strategies, objectives, future trends affecting future development, targets (climate, environment, human rights) and progress in reaching these.

Some preparer survey respondents revealed they rely on existing frameworks, guidance and legislation (e.g., the IIRC IR six capitals, GRI Standards, SDGs and EU Taxonomy) in differing ways to describe their company's business activities, outputs, outcomes and impacts when disclosing the sustainability aspects of their business model. For example, companies may use a framework but add specific elements to better describe their business model.

Interview feedback: The interviewees noted that the description of the business model is fundamental to defining the 'what' and 'why' an issue is material for their company. They indicated that personal judgements are avoided and clear definitions of sustainability criteria and thresholds and their interaction with the business model are key. These companies also use the frameworks, guidance and legislation cited by the survey respondents (e.g., the IIRC IR six capitals, GRI Standards, SDGs and EU Taxonomy). Ultimately, they see the business model as dynamic, needing to encompass topics as they are evolving, and feeding into the business strategy.

Connectivity⁵⁹

Connectivity is intended to address the connection between financial, non-financial reported information in order to provide a holistic view of the combination, interrelatedness and dependencies between all the factors that affect value creation. Connectivity is also one of the Practices Evaluation Approach attributes. ([Chapter 3](#))

The survey findings show that:

- **Connectivity between financial and non-financial reported information within the business model and risk and opportunities disclosure is applied by a slight majority of overall survey respondents (59%)** as per Figure 4.
- However, the level of application of connectivity varied by type of respondent. In particular, **while only 48% of preparers make links between financial and non-financial reported information, 80% of the user respondents consider connections in their analysis and valuations.**
- Furthermore, the majority of preparers who confirmed making links between non-financial and financial reported information, also confirmed that these connections are made through the audited financial information and in particular in the management report and also through Alternative Performance Measures.
- As shown in Figure 5 below, **technology is applied to create connectivity (e.g., links within reports, between reports and externally) by 56% of all stakeholders and by 58% preparer respondents and by 65% of user respondents.**

59 Questions 14,15 and 20 of the "PTF-RNFRO Stakeholder Outreach Questionnaire- Information Needs and Expectations of Users"
<https://forms.office.com/Pages/ResponsePage.aspx?id=un1zRwfNcUOirniLTGGEDpTQIDa4QjJcm7CsSODgizFUMEhaVVNYTkZIVkhSOFRTWIMyOUY5MTUyQS4u&wdLOR=cDBoC4990-DCDo-46BA-9F9C-4EE064246F9D>

Figure 4: Connectivity

Do you connect non-financial and financial information in your disclosure/analysis on business model and non-financial risks and opportunities?

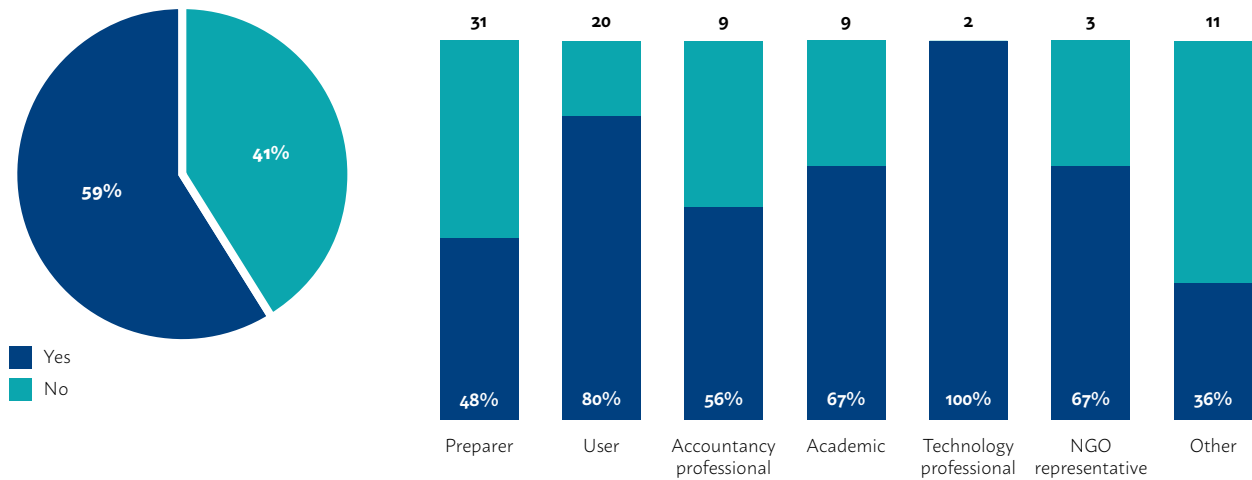
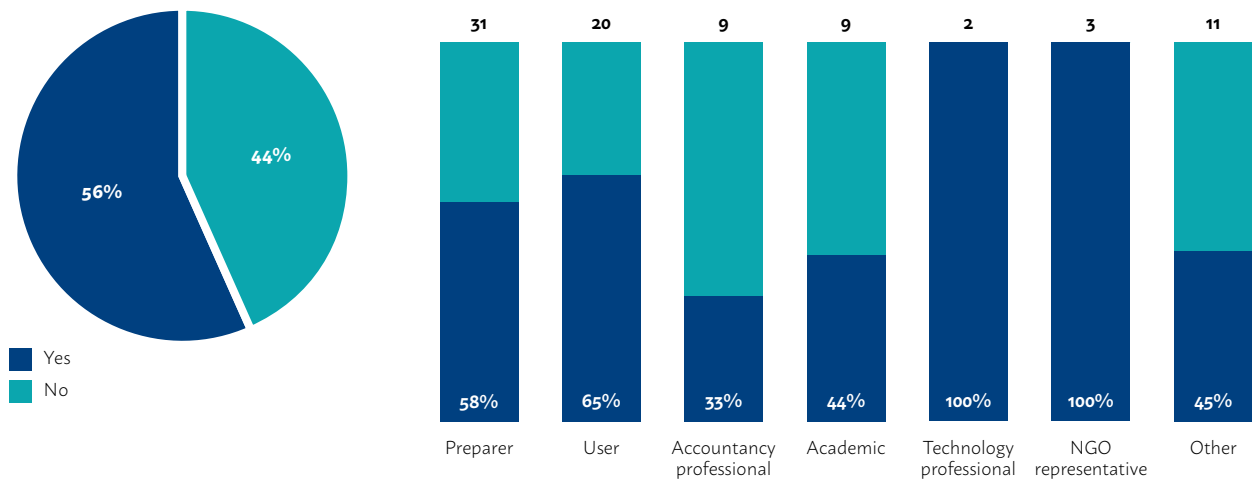


Figure 5: Use of technology for connectivity

Do you use technology to create connectivity (e.g. links within reports, between reports, and externally)?



Interview feedback: The interviewees broadly confirmed that the lack of connectivity is an inherent weakness of disclosures. Some indicated that they purposefully ‘filter out’ sustainability aspects from the financial reports. Interviewees were of the view that connectivity between financial and sustainability reporting information is necessary at all levels of the business.

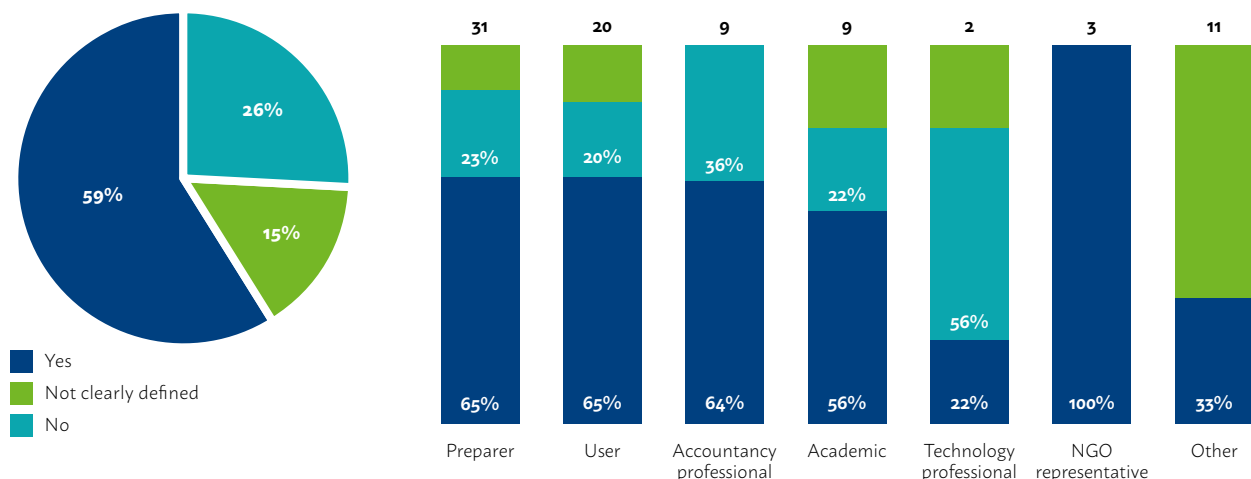
To help address the lack of connectivity, interviewees suggested a robust performance management policy, which establishes a clear connection between financial and sustainability performance targets, which are built into employee compensation.

Risks and opportunities

Survey respondents were asked whether they had a commonly agreed definition of non-financial risks and opportunities. The **majority (59%) have a common definition** and the remaining (41%) do not have a commonly agreed definition (Figure 6).

Figure 6: Risks and opportunities definition

Do you have a commonly agreed definition of non-financial risks and opportunities that is shared internally to your organisation?



Interview feedback: The interviewees indicated that more companies report on risk than on opportunities. One explanation is a company's risk management is driven by the risk departments and processes, such as Enterprise Risk Management and therefore risks are managed and controlled internally. The interviewed companies indicated that their risk assessment processes are robust and detailed and include stakeholder engagement and peer review elements. For example, a risk team may gather information on climate risk impacts, credit risk, resilience, reputation, compliance through questionnaires and this is embedded into their risk modelling.

On the other hand, the preparer interviewees indicated that their companies typically tend not to have departments or processes dedicated to opportunities, and a linkage between the risks and opportunities is often not made. Furthermore, they primarily define risks as "events" while opportunities are not so clearly defined leading to less of their consideration. However, among the interviewed companies, albeit not common, strategy teams are tasked with evaluating sustainability opportunities.

The preparer interviewees also mentioned intangibles as being important in respect of risks and opportunities, with four key areas: human capital; reputational capital, legal security and operational efficiency.

Application of frameworks, standards, thresholds, including EU taxonomy

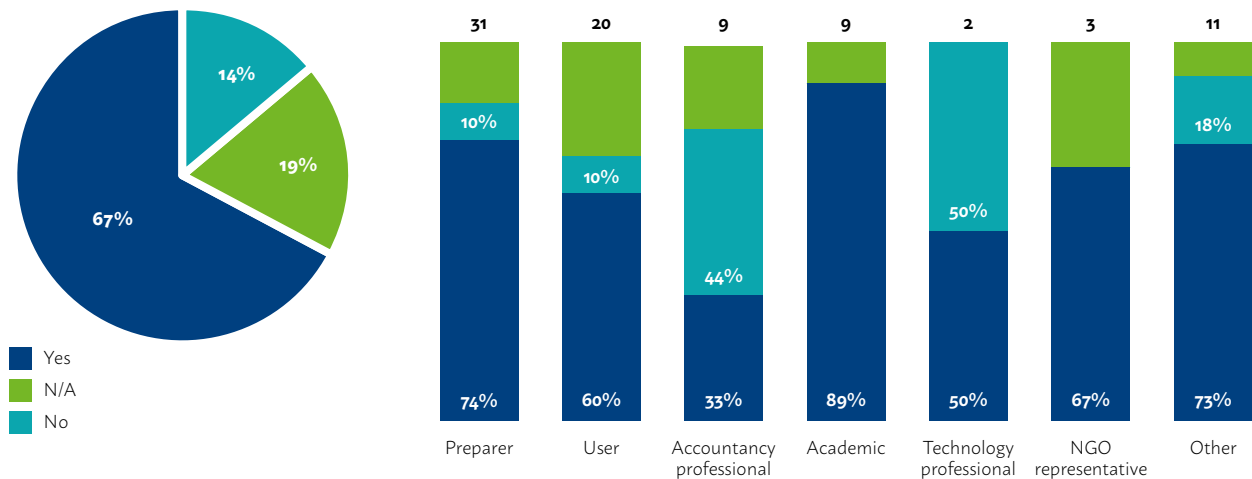
Respondents were asked which threshold(s) they use to define the materiality or relevance of the sustainability information (e.g., financial, risk-related, business-related, etc.) The responses indicated a general ambiguity, lack of consistency and subjectivity in the selection of thresholds. For example, the specific thresholds mentioned included: 'financial, risk-related and reputation-related', 'risk-related, impact-related, financial impact, impact on rights holders', and 'combination of risk-based, but largely business related'. One respondent outlined that 'there are no thresholds..., and basic ESG criteria are fulfilled'. Others referenced 'board-level discussions' as the main influence on which thresholds are selected for the company's reporting. A few respondents referenced specific frameworks, standards and guidance including GRI Standards, SASB Standards, TCFD recommendations and Principles for Responsible Investment (PRI) guidance.

