PLATFORM ON
SUSTAINABLE FINANCE

A compendium of Market Practices

How the EU's Taxonomy and sustainable finance framework are helping financial and non-financial actors transition to net zero.

January 2024

Annex: Market practices from Platform stakeholder groups

This annex compiles a stocktake and analysis of current practice. Considering the early stages of adoption of the EU sustainable finance framework, none of those market practices represent or should be interpreted as best practice or 'market standard'.

The market practices span three areas: 1) the use of the EU sustainable finance framework for business strategy, transition planning and target setting; 2) finance and transactions; and 3) reporting, monitoring and assurance. They are contributed by seven stakeholder groups of large corporates, credit institutions, investors, insurers, public institutions, auditors and consultants, and SMEs (small and medium-sized enterprises).

Disclaimers

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This report represents the overall view of the members of the Platform on Sustainable Finance. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

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1. Corporates

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Introduction to corporate market practices

Introduction to the stakeholder group's context

Companies are key actors in the EU economy's sustainability transition, with business model innovation and sustainable finance becoming increasingly important tools to help them reach their climate goals.

Within this landscape, the EU Taxonomy Regulation is positively influencing EU companies, helping them to shape and roll out strategies and instruments that are pivotal to them meeting climate objectives.

The Corporations stakeholder group analysed 31 companies across different sectors and 11 EU countries. The market practices presented in the Compendium build on four corporate strategic dimensions (strategy and business models, sustainable finance, disclosure, and supply chains) on which the contribution of the EU Taxonomy in promoting sustainable finance and environmental objectives was assessed and key opportunities and main challenges identified. Depending on the specific situations of the analysed companies and relevance of the four strategic dimensions listed, the Corporations Stakeholder Group focused on a subset of the companies for some of the market practices.

While some companies see regulation as a key driver of change, other companies are voluntarily advancing their sustainability agendas, as the value of integrating the ESG dimension into corporate strategy is becoming more and more tangible. In this sense, regulatory frameworks should be seen as an enabling complement to innovative business and financial strategies.

Specifically, companies are incorporating EU sustainable finance regulations on both a voluntary and/or mandatory basis into:

- **Strategy and business models**
    - A growing number of companies are actively incorporating ESG and climate objectives into corporate strategy.

- **Sustainable finance frameworks and transactions**
    - EU companies typically draft all-encompassing sustainable finance frameworks for sustainability -linked and/or green debt instruments that set out the terms under which they will issue such instruments. In doing so, they mainly rely on recognised market guidance and standards for sustainable finance, such as those from the International Capital Markets Association (ICMA) and the Loan Market Association (LMA). In addition, many companies also reference the EU Taxonomy in their eligibility criteria sections, and some incorporate EU Taxonomy metrics and targets as KPIs within these frameworks. The EU Green Bond Standard (GBS) is gaining attention, as the regulation was only approved in October 2023, full implementation is yet to take place; but some companies mention that they plan to align with the EU GBS in future.

- **Disclosure**
    - The EU Taxonomy Regulation came into effect in 2021 for large public-interest entities under the Non-Financial Reporting Directive (NFRD), and it will be extended to all companies subject to the Corporate Sustainability Reporting Directive (CSRD) by 2025.

    - The EU Taxonomy is being used by companies to gradually fulfil or anticipate disclosure requirements. Specifically, non-financial companies in the EU are already disclosing the proportion of environmentally sustainable economic activities that align with the EU Taxonomy criteria, with most of them using mandatory KPI indicators such as Taxonomy-aligned turnover, capex and opex.

- **Supply chains**
    - EU companies from various sectors use a range of levers to drive supply chain decarbonisation and more broadly integrate their supply chains into their sustainability practices. EU Taxonomy elements are embedded in most of the assessment framework used by Corporates in that context.

Objective of the corporate market practices

The market practices were derived from publicly available data and information collected through direct questions, with the objective of assessing, across geographies and sectors, the state of incorporation of ESG standards and the adoption of EU Sustainable Finance regulation across four key corporate dimensions:

For **strategy** and **business models**, eight of the 31 companies analysed have set and disclosed either a specific target related to an EU Taxonomy-aligned KPI (e.g., revenues, capex or opex) or an overall commitment related to the EU Taxonomy Regulation. The 23 companies that do not appear to have set specific EU Taxonomy targets give various reasons, such as the limited scope of the EU Taxonomy in covering specific sectors, requirements that cannot be met by their industry, that capital allocation is yet to be defined, and the existence of other strategic targets that implicitly impact the EU Taxonomy indicators, or of KPIs which are already 100% aligned.

As for **sustainable finance**, 20 companies were analysed more specifically, out of which 16 have established frameworks that cover different instruments (e.g., green bonds and loans or sustainability-linked bonds and loans) while four have frameworks which cover a single typology of products (e.g., green bonds only). Sixteen frameworks cover use-of-proceeds types of instruments, and three refer to sustainability-linked instruments.