With regard to the EU Taxonomy, which provides science-based technical screening criteria (thresholds) for environmentally sustainable economic activities, the survey asked whether the respondents considered the application of the EU Taxonomy to investments as an opportunity to review/enhance their business models. Referring to Figure 7, the findings showed that:

- many (67%) considered the EU Taxonomy as a tool to enhance their business model;
- a minority (18%) did not consider it as a useful tool; and
- a few respondents (15%) did not respond.

Figure 7: Application of EU taxonomy

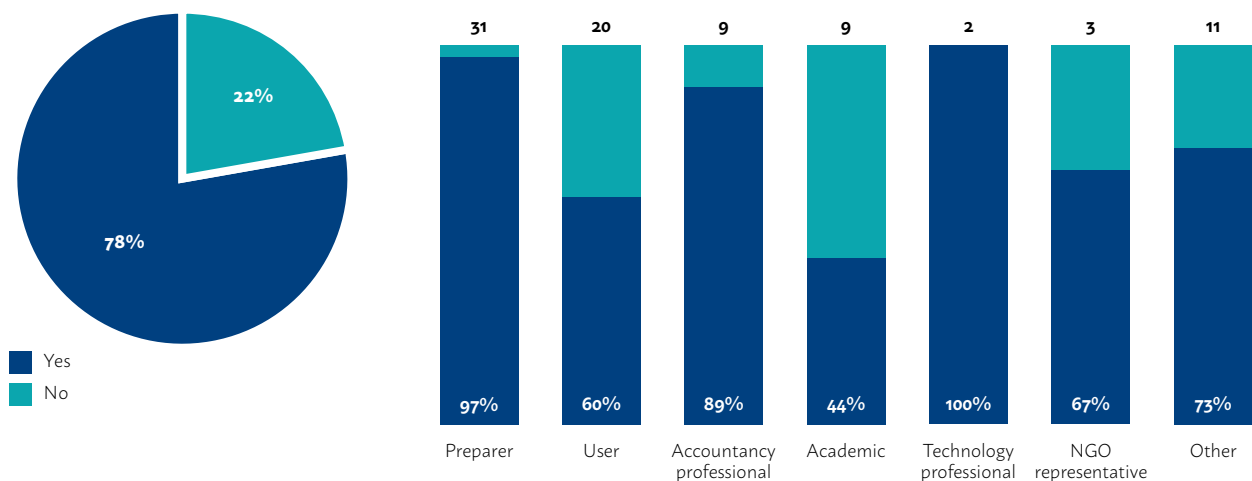
Do you see the application of the EU Taxonomy to environmentally sustainable activities or investments as an opportunity to review/enhance business models?



The majority of respondents (78%) used one or more international frameworks and tools to align their assessment of risks and opportunities.

Figure 8: International non-financial reporting frameworks/standards/methodology/guidance

Are you using any of the following international non-financial reporting framework/standards/methodology/guidance: GRI/SASB/CDP/CDSB/IIRC?



The survey results in the Figure 8 pie chart show that there are also **many (78%) respondents that, despite not having a common definition of risks and opportunities, referred to at least one sustainability reporting standard, methodology, framework and/or guideline.**

The respondents cited GRI Standards, IIRC IR Framework, CDP guidance, World Business Council for Sustainable Development – Committee of Sponsoring Organisations of the Treadway Commission (WBCSD-COSO) guidance, EU Non-Binding Guidelines, EU Taxonomy, EU Eco-Management and Audit Scheme (EMAS), SASB Standards, PRI guidance, TCFD recommendations, and the UNCTAD SDGs guidance.

Among the non-financial frameworks, standards, and guidelines, the most commonly applied are the TCFD recommendations and/or the GRI Standards (22 of the 31 preparer respondents). As noted in [Chapter 4](#), this finding aligns with the review of the PTF-NFRS⁶⁰ that highlights studies by ACCA and Alliance for Corporate Transparency showing that GRI Standards, TCFD recommendations and SDGs to be most commonly applied frameworks/standards/guidance amongst EU companies.

Reliability/verifiability

The majority of stakeholders **(79%) confirmed that they have implemented specific internal processes and systems instead of relying on external providers.**

It should also be noted that third-party assurance seems to be a common practice among the selected sample of reporting practices.

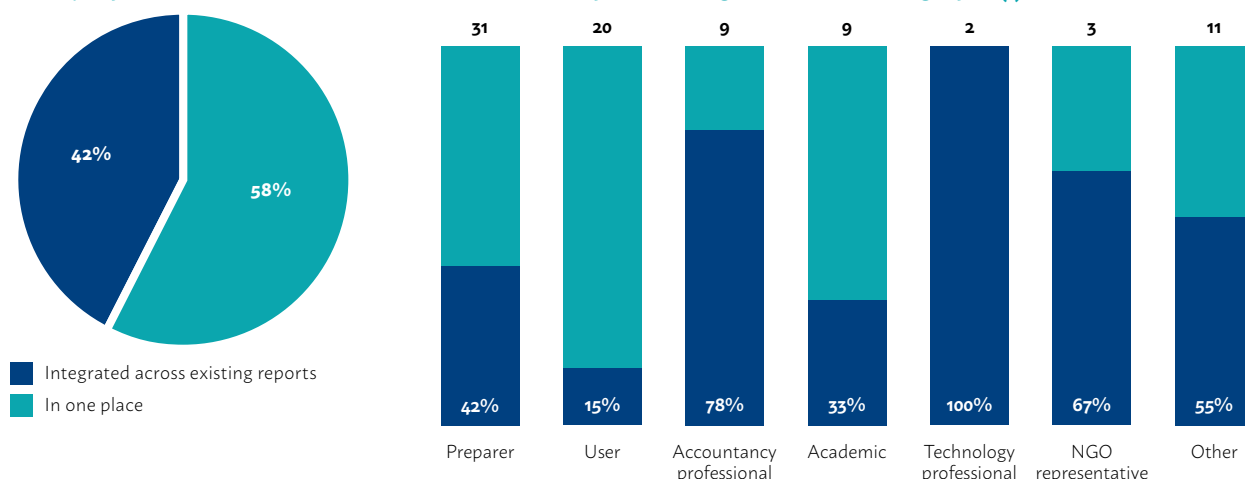
Location

In response to a question⁶¹ on location in the survey, the following were the findings:

- As per Figure 9, **58% of the respondents prefer a one-document approach for sustainability information** while 42% are in favour of an integrated-across-existing-reports approach such as the “Core & More”.
- However, **85% of users prefer to find sustainability information in one document.**

Figure 9: Location of ESG-related information

Would you prefer to have all ESG-related information in one place, or integrated across existing report(s)?



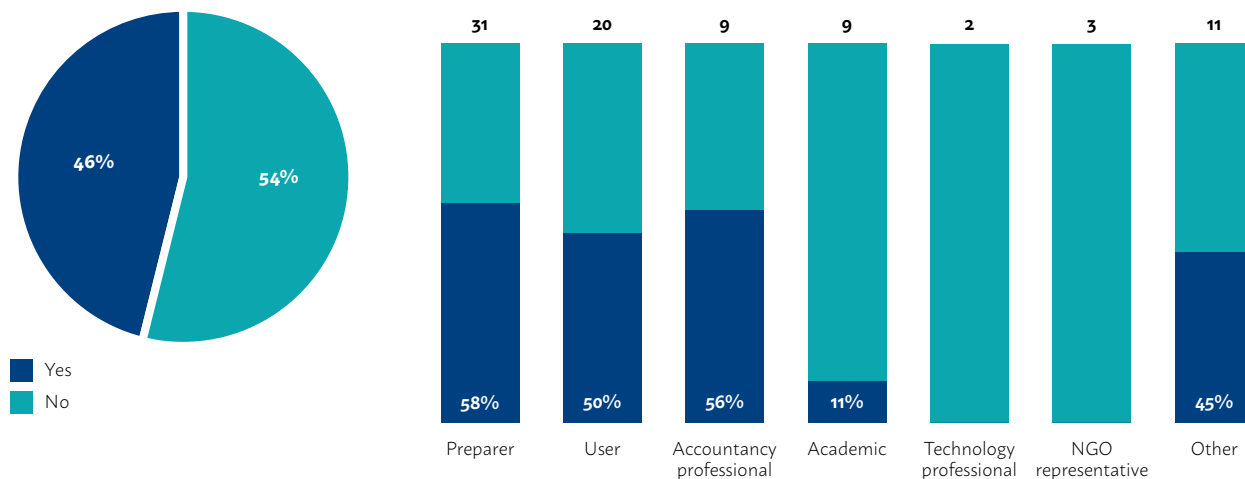
60 European Lab, PTF-NFRS, 2021, [Current Non-Financial Reporting Formats and Practices](#) – Page 16

61 Question 21 of the [PTF_RNFRO Stakeholder Outreach survey](#)

Moreover, based on Figure 10, it seems that **many stakeholders (54%), find difficulties in effectively gathering needed non-financial information**. This shows the need to improve the effectiveness in disclosing and communicating information about sustainability risks and opportunities.

Figure 10: Access to non-financial information

Are you able to find/gather the non-financial information you need in an effective way?



Reporting practices to avoid (greenwashing)

In response to a question⁶² on greenwashing⁶³, stakeholders (financial institution and non-financial institution preparers, users and other stakeholders) described features of undesirable reporting practices. We have categorised their feedback against the attributes of useful sustainability reporting information encompassed within the PTF-RNFRO Practices Evaluation Approach, which was used to select good reporting practices (see [Chapter 3](#)). It can be observed that these reporting practices that should be avoided bear the opposite of the attributes of useful information encompassed within our Practices Evaluation Approach. Furthermore, stakeholder responses were consistent with the PTF-CRR report findings on reporting practices to be avoided such as: information that is too general; a lack of connectivity between various elements of the report in a manner that fails to provide a more complete picture of companies' management of risks and opportunities; and disclosures that lack supporting information (e.g., timeframes and methodologies).

Not material/relevant

- 'Reporting with vague formulations and with an advertising character, focus on actions away from the core business'
-Preparer: Financial institution
- 'Any type of information that is provided without indications for fundamental support with a view to being "green" such as, for example, references to regulation (EU Green Bond Standard, EU Taxonomy).'
- Preparer: Financial institution
- 'Reporting that is only qualitative; not at a strategic level; not reflecting the business model; not material; merely a communication exercise'
- User

62 "Question 24: which type of information/ report stakeholders would consider as greenwashing?" see [PTF-RNFRO stakeholder survey](#)

63 Greenwashing is a colloquial term used to describe claims made against a company for using sustainability advertising for products and services that are in fact not contributing to or even causing harm to the environment. Definitions vary; however, the term "greenwash" refers to environmental claims that could be considered false, unsubstantiated and/or unethical. WBCSD Definition, [Sustainable Consumption Facts and Trends, From a Business Perspective](#), 2008

- ‘Nice wording without any concrete facts or key performance indicators (KPIs)’
- **Accountancy Professional**

- ‘Reporting non-material statements’
- **NGO representative**

- ‘Most of current ESG-indicators are not put into context. So, most indicators feel like greenwashing as the context is lacking, especially context to scientific boundaries’
- **NGO representative**

Lacking strategic orientation

- ‘Information that is not correlated with sustainability objectives and targets’ Preparer
- **Non-Financial institution**

- ‘Reports that lack a strategy to the sustainability ambition’
- **Accountancy professional**

Not giving a faithful representation (not complete or not free from error)

- ‘When a company does not report on gross GHG and water consumption - but simply report net-figures, where they have deducted bought CO₂ compensations and purified water, for example’
- **Preparer – Non-Financial institution**

- Reporting that is missing (quantitative) targets
- **Preparer- Financial Institution**

- ‘Reporting that promotes a product as environmentally-friendly because of a single characteristic, even though other product characteristics are harmful to the environment. Or the use of unclearly defined terms which can easily be misunderstood.’
- **User**

- ‘The absence of data and information being incorrectly indicated as being material is a serious form of greenwashing. For example, not talking about tax issues, not talking about biodiversity, not talking about the link between sustainability and digital transformation’
- **Accountancy Professional**

- ‘Imprecise statements and out of context statements.’
- **NGO representative**

Not giving a faithful representation (not neutral/balanced)

- ‘The exclusive emphasis on positive impacts and simultaneous omission of adverse impacts is a form of greenwashing’
- **Preparer: Financial institution**

- ‘Information not balanced, uniquely or mostly oriented towards positive impacts generated by the organisation activities’
- **Preparer: Non-Financial institution**

- ‘Report should be balanced, Green is mentioned (even if it is a small initiative) but then ‘Grey’ should also be mentioned’
- **User**

- ‘Selective data; promoting positive development over negative; choosing timelines to show positive development’
- **Accountancy Professional**

- ‘Biased information on ESG performance, including its tone’
- **NGO representative**

- ‘Unbalanced reporting: reports that focus on opportunities, but do not cover risks and challenges in a sufficient manner’
- **NGO representative**

- “Imprecise statements. Unfair statements. Out of context statements. Non-material statements”
- **Academic representative**

Not verifiable/reliable

- ‘Marketing material or prospectuses on websites, for which no robust evidence or arguments are provided as to the “green” nature of the concerned activity although the activity itself is referred to as “green”’
- **Preparer: Financial Institution**

- ‘Reports where there are unsubstantiated claims’
- **Preparer: Non-Financial institution**

- Statements made that are not supported by other evidence. Statements made without appropriate signoff/ buy-in from the senior management of the business’
- **NGO representative**

Not comparable

- ‘Sustainability reports are not applying any kind of acknowledged national or international standard or framework’
Preparer

- ‘Where no global framework is used to guide the reporting process’
- **NGO representative**

Feedback from outreach events

As noted, two stakeholder outreach webinar events (private and public) were held in May 2021 where the work of the PTF-RNFRO and summary of findings was presented to the panellists. The feedback from the public event is available on the EFRAG website⁶⁴.

In general, panellists at the public webinar concurred with the findings of the PTF-RNFRO from the review of the sample companies’ reporting practices and the feedback from the survey and interviews. There was consensus on the inadequacy of current business model reporting practices and a need for improved transparency on how materiality assessments are conducted by preparers. It was observed that disclosures, if provided at all, were often boilerplate in nature and with limited information for investors and other stakeholders.

It was acknowledged that some clarity and standardisation was needed regarding reporting on sustainability risks and opportunities and their linkage to the business model. The importance of connectivity between

⁶⁴ The details and summary report of the PTF-RNFRO public webinar are available through [this link](#).

financial and sustainability information in conveying enterprise value creation was emphasised as was the importance of faithful representation and neutrality or balance in, for example, reporting of impacts on stakeholders and thus effectively reflecting a double materiality perspective. The panellists noted that good practice examples should have clarity and provide context on the company's value chain and strategic objectives.

Further insights were obtained from the private webinar, where the meeting participants noted that companies were concerned that making statements about the future that subsequently did not materialise, could lead to litigation issues. Moreover, they observed that the marketing focus in many reports arose as it was difficult to periodically portray generally static business models without sounding repetitive. They also noted that, in order to mitigate concerns around 'greenwashing', it was important for companies to provide investors with a clear understanding of the connection between their sustainability commitments and exposure, and how these flow into the financial reporting information. Relatedly, a comment was made that it was challenging to ensure connectivity between financial reporting and sustainability reporting information due to their differing issuance timelines.

To address some of the noted limitations of current reporting, the meeting participants⁶⁵ suggested the need for:

- an enhanced definition of the business model;
- improved reporting on societal impacts;
- enactment of legislative measures that mitigate the litigation risks companies face when disclosing opportunities;
- the alignment of timelines for sustainability and financial reporting statements so as to foster connectivity.

In summary, the outreach feedback affirmed the need for a strong reporting framework and standards to ensure comparability, consistency, relevance and materiality, and faithful representation of sustainability reporting information. Panellists were supportive of EFRAG undertaking work on draft EU sustainability reporting standards building on or at least being compatible with global standards. Furthermore, the importance of assurance was emphasised giving an indication of the quality of the information provided.

⁶⁵ CSR Europe provided written comments on the PTF-RNFRO key findings.

5.3 Reporting tips

In taking cues from the outreach feedback, the PTF-RNFRO proposes a simplified practical list of common tips for good reporting practices contained in Table 6 below.

Table 6: Sustainability reporting - practical tips

Do's	Don'ts
When planning your report, begin with the end in mind, visualise what your organisation's long-term strategy is, what it aims to achieve, what this means to your organisation's stakeholders.	Do not lose sight of your company's long-term strategic aims and values.
Think and act collaboratively. Start with a simplified conceptual model of what your organisation aims to achieve and share it with key stakeholders. Add complexity in an iterative process.	Do not overcomplicate the process by providing too much or too little information to stakeholders up front.
Be open and alert to a need for further assessment and data gathering. Identify appropriate Key Performance Indicators (KPIs) or Sustainability Performance Targets (SPTs) and gather the appropriate data.	Do not let limitations of current organisational data dictate your decision on appropriate KPIs and SPTs.
Have a time horizon that incorporates short, medium and long-term KPIs/SPTs.	Do not focus on short-term time horizons without considering the longer-term impacts of decisions.
Consider the source, relevance, and sufficiency of information you have obtained, taking into consideration the nature, scope, outputs and impacts of your organisation's activities.	Do not be reluctant to question potential sources of bias or contradictory information. Potential bias may arise from the influence of key stakeholders, and contradictory information may arise between human reasoning and automated systems, as examples.
Seek advice from subject matter experts to obtain additional input to support good reporting on risks and opportunities when needed.	Do not overestimate or underestimate your organisation's capabilities to make judgements on risks and opportunities.
The whole is greater than the sum of its parts. Consult with leaders in your organisation to ensure that all parts of your organisation are engaged with a particular challenge, risk or opportunity and this is captured in the reporting.	Do not work in isolation or allow 'silos' to exist especially when dealing with challenges or evaluating risks and opportunities.
Ensure appropriate education and training programmes to support good reporting practices are in place.	Do not ignore signals that upskilling and training is needed for your organisation in respect of sustainability actions and reporting.

CHAPTER 6

HOW CAN TECHNOLOGY HELP?



6. How can technology help?

6.1 Introduction

The PTF-RNFRO assessed reporting practices on sustainability reporting information (i.e., preparation, distribution, and consumption of sustainability reporting information) that were enabled or facilitated by technological solutions. After identifying a range of possible technological solutions, the PTF-RNFRO review of their application consisted of:

- a review of policy requirements or guidance (i.e., either requirements or guidance from Regulation, Directive, Action Plan, Strategy Roadmap, Guidelines, Regulatory Technical Standards) for the proposed application of technology solutions and with consideration of the findings of the PTF-NFRS Workstream report: *Current Non-Financial Reporting Formats and Practices*;
- a review of the disclosures of the sample of 44 companies used to review good reporting practices on sustainability risks and opportunities and linkage to the business model; and
- obtaining feedback from the stakeholder outreach survey on the role of technology in creating connectivity for preparers, users, and other stakeholders.

The above review aimed to ascertain the state of play in the application of technological solutions across the sample of 44 companies and to identify if there were any good or leading practices from this sample. To the extent we were aware or obtained feedback during outreach, we also considered examples from outside the sample.

Our analysis also aimed to shed light on how technological solutions can enable companies to achieve the qualitative characteristic attributes identified in the Practices Evaluation Approach (see [Appendix 3](#) and [Chapter 7](#) – Section 7.6 on *Optimising the use of technology*).

6.2 Possible technological solutions for sustainability reporting information

A range of different technological solutions, from artificial intelligence (AI) based solutions, to satellite imagery applications for reporting have been taken into account when considering the use cases for the preparation, distribution and consumption of sustainability reporting information. Given the scope of this report, the PTF-RNFRO adopted a definition of technology based on its practical application (use case) rather than on a technological-design perspective.

Technological solutions are adopted in practice in different ways along the journey of disclosure (from disclosure preparation to disclosure distribution and consumption), and any review of good or leading practices would have been incomplete if looking only at one stage of the process. Evidence from good or leading practices shows that the application of technology goes beyond simply tagging the information in reports – there is much more that technology can help with.

In particular, for this review, seven different categories of technological solutions have been noted and include:

- **Multimedia reporting:** While PDF documents remain the most used medium to report to stakeholders, many companies use a variety of different channels to disseminate, emphasise, enhance, and make

their disclosures more accessible. Those include, for example, videos, dedicated web pages or microsites, augmented or virtual reality⁶⁶.

- **AI applications:** AI applications are numerous and diversified and include machine learning, natural language processing (NLP), natural language generation (NLG), and others. Those solutions are adopted to replace repetitive and mechanical tasks through automation or to identify patterns in large amounts of heterogeneous and unstructured data that would be invisible to the human eye.
- **Structured data (e.g., XBRL):** XBRL is the open international standard for digital business reporting. XBRL allows unique tags to be associated with reported facts, enabling digital and more accurate preparation, validation, publication, exchange, consumption, and analysis of disclosures. Inline XBRL (iXBRL) is applied in the European Single Electronic Format (ESEF⁶⁷) the electronic reporting format in which issuers on EU regulated markets have been required to prepare their annual financial reports from January 2020. Applying ESEF is furthermore a key requirement for financial statements and management reports (including sustainability information) contained in the proposal for a CSRD. Companies will be required to 'tag' their sustainability information according to a digital categorisation system as specified in the ESEF regulation⁶⁸.
- **Blockchain:** Blockchain is a distributed ledger – a shared database that creates a permanent record of a sequence of transactions. The ledger is distributed in a network of participants, without any of them being in control of the network itself.
- **Single Access Point for companies' data (including sustainability information):** This is an EU-wide platform that facilitates investors' access to company data, including sustainability information. The Action Plan of the EC on the Capital Markets Union sets the establishment of the European Single Access Point (ESAP) as the first action. While the ESAP regulation is yet to be adopted and the infrastructure yet to be developed, some companies created dedicated data portals where investors and stakeholders can access and extract the relevant ESG data they need. The development of ESAP will build on existing EU initiatives such as the findings of the European Financial Transparency Gateway (EFTG) pilot project and will complement existing initiatives such as the Business Registers Interconnection System (BRIS).
- **Data management systems:** Software systems, including cloud platforms, are used to capture and organise all inputs as well as current, intermediate, and final outputs. While the category of data management systems is very broad, in the context of this report, it is intended primarily as systems that are used to manage the data flows that are used to prepare the sustainability disclosures.
- **Satellite imagery for ESG data:** Images and data provided by the satellites orbiting over the Earth are more increasingly used to depict, track, and forecast a variety of natural phenomena and impacts of human activity on the planet.

Figure 11 depicts the interrelationship between information needs, policy requirements, and technology-based solutions during the preparation, distribution, and consumption of sustainability reporting information.

66 [Virtual and augmented Reality in corporate reporting – Digital future of Corporate Reporting \(February 2021\), Financial Reporting Council](#)

67 [European Single Electronic Format, ESMA](#)

68 https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/transparency-requirements-listed-companies_en#eftg

Figure 11: Policy requirements impact on technological solutions for sustainability reporting