All 20 companies refer to the ICMA Green and Sustainability-Linked Bond Principles and/or to the LMA Green and Sustainability-Linked Loan Principles, as widely recognised market guidance. In terms of incorporation of the EU Taxonomy Regulation, EU companies adopt different approaches in relation to the typology of instruments covered by the frameworks. When a European company adopts a use-of-proceeds approach (e.g., issuing green bonds), several of the Corporates analysed made reference to the EU Taxonomy Regulation, the EU Taxonomy Delegated Acts and related technical screening criteria where they discuss selected projects' eligibility criteria. In some cases, such alignment with the EU Taxonomy Regulation is assessed by the second-party opinion (SPO) provider. Among these 20 companies, 11 refer to the EU Green Bond Standards (GBS) in the context of use-of-proceeds/eligibility criteria section; however, these references are generally made as future commitments, given that the EU GBS will not go live until 2024. So far, no EU GBS-aligned transaction has been seen in the market.

When companies adopt a sustainability-linked approach (e.g., sustainability-linked bonds), reference to the EU Taxonomy can be made via KPIs tied to EU Taxonomy metrics and targets (e.g., the proportion of capex or revenues aligned with the EU Taxonomy), and/or in respect to selected KPIs that measure the company's sustainability performance that, at the same time, contributes to the achievement of EU Taxonomy objectives. In both cases, such alignment with the EU Taxonomy Regulation is assessed by the SPO provider. Among these 20 companies, two have adopted KPIs tied to EU Taxonomy metrics and targets in the context of their sustainability-linked frameworks.

As for **disclosures**, 20 companies were analysed more specifically. According to a 2023 report by PwC from August 2023, most companies (75%) disclosed EU Taxonomy information in sustainability or annual reports, over half (66%) used mandatory KPI templates, with some minor adjustments, interpretation challenges were widespread, particularly regarding the technical screening criteria and minimum safeguards, and only 10% of companies provided comparative figures from previous years.[1]

Regarding **supply chains**, 12 EU companies were analysed more specifically which all said they are engaging their supply chains on sustainability practices. A range of approaches is emerging across sectors, from an emphasis on ethical principles to the integration of circular economy and digital innovation in procurement processes. Strategies also include the issuance of supplier codes of conduct, supplier scoring systems and ESG assessments, incentive schemes tied to bid evaluation criteria based on sustainability KPIs, collaboration

[1] PwC, August 2023, EU Taxonomy Reporting 2023.

in setting industry standards, and stakeholder dialogue. Moreover, among the EU companies interviewed, 10 out of 12 confirmed that they are tracking and reporting Scope 3 GHG emissions from their supply chains. Different approaches are emerging across sectors, including the use of third-party providers for data calculation and the adoption of the GHG Protocol and ISO certifications as the main reference.

Key opportunities identified

The stakeholder group's market practices identified the following opportunity:

While the concept of a definitive financial advantage from issuing sustainable finance instruments (the so-called 'greenium') remains elusive, European companies see benefits in accessing a broader pool of diverse investors, leading to potentially more favourable pricing conditions compared with conventional transactions. This element could deserve further assessment to continue to support the adoption of sustainable debt practices.

Key challenges/shortcomings identified

Key challenges that emerged in the market practices relate to:

- the lack of well-defined standards for fair and inclusive decarbonisation roadmaps and strategies to benchmark corporate transition plans
- the limited scope of the EU Taxonomy in covering specific sectors and the absence of a clear methodology to measure and effectively reduce Scope 3 emissions
- activities that are still not covered by the EU Taxonomy. For those activities which are covered, there are challenges in interpretation of criteria, lack of methodologies and data access
- limited data availability and low-quality data, for certain sectors. Sourcing reliable data for GHG reporting from suppliers is even more challenging, representing a common theme across sectors
- IT and general accountability systems that have not been designed to comply with the EU Taxonomy, with impacts in terms of effort involved and on the verification processes with external auditors
- lack of implementation of the EU GBS which was just adopted (which is only referenced within green bond eligibility criteria), while the ICMA/LMA principles are widely used as market standards
- limited guidance on sustainability-linked instruments, despite the large volumes of sustainability-linked debt issued in recent years by EU companies. At present, there are only two examples of EU Taxonomy-aligned KPIs in the context of sustainability-linked finance

With specific reference to disclosure, key challenges identified relate to:

- the interpretation of EU Taxonomy criteria. The European companies addressed have expressed their concern on the interpretation of the criteria, which would require additional clarification
- Limits of current KPIs (especially OpEx and Revenues), considering the feedback from European companies on the relevance of KPIs
- Clarifying the do no significant harm (DNSH) criteria, to make them less generic and more implementable for European companies, to promote better understanding comparability and compliance
- concerns relating to strict criteria, increased workload and other challenges
- auditor assurance, recognising the limited assurance provided by external auditors to European companies.

Peer-to-peer recommendations

- define EU Taxonomy alignment roadmaps and targets using Taxonomy key performance indicators (KPIs) under companies' direct control to enable science-based decarbonisation; set trajectories and net zero targets;

- integrate Taxonomy-aligned capex KPIs and plans as part of the CSRD ESRS transition plan disclosures; build on the EU sustainable finance framework as central element of corporate transition plans;
- issue sustainable finance transactions, making use of green or sustainability-linked instruments that are based on KPIs that signal a Taxonomy transition;
- actively engage with supply chains and prepare for CSRD ESRS disclosures and the Corporate Sustainability Due Diligence Directive (CSDDD) accordingly[2];
- make use of the EU Taxonomy stakeholder request mechanism to suggest the revision of existing criteria or eligible economic activities of the EU Taxonomy framework;and
- consider providing Taxonomy-alignment analysis to credit institutions when they seek activity-specific financing to improve information flows.