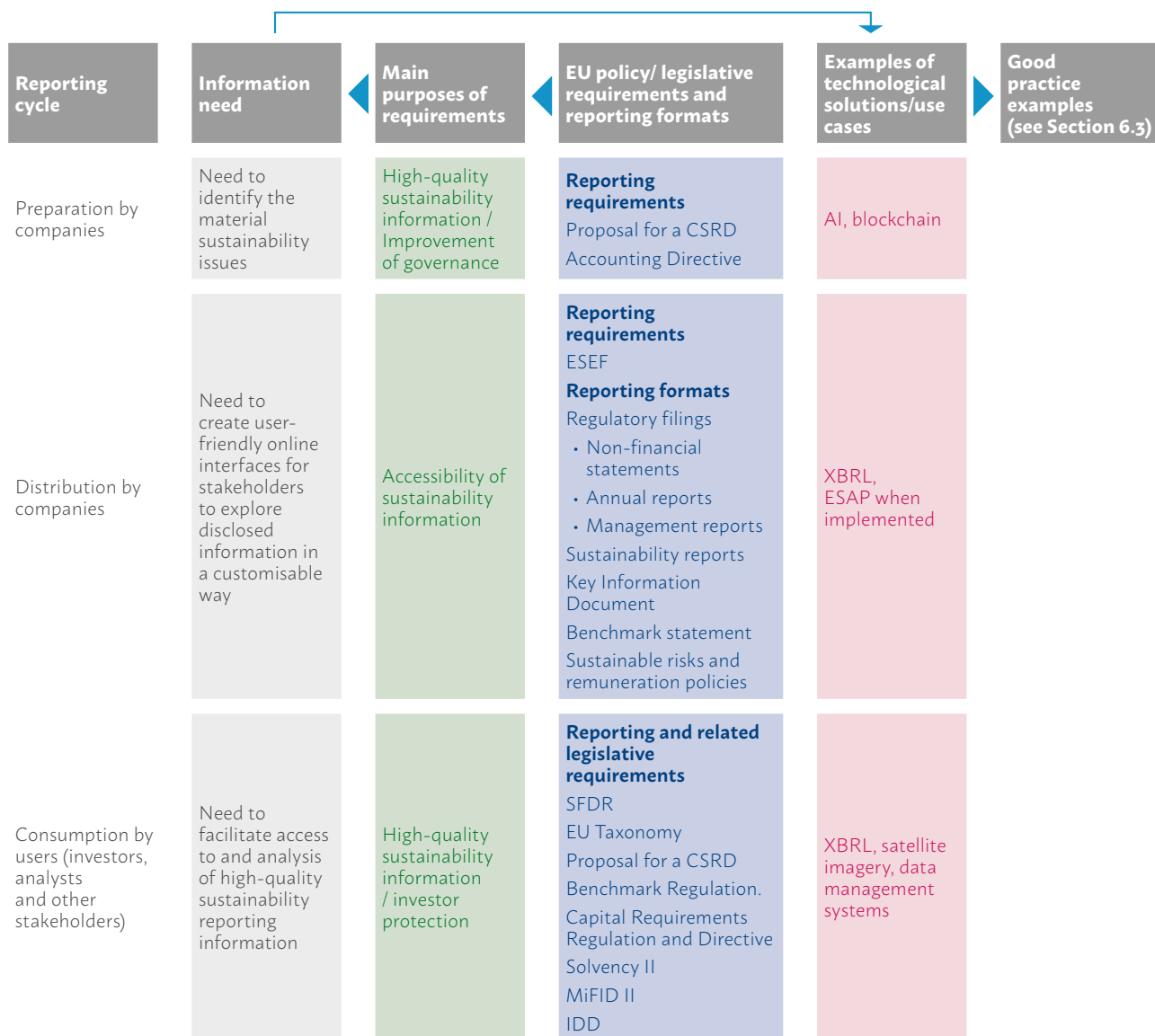


Diagram source: developed by the PTF-RNFRO. High-quality information includes attributes noted in the Practices Evaluation Approach (Relevance/material, faithful representation, comparable etc- see Chapter 2 and Appendix 3). Acronyms applied in Figure 11: IDD- Insurance Distribution Directive, MiFID II- Markets in Financial Instruments Directive; SFDR- Sustainable Finance Disclosure Regulation

As shown in Figure 11, the interplay of information needs across different phases of reporting and the policy/ legislative requirements can determine the practical applications of different technological solutions to facilitate and enhance sustainability reporting information. The technological solutions can enable information with the qualitative characteristics described in the Practices Evaluation Approach Matrix (see [Appendix 3](#) and [Chapter 7 – Section 7.6](#)).

6.3 Key findings- review of policies addressing technological solutions

Policy (i.e., Regulation, Directive, Action Plan, Strategy Roadmap, Guidelines, Regulatory Technical Standards) requirements play a pivotal role in standardising reporting practices including the application of related technological solutions. For this reason, the PTF-RNFRO analysed three different tiers of policy actions:

- policies on reporting of sustainability information by the real economy and financial sector in the EU;
- information resulting from environmental policies in the EU with relevance in terms of ‘do no harm’/ due diligence approach; and
- policies in the field of technology and data sharing in the EU.

Different sources were used to identify the relevant policies including:

- the EC Group of Seven nations (G7)/Group of Twenty nations (G20) coordinator working group on EU data spaces;
- the Datamaran mandatory and voluntary regulation databases; and
- the CDP policy database.

Among the policies that have been considered in the assessment and which are specifically related to disclosure requirements for either companies or financial market participants, only the Transparency Directive refers to ‘technology’ and notably to XBRL (which is only one of the seven possible technological solutions that the PTF-RNFRO has considered as described earlier).

Location, reporting formats

Generally, disclosure-specific policies request non-financial information to be provided in a variety of formats (i.e., different document types and formats) and locations, as summarised in Table 7 below.

Table 7: Summary of report locations and reporting formats

Location	Reporting formats
Public register (Excel file)	Excel files with fields requested to be filled.
Durable Medium (such as hard disks, hard drives, or other physical data storage devices)	Sustainability Statement (e.g., for investment advice)
Management report or currently outside management report with reference to it	Non-financial statements
Website / Officially Appointed Mechanisms	Annual financial reports in XHTML (audited financial statements, management report and issuer’s responsibility statements) in European Single Electronic Format Management reports Other periodic reports (not covered in this list such as ‘consolidated report on payments to governments’)
Website	Key Information Document, Benchmark Statement, Sustainability Risks Policies, Remuneration policies in relation to the integration of sustainability risks

Policies featuring structured data

Most required disclosures combine quantitative metrics and qualitative language (i.e., structured and unstructured data), which suggests that there is an opportunity for technologies to support the human user with the extraction of the relevant information from the different formats and sources and to make non-financial information comparable among issuers.

XBRL, and more broadly speaking machine-readable non-financial information is referred to in many policies and/or supported by many stakeholders as a critical technology to enhance data comparability and retrievability. The PTF-NFRS report (Workstream A6- Current Non-Financial Reporting and Practices) notes that XBRL is the only electronic format that has been promoted by non-financial reporting initiatives. And

that the European Banking Authority⁶⁹ (EBA), the European Insurance and Occupational Pensions Authority⁷⁰ (EIOPA), the European Central Bank⁷¹ (ECB) have endorsed the ESEF. Furthermore, the PTF-NFRS report highlights that the CDP Guidance⁷², SASB Standards⁷³ and Spanish Association of Accounting and Business Administration (AECA) support a digitised format presentation using the XBRL format.

We note that the proposal for a CSRD would require companies to prepare their financial reports and management reports (including sustainability information) in XHTML format in accordance with the ESEF Regulation and to 'tag' their reported sustainability information according to a digital categorisation system that would be developed together with the sustainability reporting standards. Similarly, the Basis for Conclusions of the IASB Exposure Draft on management commentary, which includes financially material sustainability information, notes the potential for applying electronic reporting for management commentary⁷⁴.

The ESAP that is still under development is considered by stakeholders to be a potentially useful technology since the expectation is that it will enable companies' comprehensive sustainability reporting information to be readily accessible at a minimal cost.

Policies featuring other technological solutions besides structured data

Policies addressing reporting or data provision at Member State or EU level, refer to the larger set of technologies, notably blockchain, satellite imagery and AI at large.

It is not surprising to see different kinds of technological solutions addressed in policies. The EU digital strategy and the EU data strategy provide a roadmap of a new data ecosystem in which companies' sustainability data will 'live' in the future and could contribute to achieving the sustainability goals of the EU more broadly and more effectively. The EC's vision is to create a single European data space – a genuine single market for data, open to data from across the world – where personal as well as non-personal data, including sensitive business data, are secure and businesses also have easy access to an almost infinite amount of high-quality industrial data, boosting growth and creating value, while minimising the human carbon and environmental footprint.

The open data ecosystem of an EU single market for data requires data standards, technologies and data governance that support the full data lifecycle (i.e., storage, processing, analysis, visualisation, sharing, reuse, preservation of data, etc.), that will enable, facilitate and stimulate the sharing and reuse of data. This could be a cornerstone of Europe's future data economy.

Technology and IT requirements are expected to include high-performance computer facilities, cloud services, high-speed networks, open data, data analytics, blockchain, machine learning and artificial intelligence. Data platforms for the reuse, aggregation and transformation of scientific, public sector and private sector data, based on a federated network of data hubs is envisioned to be the fit-for-purpose infrastructure to increase the EC's capacity for evidence-based policymaking and to facilitate the development of new, borderless, digital, data-driven, public services.

69 <https://www.eba.europa.eu/risk-analysis-and-data/reporting-frameworks/reporting-framework-2.8>

70 <https://www.eiopa.europa.eu/content/solvency-240-taxonomy>

71 <https://www.bankingsupervision.europa.eu/banking/approach/reporting/html/index.en.html>

72 <https://www.cdp.net/en/articles/climate/technology-and-climate-reporting-can-xbrl-help-tcdf>

73 <https://www.sasb.org/blog/as-markets-move-toward-structured-non-financial-reporting-sasb-engages-pwcs-xbrl-practice-to-support-build-of-xbrl-taxonomy/>

74 The Basis for Conclusion (BC 159 to 161) notes that the more detailed proposed requirements for the revised Practice Statement offers an opportunity for the IASB to provide more specific IFRS Taxonomy elements for management commentary across the six content elements (business model; strategy; risks; resources and relationships; external environment; and financial performance and financial position) and their respective objectives. <https://www.ifrs.org/content/dam/ifrs/project/management-commentary/ed-2021-6-bc-management-commentary.pdf>

The EU data strategy suggests the establishment of EU-wide common, interoperable data spaces in strategic sectors to measure data flows and estimate their economic value within Europe, as well as between Europe and the rest of the world. Examples are:

- a **Common European Green Deal data space**, to use the major potential of data in support of the Green Deal priority actions on climate change, circular economy, zero pollution, biodiversity, deforestation, and compliance assurance;
- a **Common European financial data space**, to stimulate, through enhanced data sharing, innovation, market transparency, sustainable finance, as well as access to finance for European businesses and a more integrated market.

Public environmental or social data are part of an open data ecosystem and shall be connected/integrated with private-sector data. The EC's 'GreenData4All' initiative, for instance, aims at the widest possible systematic availability and dissemination to the public of environmental information, such as spatial environmental data. This could equally apply to the broad range of other environmental public data held by the environmental agencies across Europe as well as private data sets such as from NGOs working in the field of sustainability.

In light of these noted policy initiatives, it is clear that reporting will be increasingly leveraging technological solutions and, more importantly, the range of applications for technological solutions expands beyond disclosure preparation or tagging.

6.4 Key findings- outreach survey feedback and review of disclosures

Survey feedback

As shown in Figure 5 in [Chapter 5](#), **technology is applied to attain connectivity (e.g., links within reports, between reports and externally) by 56% of all stakeholders and by 58% preparer respondents and by 65% of user respondents.**

Review of disclosures

Use of technology to support reporting processes can be inferred indirectly from companies' disclosures describing the application of technological solutions on reporting related activities. For example, disclosures may reference the use of a data management system to collect and store data, use of blockchain in tracking supply chain data, or use of satellite imagery for risk management purposes.

Overall, there is limited evidence in corporate disclosures of the description of technological solutions directly applied for reporting. This finding suggests that companies deploy technologies in an ad-hoc manner and calls for additional disclosure and transparency on the methodologies and techniques used to prepare the disclosures and to ensure that they are free from errors or omissions. Our finding is consistent with that of the PTF-NFRS report⁷⁵, which concluded that from a digitisation perspective, the non-financial reporting ecosystem is diversified in many ways, inflating costs, creating operational and compliance risks, and ultimately hampering access.

75 PTF-NFRS, 2021, Current Non-Financial Reporting Formats and Practices report is accessible through the following link https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FEFRAG%2520PTF-NFRS_A6_FINAL.pdf

Leading practices

Table 8 below outlines the application of the different technological solutions for reporting purposes identified after reviewing different reports. The [Supplementary Document: Good reporting practices](#) provides details of the examples in Table 8.

Table 8: Application of technological solutions in reporting

Technological solutions	Leading practices and reporting use cases
Artificial intelligence (AI)	Unilever’s webpage on materiality assessment highlights that AI is applied in scanning for and determining material sustainability information.
Multimedia and interactive formats for reporting	Novartis’ management use of a YouTube video to describe their materiality assessment process. Ferguson Plc has an interactive webpage describing its business model.
XBRL – enabling access to sustainability information	There is limited evidence of XBRL-tagged sustainability information in recent sustainability reports. An example of a company applying ESEF for its Management Report that includes GRI information is Hochtief.
Satellite imagery	Stellantis’ Sustainability Report discloses the use of satellite imagery as part of flood risk evaluation. It is not explicitly stated in the disclosure, but we infer that the outputs of the evaluation can be an input to the sustainability reporting information. Unilever’s website highlights the use of satellite imagery to monitor the sourcing of its palm oil.
Blockchain technologies	Lenzing’s Sustainability Report discloses the use of a blockchain-enabled supply chain platform to facilitate supply chain traceability amongst customers, partners and consumers. It is not explicitly stated in the disclosure, but we infer that the supply chain traceability information can be an input for either producing or analysing sustainability reporting information (e.g., the proportion of certified suppliers).

CHAPTER 7

HOW CAN REPORTING PRACTICE BE IMPROVED?

Good Practice

7. How can reporting practice be improved?

Based on the findings enumerated in the preceding chapters, the PTF-RNFRO suggests that there is considerable scope for improving the reporting on the business model and related sustainability risks and opportunities. In addition to the **sustainability reporting tips in [Chapter 5 \(Section 5.3\)](#)**, in this chapter, we present what we consider to be needed steps in the path to improvement. These are provided with the aim of helping companies improve their current reporting practices related to sustainability risks and opportunities and the linkage to the business model and thereby providing more relevant information for their stakeholders. These proposed steps and the reporting tips reflect the PTF-RNFRO views on improving practice and are not being provided as guidance.