Conclusion

While not exhaustive, the market practices illustrate how the existing EU Taxonomy and the sustainable finance framework are being used by corporate actors across sectors and geographies, highlighting their key role in shaping corporate business and financial frameworks, reporting standards and operational tools. Companies are increasingly using EU regulatory tools not only in response to existing obligations, but also on a voluntary basis to leverage value from ESG-related opportunities.

Nonetheless, the study identifies common challenges among practitioners in dealing with the integration and implementation of EU regulations into business and financial strategy, mainly relating to interpretation and data consistency issues and the relatively slow pace of EU guidance around innovative instruments and topics.

[2] The CSDDD proposal and the CSRD serve distinct purposes: the CSDDD requires companies to take environmental and social responsibility and act accordingly, whereas the CSRD ensures that companies are transparent and accountable about their activities, without any behavioural obligation. It is also worth noting that they have different scopes: the CSDDD proposal does not rely on the Accounting Directive, unlike the CSRD.

1.1 Strategy and transition

The main topics covered in this case study relate to companies considering the Taxonomy Regulation in defining their business strategies. Publicly available data has been consulted and 31 European companies have been analysed, across eight sectors and 11 EU Countries.

Objective of the market practice

The purpose of the market practice is to assess:

- How the EU Taxonomy Regulation is influencing the roll-out of sustainable business models by EU companies, and if they have defined relevant targets in relation to EU Taxonomy-aligned revenues, capex and opex; and
- The definition of science-based climate transition plans by EU companies.

Please provide further description and details on the market practice

This case study examines the practices of EU companies in adopting the EU Taxonomy Regulation as a driver to shape their business models and sustainability strategies. It also investigates how they are setting transition pathways, also through a science-based assessment. The study was conducted using publicly available data and information collected through direct questions. It aims to assess several key aspects:

- How the Taxonomy Regulation is influencing the roll-out of sustainable business models by EU companies and if this has translated into the setting of targets in relation to EU Taxonomy-aligned revenues, capex and opex.

The EU Taxonomy Regulation is gaining attention as a potentially transformative regulatory framework. The analysis and interviews carried out show that EU companies are not only approaching it as a disclosure obligation but that, in some cases, the EU Taxonomy is also acting a strategic driver.
Out of 31 EU companies analysed across eight sectors and 11 EU countries, eight have set and disclosed either a specific target related to EU Taxonomy-aligned KPIs (e.g., revenues, capex and opex) or have made an overall commitment related to the EU Taxonomy Regulation.

The energy sector is particularly active in this respect, with EU energy companies setting EU Taxonomy-aligned capex and revenues targets within a short period of time. These include targets for the percentage of EU Taxonomy-aligned capex to be rolled out, or for the percentage of revenues to be EU Taxonomy-aligned, by a given date. Other Europe-based energy companies have committed to roll out either a 100% or highly EU Taxonomy-aligned investment plan. Similar targets and commitments have been presented by other sectors, such as auto and real estate.

Those 23 EU companies that do not appear to have set specific targets tied to the EU Taxonomy give various reasons:

- The limited scope of the EU Taxonomy in covering specific sectors (e.g., chemicals, communications);
- Requirements are challenging to meet by the industry (e.g., pharma);
- Capital allocation is still to be defined;
- Other strategic targets implicitly address the EU Taxonomy indicators;
- Impacts are either negligible or KPIs are already almost 100% aligned.

The definition of climate transition, science-based plans by EU companies:

- According to an assessment published in May 2023 by ISS Insights, a data and analytics company, about 57% of more than 500 companies analysed from high-emissions (or 'priority') sectors in Europe have made commitments to reach net zero emissions by 2050. Of these, the research found that 48% are in the industrials sector, 21% materials, 13% each in utilities and energy, and 5% each in other sectors, including consumer discretionary/staples, financials, health care, and information technology.

- Of the 31 EU companies analysed for this case study, 23 have publicly disclosed a net zero commitment, of which 6 are certified by the Science Based Targets initiative (SBTi). The SBTi is a partnership between CDP, the United Nations Global Compact, the World Resources Institute and WWF.
- In addition, 19 of the companies analysed are featured on the SBTi's target dashboard. They all present a near-term SBTi certified target, with 6 also providing long-term and net zero SBTi-certified targets.
- 13 EU companies were interviewed for the case study. Key findings in relation to their strategy and transition goals included that, in defining fair and inclusive decarbonisation strategies, companies in the energy sector identified challenges in respect to:
    - governmental regulation
    - grid connection to new renewable plants
    - impacts from the energy crisis in Europe (e.g., shutdown of thermal power plants)
    - management of legacy assets
    - stakeholder engagement
    - workforce transition (upskilling/reskilling)
        - preservation of nature and biodiversity.
- Other reporting challenges include a lack of methodologies to measure and effectively reduce Scope 3 emissions, and managing the trade-offs involved in a fair and inclusive transition (e.g., in the pharmaceuticals sector).

What is the outcome?

The EU Taxonomy Regulation is emerging not only as a disclosure obligation but also as a strategic driver for EU companies in shaping sustainable business models and strategies. Among the EU companies analysed, 8 out of 31 have set specific targets related to EU Taxonomy-aligned KPIs, such as revenues and capex. The energy sector is particularly active in setting EU Taxonomy-aligned Targets. The reasons for companies not setting specific EU Taxonomy targets include sector limitations, industry-specific challenges, already highly-aligned KPIs, and certain sectors not being covered by EU Taxonomy.

Data and methodology used to compile the market practice

Data and Methodology	Data was collected from publicly available information (e.g., the SBTi, ISS ESG) and through questionnaires submitted to a set of European companies.
Internal resources	The definition of the approach, questions and the collection of the data have been shared with the companies' Stakeholder Group and SG1 more broadly.
External resources	Public available information

1.2 Finance and transactions

This case study addresses EU corporate practice in using sustainable finance framework in the context of debt structuring and issuance. It also examines how companies are considering the EU Taxonomy Regulation in relation to the structuring of sustainable finance instruments and use-of-proceeds/sustainability-linked transactions. It is based on publicly available data (e.g., from BloombergNEF) and 20 companies were analysed, across 8 sectors and 10 EU countries.

Objective of the market practice

The purpose is to assess:

- How EU companies are currently embedding sustainability in their sustainable finance frameworks and transactions
- What kind of products are covered by these frameworks
- Which main market references/guidelines corporate issuers are following
- How the EU Taxonomy Regulation is influencing the structuring of sustainable finance frameworks and transactions
- If the EU Green Bond Standards (GBS) are being referenced in green bond frameworks
- If the EU Taxonomy is informing KPIs in sustainability-linked financing frameworks, (e.g., the percentage of revenues/opex/capex aligned with the EU Taxonomy), in line with EU Commission recommendation 2023/1425 of 27 June 2023 on facilitating finance for the transition to a sustainable economy.
- Whether any financial advantage has been achieved through the use of sustainable finance versus conventional transactions.

Please provide further description and details on the market practice

This case study delves into the practices of EU companies across geographies and sectors in adopting sustainable finance practices within debt structuring and issuance. It examines how they are incorporating the EU Taxonomy Regulation in their sustainable finance frameworks and transactions, particularly regarding use-of-proceeds and sustainability-linked transactions. The study uses publicly available data and information collected through direct questions. It aims to assess several key aspects:

<u>How EU companies are integrating sustainability into their sustainable finance frameworks and transactions:</u>

- EU companies typically draft all-encompassing sustainable finance frameworks that are publicly uploaded to their websites. The frameworks typically: (i) describe the companies' business model; (ii) offer a summary of their main sustainability practices; (iii) define the scope in terms of instruments to be issued under the framework; (iv) provide the key elements to demonstrate alignment with the main market standards; and (v) refer to the second-party opinion (SPO) provider that assessed such alignment, and the specific SPO. Among EU companies, the main sustainable debt tools are: (i) green bonds; (ii) green loans; (iii) sustainability-linked bonds; and (iv) sustainability-linked loans, with some use of sustainable and social bonds, particularly in recent years. Some companies also issue sustainable commercial paper too, although this is less common.

<u>The scope of products covered by their sustainable finance frameworks:</u>

- EU companies draw up frameworks that cover, alternatively: (i) a single instrument typology (e.g., green bonds only); (ii) different instruments under a coherent all-encompassing approach (e.g., sustainability-linked bonds, loans and commercial paper); or (iii) different instruments and approaches (e.g., both green and sustainability-linked financial instruments). Titles of the frameworks vary accordingly (e.g., green bond framework, green finance framework, sustainability-linked financing framework, sustainable finance framework).
- Among those 20 EU companies analysed (from the auto, chemicals, communications, energy, forestry, real estate, service and transport sectors), 16 have drafted frameworks that cover different instruments, while 4 frameworks cover a single typology of products. 16 frameworks cover use-of-proceeds instruments, 3 refer to sustainability-linked instruments and 1 covers both types.

<u>The primary market references and guidelines followed by corporate issuers in this context:</u>

- All of the companies analysed refer to the International Capital Markets Association (ICMA) Green and Sustainability-Linked Bond Principles and/or to the Loan Market Association (LMA) Green and Sustainability-Linked Loan Principles, as widely recognized market guidance.

The influence of the EU Taxonomy Regulation on the development of sustainable finance frameworks and transactions:

- Regarding the EU Taxonomy Regulation, EU companies adopt different approaches in relation to the typology of instruments covered by their frameworks.
- When companies pursue a use-of-proceeds approach (e.g., issuing green bonds), their frameworks tend to refer to the EU Taxonomy Regulation, the EU Taxonomy Delegated Acts and related technical screening criteria, in sections related to the selected projects' eligibility criteria. This is particularly the case for more recent sustainable finance frameworks. Frequently, alignment to the EU Taxonomy Regulation is assessed by the SPO provider.
- When companies pursue a sustainability-linked approach (e.g., issuing sustainability-linked bonds), reference to the EU Taxonomy can be made (i) via a KPI tied to EU Taxonomy metrics and targets (e.g., the proportion of capex or revenues aligned with the EU Taxonomy), and/or (ii) in respect to selected KPIs that measure the company's sustainability performance that, at the same time, contributes to the achievement of EU Taxonomy objectives. In both cases, alignment with the EU Taxonomy Regulation is assessed by the SPO provider.
- Within those 20 companies, 16 refer to the EU Taxonomy Regulation where they discuss selected projects' eligibility criteria, and 2 adopted KPIs linked to EU Taxonomy metrics and targets in the context of their sustainability-linked frameworks.