7.1 Clearer description of the business model and linkage to sustainability risks and opportunities

Understanding the current business model in view of sustainability risks and opportunities is key to business and market transition. Investors and other stakeholders are particularly interested in how risk and opportunities will impact the business model and the consequences for the ongoing viability of the business. The implementation of the European Green Deal and related strategies⁷⁶, policies and regulations to 2030 and 2050 cannot be achieved without fundamental systemic and organisational changes in alignment with the transition targets towards a climate-neutral, resource-efficient, resilient, and prosperous economy. This economic transformation will require significant investments in all of the capitals under the business' control. Both investors and other stakeholders require relevant, reliable, and comparable information that is related to the performance of the business model in order to understand how value creation has affected all capitals (i.e., IIRC IR six capitals) during the transition. This will ensure that the common targets as specified by the EU are clearly met.

Furthermore, understanding the intangible assets within a business is critical to understanding how value creation is realised and what 'stock' of value a business creates, preserves or destroys. At present, whilst there is recognition of the significance of intangibles to the overall value of companies, reporting on the nature, composition and value of those intangibles remains weak as very little reporting is observed in practice.

Business has a key role to play in market transformation and all industries need to make transparent the risk and opportunities in the current business model and what is required to transition to a sustainable business model. Similarly, significant investment is needed to support the transition to green business models and again there is little insight provided in reports on what is needed and the investment required to facilitate the transition.

Time is paramount for the ambitious pace of transformation that the European economy needs to achieve. For this reason, 'first-mover' companies that are quicker to adopt and demonstrate sustainable business models in their disclosures are most likely to have better financial resources available to support the transition process as well as their long-term viability and profitability. To this end, companies need to increase their efforts towards disclosing how they plan to address their most relevant sustainability issues by detailing initiatives, projects and targets.

Reporting can be improved by explaining how the company's business model and strategy is being adapted to create and capture value. The needed change in reporting practice partly depends on a mindset shift that is needed to move away from seeing sustainability matters as 'costs' and/or 'risks' to considering how these

⁷⁶ Such as the Sustainable Finance Strategy, Corporate Transparency Regulations, Industrial Policy Strategy, Mobility Strategy, Circular Economy Policy, Common Agricultural Policy, Cohesion Policy, and related measures.

enhance the value proposition of a business. There is however a lot of work to be done to organise business processes and IT systems and information related to the reporting of the sectoral opportunities that enable companies to mitigate the destruction of value.

Taken together, the numerous identified examples of good reporting practices in the [Supplementary Document: Good reporting practices](#) can help preparers to improve their business model reporting as well as connect users (capital providers and analysts) and other stakeholders' needs with the report contents and more specifically with the description of the inputs, business activities, outcomes and impacts and the related sustainability risks and opportunities. The *Supplementary Document* has examples on a clear description of the business model from **Neste (Example 1.1)**, **Stora Enso (Example 1.2)** and **Schneider Electric (Example 1.3)**. And examples on the reporting of business model impacts include **SGS (Example 3.1)** and **ABN Amro (Example 3.2)**. We also note an example of the use of a technology solution (i.e., interactive web features) for the description of the business model by **Ferguson plc (Example 8.3)**.

7.2 More emphasis on reporting opportunities

As highlighted in [Chapter 4](#), the identification of opportunities and their link to companies' business models and strategy is currently under-reported. Whilst positive statements are sometimes made in company reports about the viability of the business model, this is not the same as identifying what opportunities the business will pursue in the future. Such statements do not inform on how available present and future opportunities are aligned to or derived from the company's strategy. In contrast, good reporting practices identify the specific opportunity drivers that could have a material strategic and financial impact on the business.

To this end, reporting on sustainability opportunities should go beyond focusing on those that arise from a 'do no harm' approach by companies (i.e., by only reporting on positive impacts from avoiding negative externalities. For example, when companies limit the description of opportunities to their avoidance of hazardous substances in products or on phasing out fossils fuels in a product lifecycle). Rather, reporting on opportunities should also entail conveying what companies are doing to seize the favourable external conditions that arise as the EU and global economy undergoes the necessary transformational change to a prosperous and sustainable condition or opportunities that arise from internal organisational capabilities. The notion of responsibility to stakeholders should be embedded in the culture of the business in order to develop and report on opportunities associated with enhancing long-term sustainability across the value chain. An example of a company that discloses its focus on sustainable innovation is **Lenzing (Example 7.3)** in the [Supplementary Document: Good reporting practices](#). Another company example is **Signify (Example 7.5)**, which discloses the revenue potential across different product lines resulting from its pursuit of SDGs.

Moreover, the link between the business model and sustainability opportunities needs to be clearly defined, for instance, detailing the relation between sustainability issues, opportunities, business model elements and financial indicators. A helpful way to do this could be through the inclusion of a connectivity matrix such as the one disclosed by **Arcadis (Example 4.2)** in the *Supplementary Document*.

Another useful example of disclosure is from **EnBW (Example 4.1)** in the *Supplementary Document*, which gives a clear view of how its top opportunities/ risks including those related to sustainability, affect the strategic, financial, and non-financial KPIs. It distinguishes between direct and potential/long term effects. Through a 'risk versus opportunities potential' matrix, it also outlines which of these opportunities/risks can be seized as opportunities rather than being mitigated as risks. However, currently, even the leading practices on reporting opportunities identified by the PTF-RNFRO show that companies could do a better job of highlighting opportunities across the short-, medium- and long-term timeframes and they could enhance disclosures of business segmental or product level opportunities.

Frameworks such as the TCFD recommendations are helpful to link sustainability matters such as climate change to risks and opportunities, as it proposes that companies disclose what different scenarios would mean

for the company. Furthermore, building on the successful uptake by companies and broad stakeholder support⁷⁷ for the TCFD recommendations, the newly formed Task Force on Nature-related Financial Disclosures (TNFD)⁷⁸ is expected to deliver a framework for companies to report on evolving nature-related risks and opportunities.

The identified good or leading practices show some companies effectively applying the TCFD recommendations. For instance, scenario analysis is applied by **Enel (Example 6.1)** to quantify its climate-related transition opportunities. The PTF-CRR report's Supplement 2: [Scenario Analysis Practices](#) also provides examples of scenario analysis information being integrated into business decisions by companies (e.g., **Eni** assesses its portfolio resilience based on different scenarios).

7.3 Quantification of risks and opportunities and cash flow generation

Better access to comparable, relevant, and reliable sustainability information from companies translates to a more effective capital allocation by investors and credit institutions. A company's quantification of sustainability risks and opportunities and the assessment of how these factors impact the company's cash flow in the short, medium, and long term can aid the analysis of the sustainability of the business model (i.e., assessment of the viability, resilience, adaptability of the business model).

However, feedback received from the PTF-RNFRO outreach indicates that even where different forms of forward-looking information are provided, analysts rarely find sufficient disclosure on the future cashflow effects of sustainability risks and opportunities. Inadequate disclosures can mask how an entity's future cash flows are affected by changes to the business model, either positively or negatively.

The measurable effects of sustainability risks and opportunities can include potential costs (e.g., impacts of physical risk exposure, remediation, litigation) and benefits (e.g., the revenue potential from climate adaptation including from generating renewable energy, circular-economy-derived benefits, pollution prevention and remediation measures, ecological conservation etc). Admittedly, the social effects of diversity, fair dealing with employees, reputational risk factors are harder to quantify.

The disclosure of quantitative information that includes the outline of future cash flow effects can demonstrate how investments aligned to the sustainability strategy (e.g., transition-related adaptation by companies) affect the company's financial performance and financial position (i.e., balance sheet strength) over the short, medium, and long term. Visibility of such forward-looking, quantitative data would strengthen analysis and contribute to a better understanding of any interaction between business model development and related investment needs.

The identified good or leading practices show companies applying scenario analysis to quantify climate-related transition risks and opportunities (**Enel- Example 5.1-risks** and **Example 6.1-opportunities**; and **Allianz- Example 2.1** discloses the impacts of carbon pricing on the value of its asset portfolios).

7.4 Better connectivity of financial and sustainability information

The assessment of current reporting practices along with the stakeholder feedback shows that only a few companies provide clear linkages between sustainability and financial information. In part, this is explained by the lack of clear guidance and practical examples of the financial and non-financial information that should be connected.

77 The TCFD 2020 status report shows support for the TCFD guidance from over 1500 organisations globally and over 110 regulators and governmental entities. https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Status-Report.pdf

78 [TNFD website](#)

The TCFD recommendations are a clear demonstration of how the narrative provided in the management report can impact the financial statements when it comes to the effects of climate change. The IIRC IR Framework has, as a core principle, connectivity of information as the basis for helping users understand the significance of reported information (as explained in the Practices Evaluation Approach in Chapter 3). The PTF-NFRS report asserts that linking sustainability and financial reporting will be based on **anchor points**. Anchor points could be direct (as a monetary impact derived from accounting data) or indirect (ensuring coherence between financial and sustainability disclosures) and should be present in both financial reports and sustainability reports.

The importance of connectivity is also reinforced in Auditing Standards – ISA 720 *The auditor's responsibilities relating to other information*, which requires the auditor to consider the 'through line' from the financial statements to other information (including the management report).

Better connectivity could be improved in the management report, integrated report or sustainability report by identifying information that is material to the ability to create long-term enterprise value and disclosing why and how value creation could be affected.

In general, sustainability reporting information should be connected with financial reporting information when there is evidence of a link to enterprise value creation being the information relevant for the economic decisions.

Moreover, considering that there are also limited linkages in practice between sustainability reporting information and the notes to the financial statements prepared according to International Financial Reporting Standards (IFRS), two articles issued in 2019 and 2020 by the IASB about reporting on climate-related matters⁷⁹ could be considered as a reference. In such a context, it is clearly shown that, notwithstanding **the fact that non-financial risks including environmental, climate change risks and other emerging risks are not covered explicitly by IFRS Standards, they do address financial issues that relate to them**.

In particular, such analysis shows how qualitative external factors that are predominantly discussed outside the financial statements (e.g., management report, integrated report, sustainability report, etc.) such as the industry in which the company operates together with investor expectations, **may make such risks material and warrant disclosures in the notes to the financial statements, regardless of the magnitude of their quantified impact**⁸⁰. This would create the opportunity to establish more coherent linkages between sustainability reporting and financial reporting providing more useful information to capital providers and other stakeholders.

From our analysis of good or leading practices, an example of a company that is emphasising the link between the reported financial and sustainability information is **Enel**. In the description of its application of the Core and More approach⁸¹, Enel demonstrates the connectivity of financial and non-financial information and indicates that, in the presentation of its results, it has taken account of the earlier-referenced IASB 2019 and 2020 articles on the effects of climate-related matters on financial statements.

79 In November 2019, Nick Anderson, a member of the IASB issued a paper "IFRS Standards and climate-related disclosures", intended to help investors understand what already exists in the current requirements and guidance on the application of materiality, and how it relates to climate and other emerging risks. In November 2020, the IFRS Foundation has published an additional educational material "Effects of climate-related matters on financial statements", that complements the paper issued in November 2019.

80 This means that, given investor statements on the importance of climate-related risks and other risks to their decision-making, such risks may need to be considered in the context of financial statements, rather than solely as a matter of sustainability reporting. That is, to provide material information to investors even though the carrying amounts in the financial statements are not exposed to those risks. For example, the potential financial implications arising from climate-related and other emerging risks may include, but are not limited to asset impairment, including goodwill, changes in the useful life of assets, changes in the fair valuation of assets, effects on impairment calculations because of increased costs or reduced demand, changes in provisions for onerous contracts because of increased costs or reduced demand, changes in provisions and contingent liabilities arising from fines and penalties; and changes in expected credit losses for loans and other financial assets.

81 <https://integratedreporting2020.enel.com/en/coremore/integrated-annual-report-and-materiality-analysis>
Enel notes that in order to ensure the connectivity of information and to communicate the way in which the progress achieved in sustainability contributes to enhancing current and future financial performance, clear and consistent relationships between key financial and non-financial information have been identified and presented in the Report on Operations for the TCFD thematic areas (Governance, Strategy and Risk, Performance and Metrics) and for its Outlook.

7.5 Application of evidence-based and science-based targets

The reporting of metrics, absent a context or framing of those metrics, makes it difficult for users of that information to properly assess the business' performance. For example, a claim made in a report stating that GHG emissions will be reduced by 10% provides little information unless that 10% leads to a reduction needed to achieve national and global goals. There is an increasing amount of evidence indicating that the continuation of current efforts and policies, across the European economy, can achieve the substantial energy and resource efficiencies needed to achieve greenhouse gas emissions reductions, to halt biodiversity loss and ecosystem degradation, to secure access to food, water and energy and maintain a fair, competitive and prosperous society^{82,83}.