The extent to which the EU Green Bond Standard serve as a reference for green bond frameworks:

- The EU Green Bond Standards is recent, having been adopted in October 2023 with entry into force in 2024. Among companies analysed, reference to the EU GBS is made only in the context of the above-mentioned eligibility criteria section. As a result, as of July 2023, there had been no EU GBS-aligned transactions in the market yet.
- Among the 20 companies, 11 refer to the EU Green Bond Standards in the use-of-proceeds/eligibility criteria section of their green bond frameworks and, generally, as commitments for the future, given that the standard is not yet live.

The usage of the EU Taxonomy as a KPI within sustainability-linked financing frameworks, aligning with the EU Commission recommendation 2023/1425 of 27 June 2023 on facilitating finance for the transition to a sustainable economy:

- Two EU companies of the sample have established a sustainability-linked financing approach with KPIs tied to EU Taxonomy alignment. Such an approach is in line with the above-mentioned EU Commission recommendation.
- The first one, an Energy company, introduced a new KPI in 2023 in its sustainability-linked financing framework, namely the "Proportion of capex aligned with the EU Taxonomy (%)". The company's sustainability-performance target (SPT) is to achieve 80% of aligned capex in the 2023-25 period.
- In 2022, the other one, active in the energy and communication sector introduced a new KPI in its sustainability-linked financing framework, namely "Revenue aligned with EU Taxonomy climate mitigation criteria, as a share of total revenues". Its SPT is to achieve 50% by 2025.

The potential financial advantages achieved through the implementation of sustainable finance compared with conventional transactions:

- in general, the EU companies interviewed found some difficulty in clearly identifying a definitive economic financial advantage arising from issuing sustainable debt instruments, often referred to as the 'greenium'. However, what has emerged from the analysis of the 20 companies is the significant value of accessing a broader and more diverse pool of investors by issuing sustainable finance instruments, while also experiencing deeper market engagement, potentially leading to a financial advantage compared with conventional transactions.

What is the outcome?

- EU companies are actively embracing sustainable finance, with a significant number adopting either sustainability-linked and/or green debt instruments.

- EU companies rely on recognized market guidance and standards for sustainable finance, particularly those from ICMA and the LMA.
- Many companies reference the EU Taxonomy in their eligibility criteria sections, and some incorporate EU Taxonomy metrics and targets as KPIs within their sustainability-linked frameworks.
- Only two EU companies have integrated EU Taxonomy alignment as KPIs in their sustainability-linked financing frameworks, aligning with the EU Commission's recommendation to facilitate finance for a sustainable economy.
- The industry would welcome further guidance in relation to sustainability-linked financing instruments given the relevance of sustainability-linked transactions among EU companies.
- The EU GBS are still to be implemented, but EU companies are already referencing the EU Taxonomy in the context of ICMA/LMA-aligned transactions.
- EU companies see benefits in accessing a broader pool of diverse investors.
- Identification of a greenium remains unclear, but sustainable finance enables access to deeper capital markets.
- To enable the transition, sustainable Finance needs to spread to those sectors less inclined towards sustainable investments.

Data and methodology used to compile the market practice

Data and Methodology	Data was collected from publicly available information (e.g., sustainable finance frameworks, BloombergNEF) and through questionnaires submitted to a set of European companies.
Use of Proxies	N/A
Internal resources	The approach to the case study, questions and the collection of the data were shared with the companies' Stakeholder Group and SG1 more broadly.
External resources	Publicly available information

Did you encounter any obstacles or gaps? If so, please describe.

Challenges related to the use of the EU Taxonomy:

- There have been large volumes of sustainability-linked debt issued in recent years by EU companies, but they have received no guidance from the EU, which focuses on green use-of-proceeds structures, via the EU GBS.
- The financial community is not always open to sustainability-linked bonds, because it is a new framework with a relative lack of common industry guidance / maturity and differences in approach vs. use-of-proceeds/green transactions, as the sustainability-linked asset class's focus is on strategy and KPIs.

1.3 Reporting and assurance

This case study covers EU corporate practice relating to disclosure and related assurance around the EU Taxonomy. It uses publicly available data (e.g., reports from PwC) and analysed 20 companies across eight sectors (auto, chemicals, communications, energy, iron and steel, pharmaceuticals, real estate and services). Out of these companies, 14 EU companies responded to dedicated questionnaires to explore more qualitative aspects.

Objective of the market practice

The purpose is to assess:

- whether EU companies are already disclosing the proportion of their economic activities that align with the EU Taxonomy criteria relating to environmental objectives, and if they align with mandatory KPI templates
- whether EU companies believe that the KPIs identified by Article 8 of the EU Taxonomy's Delegated Act are effectively usable
- whether EU companies have made any organisational changes in response to EU Taxonomy disclosure becoming mandatory, and how governance processes have been affected
- whether any critical challenges have emerged during the preparation of disclosures
- whether companies have engaged external auditors to review EU Taxonomy disclosures
- what approaches have been adopted to verify compliance with the Taxonomy's do no significant harm (DNSH) and minimum safeguards criteria.

Please provide further description and details on the market practice

This case study examined the practices of EU companies in relation to EU Taxonomy disclosure and assurance, across geographies and sectors. The EU Taxonomy Regulation came into effect in 2021 for large public-interest entities under the NFRD, and it will be extended to all companies subject to the CSRD by 2025. The study uses publicly available data and information collected through direct questions. It sought answers to the following questions:

<u>Are EU companies already disclosing the proportion of their economic activities that align with the EU Taxonomy criteria, and if they align with mandatory KPI templates?:</u>

- For the 2022 reporting year, the EU Taxonomy Regulation required non-financial companies to undertake both eligibility and alignment reporting in respect to the Taxonomy's first two environmental objectives (i.e., climate change mitigation and climate change adaptation), while reporting on eligibility and alignment on the remaining four environmental objectives will become mandatory in the 2023 and 2024 reporting years, respectively.
- According to a report published in August 2023 by PwC Deutschland[3] which analysed 706 non-financial and 146 financial companies listed in the EU:
    - Three quarters of non-financial companies report their EU Taxonomy disclosures in their sustainability reports or annual reports;
    - Two-thirds (66%) of the analysed non-financial companies used the mandatory KPI templates. Of those, 20% used them with minor amendments. The remainder did not make use of the mandatory templates.
    - The study found a "high degree of uncertainty around interpreting the regulations (especially the Technical Screening Criteria as well as minimum safeguards)" and reported a "need for clarification".
    - Only 10% of the analysed non-financial companies voluntarily provided comparative figures (mainly in the energy, utilities & resources, industrial manufacturing, automotive and technology sectors). Ninety per cent of the analysed companies did not provide any figures from previous years (considering FY 2022 is the first year of mandatory reporting for Taxonomy alignment).

- **On reported turnover:**

[3] PwC, August 2023, EU Taxonomy Reporting 2023.

- The average reported Taxonomy eligibility amounted to 26%, and Taxonomy alignment to 7%.
- According to PwC, "the wide variation in reported eligibility between industries is related to the limited scope of economic activities reflected in the EU Taxonomy. The EU Taxonomy does not cover all business sectors to the same extent. Therefore, the level of eligibility (for the turnover KPI) varies depending on the core business activities (generating revenue) of the non-financial company."[4]
- The report also found a very large gap between eligible and aligned turnover in some industries. For example, the gap between eligible and aligned turnover was 49 percentage points in real estate and 40 percentage points in the automotive industry.

- **On reported capex**:
  - For capex, the average Taxonomy eligibility amounted to 37%, and Taxonomy alignment amounted to 10%.
  - Again, there were some particularly large gaps between eligible and aligned capex, with a gap of 57 percentage points in real estate and 39 percentage points in the automotive industry.

- **On reported opex**:
  - For opex, the average Taxonomy eligibility amounted to 27%, and Taxonomy alignment amounted to 8%.
  - According to PwC, the largest gaps between eligible and aligned opex were in the automotive industry (35 percentage points) and the transport and logistics industry (33 percentage points).

Sectors	EU Taxonomy Turnover		EU Taxonomy CAPEX		EU Taxonomy OPEX	
	Alignment	Eligibility	Alignment	Eligibility	Alignment	Eligibility
Real Estate	16%	65%	6%	63%	5%	37%
Automotive	6%	46%	15%	54%	14%	49%
Transportation & Logistics	10%	39%	8%	42%	4%	37%
Energy, Utilities & Resources	20%	37%	35%	56%	27%	43%
Other	6%	35%	7%	46%	6%	33%
Private Equility	5%	29%	13%	38%	3%	24%
Industrial Manufacturing	10%	29%	11%	34%	10%	28%
Technology	3%	19%	4%	29%	3%	18%
Media & Telecommunication	2%	17%	5%	26%	2%	18%
Retail & Consumer	1%	5%	3%	25%	1%	11%
Health Industries	0%	0%	1%	14%	0%	2%

Source: PwC, August 2023, EU Taxonomy Reporting 2023.

In the report, PwC also observed that "it will take some time before comparability can be established. It was particularly noticeable that alignment criteria posed major challenges for some of the companies, not only in terms of understanding and interpretation, but also regarding data availability." It found that companies needed to redefine internal processes and reallocate resources to collect the necessary data on alignment and assess the alignment criteria.

[4] PwC, August 2023, EU Taxonomy Reporting 2023.

Among the 20 EU companies analysed (from the automotive, chemicals, communications, energy, iron and steel, pharmaceuticals, real estate and services sector), all have their 2022 financial year EU Taxonomy disclosures in their sustainability reports or annual reports. However, those 20 companies present reports that only disclose substantial contributions to the climate change mitigation objective. The disclosure is aligned with regulation expectations since only 1 company does not use mandatory templates.

Do EU companies believe that the KPIs identified by Article 8 of the EU Taxonomy's Delegated Act are effectively usable?

The collected feedback, from 14 companies, gave an overall positive view of the KPIs identified.

- Key comments and suggestions are that:
  - Capex was seen as the most useful metric in most cases
  - if turnover was strongly influenced by high-income activities that do not contribute proportionally to profit, EBITDA reporting would be more appropriate (energy)
  - opex KPIs are more complex to understand and calculate (pharma, energy, communication)
  - DNSH criteria are often hard to understand and implement. They lead to differences in interpretation in particular for the companies interviewed in the Auto sector, resulting in very different alignment figures with a respondent taking a very conservative approach and reporting zero alignment, while another respondent reported alignment.