The EU Taxonomy helps to define science-based targets (SBT) necessary to steer both private and public capital towards sustainable businesses. It forms one part of the comprehensive Sustainable Finance Strategy of the EU requiring users of information, i.e., financial market participants to disclose how and to what extent their investments are environmentally and socially sustainable. Such evidence-based and science-based definitions, metrics and targets as provided by the EU Taxonomy are a crucial tool for companies to assess and manage sustainability risks and opportunities and connect with their business model's medium and long-term strategies.

At the most basic level of use, the guidance provided in tools such as the EU Taxonomy will help companies to explain in their disclosures the context of their sustainability goals and to report in units that are relevant and consistent for the sectoral activity concerned. For example, simply stating that waste will be reduced by 50% over ten years does not provide the reader with sufficient information to judge the adequacy of that target. Sustainability targets need to be combined with production or service metrics (e.g., tonnes of waste produced per tonne of product). Evidence-based targets are necessary to calibrate the target to a sector-specific context and performance standard⁸⁴.

Unfortunately, not all sustainability factors are adequately analysed by science in order to make the use of scientific data in decision-making and target-setting possible. For example, one material issue that is often identified by companies in different industries is diversity and inclusion and many companies are struggling to meet both qualitative and quantitative targets with respect to gender or cultural diversity. Undoubtedly, there is not enough evidence-based information to support this process both inside companies but also in view of the sustainability performance assessment between companies operating in the same industry and context.

7.6 Optimising the use of available technologies

From the analysis of how the technology solutions are adopted in practice, the PTF-RNFRO outline below the many ways that technology solutions can play a crucial role in creating information consistent with the qualitative characteristics of the Practices Evaluation Approach (see [Chapter 2](#)). In particular:

Materiality/relevance

- Use of AI including NLP technologies to identify evidence of interest, relevance, and impact in relevant sources (corporate reports, regulations, standards, news, social media), ensuring a data-driven and auditable approach.
- The implementation of data management systems and related procedures enable the measurement and management of issues identified as material.

82 [The EC 2050 Long-term Strategy](#)

83 [A clean Planet for all – A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy, In-depth Analysis in support of the EC Communication COM \(2018\) 773 dated 28 November 2018.](#)

84 For a comprehensive database of sustainability targets set by companies see: <https://www.embeddingproject.org/goals-database>

Faithful representation (completeness, accuracy, balance)

- NLP techniques can be used to check that the content details defining a complete report are present.
- The use of digital taxonomies and tags (such as XBRL) can operationalise the concept of “completeness”, enabling the identification and monitoring of reported versus missing disclosure elements.
- Videos can be used to draw attention to the processes that ensure faithful representation in the disclosure (e.g., a video explaining the materiality determination process or how the company’s business model works). The gravitas of the senior leadership can be leveraged in the video and contribute to building stakeholders’ trust (for instance, **Novartis** use of YouTube to communicate its materiality assessment- **Example 8.2** in the [Supplementary Document: Good reporting practices](#)).
- Data management systems enable storing, retrieving, modifying, filtering, and sharing information internally and externally while ensuring consistency, traceability, and confidentiality of the underlying data.
- On certain topics (e.g., deforestation), satellite imagery can help identify potential or actual impacts using primary data instead of secondary or proxy data (see **Stellantis** and **Unilever- Examples 8.5 and 8.6** in the *Supplementary Document*).
- Along the value chain, blockchain technology can be used to make sure that the data collected from subsidiaries or local sites is traceable and verifiable (see **Lenzing’s** use of blockchain for supply chain traceability- **Example 8.7** in the *Supplementary Document*).

Understandability/clarity

- Web-based reporting enables interaction with visualisations that would be otherwise static, allowing to navigate dynamically the relevant elements in the disclosures, such as the components of the business model (see **Ferguson Plc- Example 8.3** in the *Supplementary Document*).
- XBRL tagging in non-financial reports - in particular iXBRL - has the potential to facilitate the navigation across the different pieces of information.

Comparability

- NLP is used to quantify unstructured and qualitative data (such as narrative), enhancing its comparability. In particular, NLP can help compare disclosures horizontally (versus peers) and vertically (over time), identifying variations and changes.
- XBRL tags specific disclosures, facilitating the identification of comparable information.
- Blockchain could be applied to ensure the traceability of changes in the disclosures.
- The ESAP would facilitate access to the information for comparison purposes eliminating the challenges coming from the fragmentary disclosure of relevant information.

Reliability/verifiability

- Management control systems can demonstrate the underlying data used in the disclosures.
- Satellite imagery technologies enable gathering primary data, rather than relying on secondary or proxy data (see **Stellantis and Unilever- Examples 8.5 and 8.6** in the *Supplementary Document*).
- Transparent AI and NLP algorithms allow access to underlying assumptions and methodologies.

- The ESAP when implemented would facilitate access to the information for verification purposes, eliminating the challenges coming from the fragmentation of the relevant disclosures in different places.

Coherence

- Use of NLP to compare disclosure in annual financial filings and sustainability filings to ensure consistency and bridging between the financial and non-financial dimensions.
- Leverage data management systems that allow the integration of non-financial and financial information.

Connectivity– in respect of non-financial and financial information

- Use of visualisations and hyperlinks to facilitate the connection between information (see **Ferguson Plc- Example 8.3** in the *Supplementary Document*).
- Use of NLP techniques to identify co-occurrence of information in the same paragraphs or sections.
- Use of XBRL to tag information (e.g., indicators) that have inter-operability connecting the non-financial and financial dimensions.

Strategic focus and future orientation

- Use of NLP and AI to identify signals of emerging risks (red flags) and opportunities, looking for example at leading sources (e.g., voluntary guidelines, policies, frameworks, stakeholder campaigns and activism (see **Unilever’s** application of AI in materiality assessment- **Example 8.1** in the *Supplementary Document*).

Stakeholder inclusiveness

- NLP and AI techniques that allow scanning through vast amounts of data sources can be used to identify material issues from the perspective of a broad range of stakeholder groups (see **Unilever’s** application of AI in materiality assessment- **Example 8.1** in the *Supplementary Document*).
- Multimedia reporting allows different stakeholders to be addressed and facilitates access to the disclosures that are relevant to them (see **Novartis** use of YouTube to communicate its materiality assessment- **Example 8.2** in the *Supplementary Document*).
- A single access platform (such as ESAP when implemented) would foster stakeholders’ access to relevant insights and minimise access barriers.

Timeliness

- Companies can leverage web-based reporting and videos to inform relevant audiences of material events in a timely manner.
- Data management systems can ensure KPIs and relevant indicators are tracked to check progress.
- The ESAP when implemented would facilitate timely access to the latest available information.

Figure 12: Technological solutions contribution to qualitative characteristics of useful sustainability reporting information

Technological solutions	Technological solutions contribution to information attributes								
Blockchain	Faithful representation	Comparability	Materiality/relevance						
Satellite imagery	Faithful representation	Verifiability/reliability	Materiality/relevance						
Structured data (XBRL)	Faithful representation	Comparability	Connectivity	Understandability					
ESAP	Verifiability/reliability	Timeliness	Stakeholder inclusiveness	Comparability					
Multimedia	Faithful representation	Timeliness	Stakeholder inclusiveness	Connectivity	Understandability				
Data management	Faithful representation	Verifiability/reliability	Timeliness	Materiality/relevance	Coherence				
AI	Faithful representation	Comparability	Verifiability/reliability	Connectivity	Timeliness	Stakeholder inclusiveness	Materiality/relevance	Coherence	

This analysis illustrates how different technological solutions can enable the qualitative characteristics of useful sustainability reporting information as indicated in the Practices Evaluation Approach described in [Chapter 3](#). A more detailed outline of how technology solutions can help fulfil the Practices Evaluation Approach attributes of useful information is in [Appendix 3](#). As shown in Figure 12, to varying degrees, these technologies can contribute to attributes of useful sustainability reporting information.

More importantly, it is clear that technology should be considered holistically in the entire reporting cycle, from preparation, distribution to consumption.

We also note the recommendation of the PTF-NFRS report that to facilitate digitisation, the EU standard-setter should translate the architecture’s classification and segmentation of sustainability disclosures into a digital taxonomy from the outset. This digital taxonomy should be issued in parallel with the standards. This will permit sustainability information to be tagged based upon a granular analysis of data points. Furthermore, the proposal for a CSRD would require companies to prepare their financial statements and management reports (including sustainability information) in XHTML format in accordance with the ESEF Regulation and to ‘tag’ their reported sustainability information according to a digital categorisation system.

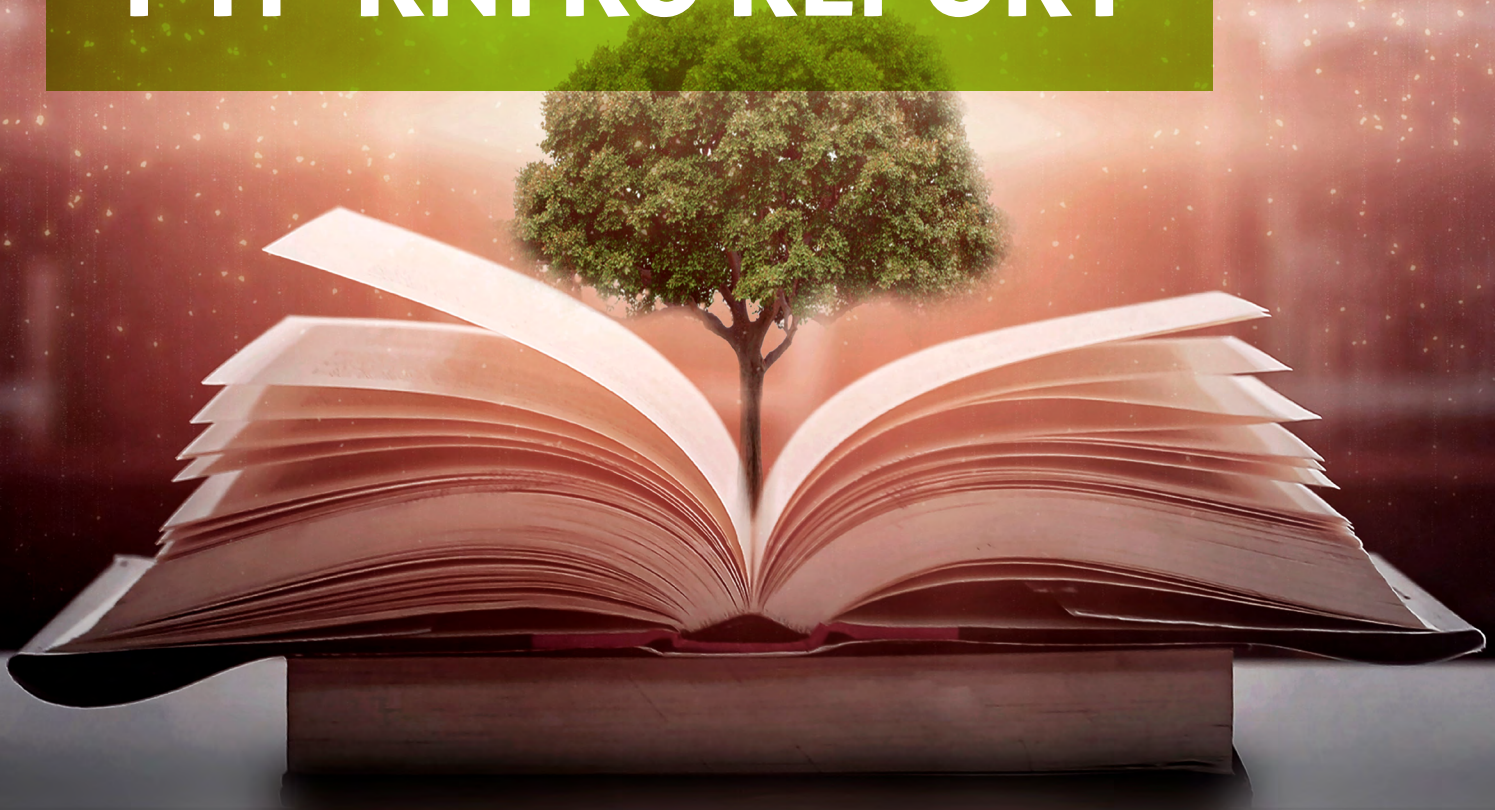
7.7 Assurance

As the interviews with stakeholders demonstrated ([Chapter 5](#) – section 5.2: Reporting practices to avoid), there is still a degree of scepticism about the ‘green’ claims being made by companies in their management or other reports. As one academic put it: “*Imprecise statements. Unfair statements. Out of context statements. Non-material statements*” and this echoed the comments made by a number of stakeholders. Accordingly, there is considerable scope to build trust and credibility in reporting. The role of assurance is not just about building credibility amongst stakeholders but there is a direct benefit to the company in improving their systems and processes to be able to transition to sustainability being seen as a cost to an opportunity to identify new sources of value.

Assurance has already been made mandatory in some Member States and the proposal for a CSRD extends limited assurance over all the management reports across the EU and that development has the potential to significantly enhance the quality of reported information. A considerable challenge for assurance providers is to ensure that the claims being made – on both financial and sustainability reporting information align. The lack of alignment at present raises doubts for stakeholders about whether the claims included in sustainability reports are reflected in the financial statements and in the assumptions that underpin accounting estimates.

APPENDIX 1

GLOSSARY IN CONTEXT OF THE PTF-RNFRO REPORT



The Glossary outlines the meaning of different key terms as applied in the PTF-RNFRO report and [Supplementary Document: Good reporting practices](#).

Financial and sustainability reporting terms

Business model: An organisation's system of transforming inputs through its business activities into outputs and outcomes that aims to fulfil the organisation's strategic purposes and create value over the short, medium, and long term. (IIRC). The following terms related to the business model

- **Inputs:** The capitals (resources and relationships) that the organisation draws upon for its business activities. (IIRC)
- **Outputs:** An organisation's products and services, and any by-products and waste. (IIRC)
- **Outcomes:** The likely or achieved short-term and medium-term effects of an intervention's outputs. (Organisation for Economic Co-operation and Development (OECD), Impact Management Project (IMP))
- **Impacts:** Positive and negative, primary and secondary long-term effects produced by an intervention, directly or indirectly, intended or unintended. (OECD, IMP)
- Inputs, outcomes and impacts are of either a tangible, sustainable or intangible nature.

Capital providers: Equity investors, debt providers and trade creditors are the primary capital providers in the EU. Capital providers can be sub-classified as 'inside' equity investors (e.g., owner-managers in family firms) and 'outside' equity investors who rely on information that is publicly available. (derived from EFRAG and ICAS 2013 publication- Professional investors and decision usefulness of financial reporting)

Connectivity: Connectivity is intended to address the connection between financial, non-financial information in order to provide a holistic view of the combination, interrelatedness and dependencies between all the factors that affect value creation. (derived from the IIRC IR Framework)

Dependencies: A business reliance on or use of resources and relationships (obtained from the National Contact Points for responsible business conduct (NCP))

Financial Information: Information that is material to a limited liability company, including listed companies, non-listed companies, micro, small to medium-sized enterprises (SME's), which is necessary for the preparation of financial statements to monitor the performance of their business and provide a true and fair view of their financial position ([derived from EC Financial Reporting website](#)).

Intangibles

Intangibles are non-physical resources which, either alone or in conjunction with other tangible or intangibles resources, can generate a positive or a negative effect on the value of the organisation in the short, medium and long term (WICI Intangibles Reporting Framework).

The proposal for a CSRD states that intangibles means non-physical resources that contribute to the undertaking's value creation.

PTF-NFRS has the following definition of intangibles

Non-monetary assets without physical substance (non-monetary assets being defined as assets which are neither (i) money or units of currency held nor (ii) assets to be received in fixed or determinable amounts of money or units of currency).

In the context of sustainability reporting, the intangible dimension can be classified into three categories:

- Human capital corresponds to the individual and collective contribution to performance. It is made up of the accumulation of knowledge and skills by individuals within a company. It includes talent, experience, charisma, leadership, humanity, empathy, resilience, interpersonal relationships.
- Organisational and intellectual capital reflects the organisation’s philosophy and the systems to leverage the organisation’s capabilities. This includes techniques, procedures, intellectual property (commercial rights, copyrights, trademarks, patents), management, information systems, innovation.
- Relational and social capital corresponds to the different interactions between the company and its ecosystem. It is based on relations with shareholders, partners, customers, suppliers, prescribers, distribution networks.

Materiality

- **Financial materiality:** The level of significance of a sustainability matter on the reporting entity’s ability to create or erode financial value. Financial materiality might also be referred to as **outside-in materiality** (definition used by PTF-NFRS).
- **Non-Financial materiality or Impact materiality or Environmental and social materiality:** Level of significance of an entity’s impacts on the environment and people. Social and Environmental materiality might also be referred to as **inside-out materiality or as Impact materiality** (definition used by NFRD and PTF NFRS).
- **Double materiality:** Application of both impact materiality and financial materiality perspectives in their own rights, while recognising the **dynamic relationship** between the two, in the way that an entity’s impacts on people and the environment can also affect the entity’s business model and therefore create or erode value over time (definition used by NFRD and PTF NFRS).
- The proposal for a CSRD states that *“Articles 19a and 29a of Directive 2013/34/EU require reporting not only on information ‘to the extent necessary for an understanding of the undertaking’s development, performance, position’, but also on information necessary for an understanding of the impact of the undertaking’s activities on environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters. Those articles therefore require undertakings to report both on how various sustainability matters affect the undertaking, and on the impacts of the activities of the undertaking on people and the environment. That is referred to as the double-materiality perspective, in which the risks to the undertaking and the impacts of the undertaking each represent one materiality perspective.”*
- **Dynamic materiality:** What is financially immaterial to a company or industry today can become material tomorrow, a process called “dynamic materiality” (World Economic Forum (WEF), 2020). The PTF-NFRS report explicitly acknowledges the dynamic interrelationship between impact materiality and financial materiality: *“Many impacts on people and the environment may be considered ‘pre-financial’ in the sense that they may become material for financial reporting purposes over time (so-called ‘dynamic materiality’)”*.

Materiality assessments

Although an institutionalised definition of a materiality assessment has yet to be formulated, there are various documents and publications provided by practitioners that explain what a materiality assessment is. Generally speaking, materiality assessments are the processes used by organisations to identify, prioritise, and validate their material issues. Robust and credible materiality assessments are evidence-based, systematic, conducted annually in advance of the report preparation, and involve the highest governance body of the organisation in making materiality judgements. Organisations connecting non-financial and financial issues use materiality assessments as a foundation for their strategic planning, budget allocation, risk management, and annual reporting.

Non-financial information: This information may not be captured in financial statements, and it is generally expressed in non-monetary units (e.g., physical measures, percentages, Likert scales). (WICI)

Policy: Regulation, Directive, Action Plan, Strategy Roadmap, Guidelines, Regulatory Technical Standards.

Purpose (Values, Mission, Vision)

- **Purpose:** Articulates why an organisation exists.
- **Values:** They inform and guide the specific day to day behaviours and decisions taken by every member of the organisation.
- **Mission:** Captures the day-to-day activities of the organisation, defining quite literally what business it is in.
- **Vision:** Describes the outcome that the organisation wants to see from the successful delivery of its stated purpose. (Enacting Purpose Within The Modern Corporation, EPI, October 2020)

Reporting Information Consumption: The analysis and use of distributed, packaged information.

Reporting Information Distribution: The dissemination of packaged information to meet policy requirements and communicate with external stakeholders.

Reporting Information Preparation: The collation, amalgamation, packaging, and presentation of underlying financial and non-financial information from within a company or organisation with the intention that it will be externally released.

Risks and opportunities

Risks: Possible events that can affect the achievement of strategy and business objectives. (COSO/WBCSD)

Opportunities: Actions or potential actions that create or alter goals or approaches for creating, preserving and realising value. (COSO/WBCSD)

Risks and opportunities can affect value creation in general, in the short, medium and long term. (IIRC)

Stakeholders

Those individuals, groups of individuals or organisations who affect and/or could be affected by an organisation's activities, products, or services. (NFRD, AA1000)

These individuals include also those who affect and/or could be affected by an organisation's outcomes and impacts. (IIRC)

Sustainability

Commitment to sustainability: It defines the management approach to sustainability and it is expressed with a commitment taken by the Board (CEO or Chair) and explained with the longer-term sustainability targets. The commitment to specific sustainability standards is part of the business strategy and relevant to the maturity of the business model.

Sustainable development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (World Commission on Environment and Development, 1987 "Brundtland Report")

Sustainability issues: Refer to sustainability factors.

Sustainability factors: Environmental, social and employee matters, respect for human rights, anti-corruption, and anti-bribery matters. (NFRD, Sustainable Finance Disclosure Regulation (SFDR))

Sustainable investment: An investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy, or an investment in an economic activity that contributes to a social objective, in particular, an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices, in particular with respect to sound management structures, employee relations, remuneration of staff and tax compliance. (SFDR)

Sustainability risk: An environmental, social or governance event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of an investment. (SFDR)

Risk can expose the organisation to either an opportunity, a threat or both (ISO 31000)

Value

Increases, decreases or transformations of the capitals caused by the organisation's business activities and outputs. (IIRC)

It includes shareholder and other stakeholders-related value. (IIRC, GRI, SASB, NFRD and WICI)

Value creation: Narrative explanation – often supported by quantitatively expressed information – about the interconnected events which have occurred and generated the organisation's value. (WICI)

Value destruction: Temporary or permanent loss of value in any or a combination of the six capitals. (derived from the IIRC definition of value creation)

Technology-related terms

Artificial Intelligence (AI): AI applications are numerous and diversified. Those solutions are adopted to replace repetitive and mechanical tasks through automation, or to identify patterns in large amounts of heterogeneous and unstructured data that would be invisible to the human eye.

Blockchain: A distributed ledger – a shared database that creates a permanent record of a sequence of transactions. The ledger is distributed in a network of participants, without any of them being in control of the network itself.

European Single Access Point (ESAP): EU-wide platform in order to facilitate investors' access to company data, including sustainability information.

Natural language generation (NLG): Natural language generation is a software process that produces natural language output.

Natural language processing (NLP): A branch of artificial intelligence focused on the interaction between computers and human language.

eXtensible Business Reporting Language (XBRL): An open international standard for digital business reporting.

Inline (iXBRL): Inline XBRL is an open standard that enables a single document to provide both human-readable and structured, machine-readable data.

Acronyms

Table A1 includes a list of acronyms **related to organisations, initiatives, frameworks, and concepts** applied across this report and the [Supplementary Document: Good reporting practices](#).

Table A1- Acronyms related to organisations, legislation, initiatives, and concepts

2°C	2° Celsius
ACCA	Association of Chartered Certified Accountants
BNEF	Bloomberg New Energy Finance
CAANZ	Chartered Accountants Australia & New Zealand
Cap (large-cap, mid-cap, small-cap)	Market capitalisation (large, medium or small)
CDP	Formerly Carbon Disclosure Project
CDSB	Climate Disclosure Standards Board
COP 21	21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC). See also Paris Agreement below.
COSO	Committee of Sponsoring Organisations of the Treadway Commission
CRR	Climate-related Reporting
CSRD	Corporate Sustainability Reporting Directive
EBA	European Banking Authority
EC	EC
ECB	European Central Bank
EFRAG	European Financial Reporting Advisory Group
EIOPA	European Insurance and Occupational Pensions Authority
EMAS	EU Eco-Management and Audit Scheme
ESMA	European Securities Markets Authority
ESG	Environmental, social and governance
EU	European Union
European Lab	European Corporate Reporting Lab @EFRAG
European Lab SG	European Lab Steering Group
FRC-UK	Financial Reporting Council of the UK
FSB	Financial Stability Board
G7	Group of Seven nations
G20	Group of Twenty nations
GeSI	Global e-Sustainability Initiative
GHG	Greenhouse gas
GICS	Global Industry Classification Standard
GRI	Global Reporting Initiative
I4CE	Institute for Climate Economics
IAS/IFRS	International Accounting Standards/International Financial Reporting Standards
IASB	International Accounting Standards Board
ICAS	Institute of Chartered Accountants of Scotland
IDD	Insurance Distribution Directive
IEA	International Energy Agency
IFAC	International Federation of Accountants
IIGCC	Institutional Investors Group on Climate Change
IR, IIRC	Integrated Reporting, International Integrated Reporting Council
IMP	Impact Management Project

IPCC	Intergovernmental Panel on Climate Change
ISO	International Organisation for Standardisation
KPI	Key Performance Indicator
MIFID II	Markets in Financial Instruments Directive
NCP	National Contact Points for responsible business conduct
NFRD	Directive 2014/95/EU – the EU Non-Financial Reporting Directive
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
Paris Agreement	Paris Agreement under the United Nations Framework Convention on Climate Change (also called Paris Climate Agreement or COP21)
PRI	Principles for Responsible Investment (PRI)
PTF-CRR	European Lab Project Task Force on Climate-related Reporting
PTF-NFRS	European Lab Project Task Force for the elaboration of Non-Financial Reporting Standards
PTF-RNFR0	European Lab Project Task Force on Reporting of Non-financial Risks and Opportunities and Linkage to the Business Model
RCP	Representative Concentration Pathway
SASB	Sustainability Accounting Standards Board
SBT; SBTI	Science-Based Targets; Science Based Targets Initiative
SDGs/UN SDGs	Sustainable Development Goals of the United Nations General Assembly
SDGD	Sustainable Development Goals Disclosure
SDS	Sustainable Development Scenario
SFDR	Sustainable Finance Disclosure Regulation
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Task Force on Nature-related Financial Disclosures
TRE	Thomson Reuters Eikon
UN	United Nations
UNGC	United Nations Global Compact
UNEP	United Nations Environment Programme
VaR	Value at Risk
VRF	Value Reporting Foundation
WBA	World Benchmarking Association
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum
WEM	World Energy Model

METHODOLOGY APPLIED IN THE REVIEW OF GOOD REPORTING PRACTICES



The PTF-RNFRO research was carried out considering the current NFRD requirements and voluntary non-financial reporting frameworks, standards, and other guidance. The progress on the PTF-RNFRO work was regularly presented at the European Lab Steering Group meetings that involved EC representation. At these meetings, the EC gave some indications on the development of the proposal for a CSRD.