Have EU companies put in place organisational changes in response to EU Taxonomy disclosures becoming mandatory, and how have governance processes been affected?

The feedback from 14 companies suggested that a series of organisational changes were put in place. In particular:

- Dedicated processes and teams were set up across the overall organisation (energy, pharma)
- actions were put in place to ensure Taxonomy alignment across the business (energy)
- Senior management were involved (energy, communications, auto)
- IT solutions were set up to support EU Taxonomy reporting (chemicals).

Did any critical challenges emerge during the process?

The feedback from 14 companies noted that:

- the EU Taxonomy still lacks clarity in terms of the interpretation of the Technical Screening Criteria, and companies are partly required to interpret them under their own initiative, leading to uncertainties, both within companies and their auditors, and to a lack of comparability (chemicals, pharma, auto, energy)
- the process of compliance with the EU Taxonomyimplies the set-up for corporates of processes and activities that may result in higher resources imployment and cost intensivity., If put in the context of other requests related to green finance mechanism (i.e., green bonds, loans), this adds to what is sometimes perceived as a disclosure burden (energy)
- some activities are still not covered by the EU Taxonomy. For activities which are covered, as the regulations are new, there is at this stage a lack of methodologies and data access (energy)
- An issue for the O&G sector and disclosures on alignment with the Taxonomy is related to the way it operates and structures its activities with several Joint-Ventures and Associates. In addition to the mandatory KPIs based on controlled perimeter, one of the analysed corporates thus also provides Revenues and CapEx KPIs on proportional perimeter - highlighting in its voluntary disclosures the proxies used, and ability to address DNSH and MS criteria depending on the level of control within the JV.

Have external auditors been engaged to carry out a review of EU Taxonomy disclosures?

- Twelve companies out of the twenty analysed undertook limited assurance of their EU Taxonomy disclosure.
- No reasonable assurances have been identified among the companies analysed.

What approaches have been adopted to verify compliance with DNSH and minimum?

Of the companies analysed, 14 verify compliance through recourse to:

- due diligence obligations (energy, chemicals, communications)
- certificates and confirmations (energy)
- existing environmental procedures (energy)
- sampling and tests (energy).

What is the outcome?

- EU companies are already disclosing the proportion of environmentally sustainable economic activities that align with the EU Taxonomy criteria, most of them using mandatory KPI templates.
- Overall, EU companies believe that the KPIs identified in Article 8 of the EU Taxonomy Delegated Act are usable, with some concerns on certain specific criteria. Particularly, (i) some companies, especially in the energy sector, suggested that providing information on level of Taxonomy alignment of EBITDA in addition to level of alignment of turnover would be useful for the sector, (ii) pharma, energy, and communications companies indicated that the opex KPI was viewed as less meaningful and challenging to understand and calculate, and (iii) in some cases, the DNSH criteria were considered generic and difficult to implement.
- EU companies, based on feedback from 14 respondents, are implementing organisational changes in response to mandatory EU Taxonomy disclosure.
- Some critical issues emerged during the EU Taxonomy disclosure process, based on feedback from 14 EU companies, including around interpretation, strict criteria for economic activities to qualify as Taxonomy-aligned, increased workloads for reporting activities, and unsuitable IT and accountability systems.
- Companies are pursuing limited assurance only at this stage on EU Taxonomy disclosures.

Data and methodology used to compile the market practice

Data and Methodology	Data was collected via publicly available information (PwC report) and through questionnaires submitted to a set of European companies.
Internal resources	The approach to the case study, questions and the collection of the data were shared with the companies' Stakeholder Group and SG1 more broadly.

1.4 Supply chain

This case study addresses EU companies' engagement with their supply chains on sustainability issues. It is based on interviews conducted with 12 companies, across four sectors (communications, energy, iron and steel and pharmaceuticals) and nine countries (Denmark, Finland, France, Germany, Italy, Netherlands, Poland, Portugal and Spain).

Objective of the market practice

It considers:

- If, and how, EU companies are engaging their supply chains, including small and medium-sized enterprises (SMEs), on sustainability practices
- If EU companies have identified any KPIs to drive and steer sustainability practices among SMEs
- If EU companies are tracking and reporting GHG emissions from their supply chains (Scope 3) and, if so, what approach or methodology they are following
- How EU companies are dealing with the lack of reliable GHG data from some suppliers
- What levers EU companies are pulling to support supply chain decarbonisation and whether these levers require or incentivise suppliers to define science-based targets.