Sample of companies reviewed

We reviewed a sample of 44 companies that were selected based on the following criteria:

- Diversity of the sample:
 - o 16 European countries;
 - o 19 sectors;
 - o Medium and large companies (in terms of annual turnover, employees, and market cap); and
 - o Initial review of their financial and non-financial 2019 or 2020 reports identifying the information disclosed by the companies.
- Targeting good practices:
 - o After gathering an initial long list of possible companies, we evaluated the following conditions for selecting our final sample of 44 companies:
 - Diversity of the sample (see above);
 - High-level review by the expert group members of the PTF-RNFRO;
 - Existing initiatives highlighting recognised good practices (e.g., Alliance for Corporate Transparency); and
 - Input for companies from the PTF-RNFRO Stakeholder Survey.

As this was not an exhaustive list, we might not have considered all good practices.

Table A2 outlines the sectors of the sample of companies reviewed.

Table A2: Sectors covered

Sector	Number	Percentage
Financial	11	25%
Energy and utilities	9	21%
Manufacturing*	7	16%
Food and Beverages	5	11%
Other**	12	27%
Total	44	100%

* This includes automotive ** Including sectors like pharma and real estate

Selection of good reporting practices

For the selected sample of companies, different types of reports were reviewed including:

- annual financial statements
- sustainability reports
- non-financial statement reports
- annual reports
- integrated reports

The different types of company reports were analysed against the application of the Practices Evaluation Approach attributes and content elements elaborated on in [Chapter 2](#). The disclosures were identified and categorised based on the seven criteria below.

1. The company disclosure has a clear and comprehensive description of its business model.
2. The company discloses its business model's short, medium, and long-term potential.
3. The company disclosure provides a clear description of its business model's dependencies and impacts on sustainability issues.
4. The company discloses the material sustainability issues that are likely to impact its performance.
5. The company discloses its exposure to sustainability risks.
6. The company discloses its sustainability opportunities.
7. The company discloses its sustainability strategy, targets, KPIs, and its monitoring of progress.

The analysis in respect of the above criteria 1 to 3 focused on business model reporting including the disclosure of business model inputs (resources and relationships), business activities, outputs, outcomes and impacts. Criteria 4 to 7 focused on the disclosure of sustainability risks and opportunities, and their linkage to the business model outputs (i.e., financial and sustainability KPIs) and strategy including targets.

As shown in the [Supplementary Document: Good reporting practices](#), for each of the seven criteria, the PTF-RNFRO applied the Practices Evaluation Approach attributes and content elements for useful sustainability reporting information. The content elements considered included reference timeframes, whether the company disclosed sustainability issues that were material to its performance, the top-five dependencies and impacts of sustainability issues, details of how a company manages its material issues, how and to what extent a company describes its exposure to sustainability risks and opportunities, as well as how they manage risks and avail of opportunities, and finally detailed analysis of their strategy, targets, KPIs and monitoring of progress.

The content elements that guided the review and selection of good reporting practices were identified through a desk research of existing reporting frameworks, standards and regulatory documents including those of the IIRC (IR Framework), the NFRD, GRI Standards, TCFD recommendations, and SASB Standards. Other sustainability standards, policy and consultation papers, and (expected) regulation, such as the proposal for a CSRD were also reviewed.

The quality of the identified disclosures identified was ranked by PTF-RNFRO members. This ranking informed the selection of good reporting examples. To avoid bias and contribute to the replicability of the findings, a peer review and cross-checking was done for decisions relating to the content elements, the ranking of disclosures, and the selection of good reporting practice examples. This due process ensured a collective PTF-RNFRO assessment of the suitability of the chosen examples and reflected individual members' expert judgements whilst reviewing the reports. The PTF-RNFRO selection of examples was further informed by feedback obtained during the stakeholder outreach.

From the sample of 44 companies, 30 examples of good practices in the reporting of sustainability risks, opportunities and linkage to the business model were selected from 22 companies as detailed in Part 1 of the *Supplementary Document*.

APPENDIX 3

PRACTICES EVALUATION APPROACH MATRIX



Included in Table A3 below are further details of the Practices Evaluation Approach content elements considered in reviewing good reporting practices and possible technology solutions. These have been categorised by the Practices Evaluation Approach attributes of useful sustainability reporting information.

Table A3: Practices Evaluation Approach Matrix

Attribute of information	Content elements - sustainability risks, opportunities and business model (see Supplementary Document: Good reporting practices)	Possible technology solutions
<p>Accuracy/Free from error</p> <p><i>Does the organisation provide information that has no material error (also in the way it has been produced)?</i></p>	<p>Materiality determination process</p>	<p>Use NLP technologies to identify evidence of materiality in relevant sources (corporate reports, regulations, standards, news, social media), ensuring a data-driven and auditable approach.</p> <p>Use videos to explain the materiality determination process.</p> <p>Data management systems enable storing, retrieving, modifying, filtering, and sharing information internally and externally while ensuring consistency, traceability and confidentiality of underlying data.</p> <p>Satellite imagery can help identify potential or actual impacts using primary data.</p> <p>Blockchain could be used to make sure that the data collected from subsidiaries or local sites is traceable and verifiable.</p>
<p>Understandability/Clarity</p> <p><i>Does the organisation provide information in a clear and concise way, also including cross-references between reports?</i></p>	<p>Use of a chart/picture/graph/diagram to describe the key elements of its business model</p> <p>Use of hyperlinks</p>	<p>Web-based reporting enables interaction with visualisations that would be otherwise static, allowing to navigate dynamically the components of a business model.</p> <p>Leverage the gravitas of the CEO or CFO to explain how the business model works and how it ensures long term value creation.</p> <p>XBRL tagging in non-financial reports - in particular, iXBRL - has the potential to facilitate the navigation across the different pieces of information.</p>
<p>Coherence/Connectivity</p> <p><i>Does the organisation provide a holistic view of the combination, interrelatedness, and dependencies between all the factors that affect value creation, providing information as a well-integrated coherent whole, also including cross-references between reports?</i></p>	<p>Links between reporting of business model and sustainability risks and opportunities</p> <p>Links between material topics and risks and opportunities</p> <p>Link to sustainability strategy and targets</p>	<p>Use NLP to compare disclosure in annual financial filings and sustainability filings to ensure consistency and bridging between the financial and sustainability dimensions.</p> <p>Leverage data management systems that allow the integration of sustainability reporting and financial reporting information.</p>
<p>Comparability</p> <p><i>Does the organisation provide consistent information that allows comparison with other entities, previous period(s) and within other reports or publications?</i></p>	<p>Assumptions and methods used to develop the business model risks and opportunities analysis</p> <p>Explanation of eventual changes</p> <p>New information provided</p> <p>Comparative data provided</p>	<p>XBRL tags specific disclosures, facilitating the identification of comparable information.</p> <p>Blockchain could be applied to ensure the traceability of changes in the disclosures.</p> <p>NLP technology can help compare disclosures horizontally (versus peers) and vertically (over time), identifying variations and changes.</p> <p>Alignment with EU taxonomy.</p>

Attribute of information	Content elements - sustainability risks, opportunities and business model (see Supplementary Document: Good reporting practices)	Possible technology solutions
<p>Completeness (which includes Strategic Focus and Future Orientation)</p> <p><i>Does the organisation report on all material information identified for the relevant topics and allow a complete assessment and evaluation of its business model and linkages with sustainability risks and opportunities with a future orientation and also provide insights about the strategy and its links with the value creation in the short, medium and long term?</i></p>	<p>Mission, Purpose, Vision, Governance, External environment</p> <p>Inputs/dependencies (sustainability, intangibles, financial-related, positive, negative, external, internal), Business activities, Outputs</p> <p>Outcomes (sustainability, intangibles, financial-related, positive, negative, external, internal)</p> <p>Impacts (sustainability, intangibles, financial-related)</p> <p>Description of risks (sustainability, intangibles, financial-related), Risks control</p> <p>Description of opportunities (sustainability, intangibles, financial-related)</p> <p>Opportunities-related improvement</p> <p>Link to SDGs</p> <p>Strategic targets</p> <p>Business model's short, medium, and long-term potential</p> <p>Indication of the timeframe of risks/opportunities</p> <p>Description of progress against targets</p>	<p>NLP techniques can be used to check that the content details defining a complete report are present.</p> <p>The use of XBRL taxonomies can operationalise the idea of "completeness".</p> <p>Use NLP and AI to identify signals of emerging risks and opportunities.</p> <p>Data management systems ensure KPIs and relevant indicators are tracked to check progress.</p>
<p>Neutrality/Balance</p> <p><i>Does the organisation provide information without bias that could influence favourably/unfavourably the understanding of stakeholders?</i></p>	<p>Positive and negative outcomes</p> <p>Positive and negative impacts</p>	<p>NLP polarity or sentiment analysis can help identify the tone of the language.</p>
<p>Relevance/Materiality</p> <p><i>Does the organisation provide all the information capable of making a difference to the decision of investors and other stakeholders?</i></p>	<p>Issues that are likely to impact the company performance</p> <p>Issues that are likely to impact the external environment</p> <p>Materiality matrix, Materiality determination process, Management of material issues</p>	<p>Use NLP technologies to identify evidence of materiality in relevant sources (corporate reports, regulations, standards, news, social media), ensuring a data-driven and auditable approach.</p> <p>Existence of data management systems and related procedures enable the measurement and management of issues identified as material.</p>
<p>Verifiability/Reliability</p> <p><i>Does the organisation provide information that is possible to corroborate (also in the way it has been produced)?</i></p>	<p>Assumptions and methods used to develop the business model risks and opportunities analysis</p> <p>Metrics and KPIs (related to inputs, outputs, outcomes, risks and opportunities)</p> <p>Materiality determination process</p>	<p>Management control system can demonstrate the underlying data used in the disclosures.</p> <p>Satellite imagery technologies enable gathering primary data, rather than relying on proxy data.</p> <p>Transparent AI and NLP algorithms allow access to underlying assumptions and methodologies.</p>
<p>Timeliness</p> <p><i>Does the organisation provide information in a timely manner to influence stakeholders' decisions and with aligned schedules for financial reporting and sustainability reporting?</i></p>	<p>The sustainability report or integrated report is issued at the same time as the annual report.</p>	<p>Leverage web-based reporting and videos to inform relevant audiences of material events in a timely manner.</p> <p>Data management systems - ensure KPIs and relevant indicators are tracked to check progress.</p> <p>The ESAP would facilitate timely access to the latest available information.</p>
<p>Stakeholder inclusiveness</p> <p><i>Does the report give information about the relationship with stakeholders, and how their interests have been taken into account in providing material information?</i></p>	<p>Inclusion of materiality matrix that considers importance for stakeholders</p> <p>Reporting on impact/value creation for different stakeholders</p>	<p>NLP and AI techniques in order to identify material issues allow scanning through vast amounts of data sources, representing a range of different stakeholders' groups.</p> <p>Multimedia reporting allows different stakeholders to be addressed and facilitate access to the disclosures that are relevant to them.</p> <p>A single access platform (such as ESAP) would foster stakeholders' access to relevant insights, minimising entry barriers.</p>

APPENDIX 4

PTF-RNFRO MEMBERS AND SUPPORT TEAM

The PTF-RNFRO was appointed by the European Lab SG in June 2020 for the duration of the European Lab's second project on reporting of non-financial risks and opportunities and linkage to the business model and was operational from September 2020. The PTF-RNFRO 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 sustainability reporting. The members of the PTF-RNFRO participated in the project in a personal capacity.

The members of the PTF-RNFRO work for organisations in different sectors including the accountancy profession, civil society or academia, and are from different EU countries including Bulgaria, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, and Malta.

PTF-RNFRO members

Charles Mario Abela, Director-Redefining Value, WBCSD- Co-Chair

Dawn Slevin, Managing Director, Environmental Liability Solutions-Co-Chair

Maria Alexiou, ESG Senior Advisor, Titan Cement International S.A

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Datamaran

Datamaran voluntary and mandatory regulation databases

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Thomson Reuters Eikon- The database combines economic, financial, and business information from many sources worldwide. ESG-related claims were identified via the 'ESG Controversies Score' which measures a company's exposure to environmental, social and governance controversies and negative events reflected in global media.