Please provide further description and details on the market practice

The study explored the following questions:

<u>Are EU companies engaging their supply chains, including SMEs, on sustainability practices? If so, how?</u>

- Of the 31 companies surveyed, 12 were selected and interviewed to understand how they engage their supply chains on sustainability practices.
- They discussed an array of strategies, which all sought to integrate supply chains into the fabric of their sustainability practices.
- In the pharmaceutical sector, for instance, one German company lays down precise requirements in its supplier code of conduct, and collaborates with industry peers to establish comprehensive standards. This is not without its complexities, particularly in terms of sourcing reliable data from suppliers.
- In the energy sector, a spectrum of approaches are applied.
    - Two companies have regular dialogue with stakeholders on sustainability matters. One company emphasises the promotion of sustainability within its supplier relationships, grounded in ethical principles, transparency and collaborative frameworks: through a dedicated programme, it helps suppliers continually improve by identifying areas for action.
    - Another company's code of conduct for its suppliers is initially focused on larger suppliers, with its sustainability criteria embracing the EU Taxonomy. While for another surveyed company in the energy sector, all suppliers are expected to adhere to fundamental requirements. The company's supplier sustainability procurement process involves a five-year engagement programme with ambitious targets for (i) climate action, (ii) circular supply chains, (iii) social commitment and (iv) human rights.
    - A company is strategically integrating circular economy, digital innovation and sustainability factors into its procurement processes. This strategy favours suppliers with international certifications and with a commitment to sustainable resource utilisation.
    - Two companies rely on a proprietary ESG scoring methodology in their suppliers' selection process, combined with other decarbonisation and sustainability criteria for one of the companies, with a special focus on SMEs, and asking its main suppliers to fill out questionnaires and requesting they join other initiatives.
- In the telecommunications sector, a company is engaging with its most significant suppliers to reduce Scope 3 emissions, using bespoke programmes and joint audits, as well as global initiatives like the 1.5°C Supply Chain Leaders and SME Climate Hub.
- In iron and steel, a respondent directs its efforts towards its most material suppliers. Using a code of conduct and conducting educational audits, its tailored strategy is a pragmatic response to the expansive nature of its supply chain.

<u>Have EU companies identified KPIs to drive and steer sustainability practices among SMEs?</u>

- A diverse array of strategies and metrics have emerged across European industries, mainly linked to sector-specific practices as well as limited standard setting and implementation agility.
- Within the pharmaceutical sector, a respondent has taken a comprehensive stance, using an overall supplier score encompassing environmental, social, and governance (ESG) performance factors.
- On the energy sector, a company aims to incentivise sustainable practices among suppliers through an evaluation system for potential suppliers based on health and safety, environment, human rights, and business ethics. The introduction of 'sustainability factors' as a reward mechanism further incentivises suppliers through bid evaluation criteria, ranging from carbon footprints to commitments to socially beneficial projects. Within another energy company, a commitment to SMEs is articulated through specific spending targets, aiming for a significant percentage of non-public procurement spending to benefit local SMEs; it also includes ESG criteria in its scoring models. Similarly, a Spanish company uses a platform to assess suppliers across emissions, gender diversity, circular economy and human rights. While one company rely on KPIs, another surveyed company undertakes a multifaceted engagement strategy, encompassing a code of conduct, sustainability integration in procurement, and ambitious five-year targets across thematic areas.
- A telecoms company and a Polish energy firm both said they hadn't yet identified KPIs for steering sustainability practices among SMEs.
- The voluntary SME standard (in development by EFRAG) is meant to harmonize the KPIs in a proportionate manner.

<u>Are EU companies tracking and reporting GHG emissions from their supply chains (Scope 3) and, if so, what approach or methodology are they following?</u>

- Across a range of industries in Europe, companies are actively monitoring and reporting Scope 3 emissions from their supply chains: among those 12 companies interviewed, 10 confirmed they track and report supply chain GHG emissions.
    - Third party provider is used to calculate scope 3 emissions data
    - Regarding the reference framework, two companies confirmed using recognised framework such as GHG Protocol and ISO certifications
    - To collect data, companies also engage with suppliers and/or rely on specific assessment using initiatives like SME Climate Hub or life-cycle assessments (LCAs)

<u>How are EU companies dealing with the lack of reliable GHG data from some suppliers?</u>

- The challenge of obtaining reliable GHG data from suppliers is a common theme.
- In the pharmaceutical sector, the company, faced with an extensive supplier network, relies on a third-party provider for calculating Scope 3 emissions data. Despite the scalability and assurance achieved through this method, the company acknowledges that it may exclude real GHG reductions from suppliers due to data unavailability on reporting days.
- In the energy sector, companies employ a pragmatic approach, using the average data method (based on LCA) or the spend-based method for certain suppliers, particularly when direct GHG data from suppliers is unavailable. Companies also use benchmarks, regional, sectoral and state-specific data, showcasing a pragmatic approach to deal with data gaps and the use of generic LCA data.
- The iron company utilises default values from recognised databases where specific and reliable data are unavailable.
- The telecoms company has a proactive supplier programme underway, involving suppliers in defining reduction plans, raising awareness through webinars and requesting that significant suppliers complete the CDP Supply Chain questionnaire.

<u>What levers are EU companies pulling to support supply chain decarbonisation? Do these levers require or incentivise suppliers to define science-based targets?</u>

- In navigating the complex landscape of supply chain decarbonisation, European corporations employ diverse levers to drive sustainability.
- Four companies, in the pharmaceutical, telecoms and iron manufacturing sectors rely on regular dialogues with suppliers to to discuss sustainability roadmaps and improvement potential. Depending on the sector, discussions imply to set carbon reduction targets, contributing to its climate action plan and renewable energy adoption. A company also undertakes strategic engagement with industry associations. As a concrete exemple of engagement, a company in the energy sector actively

engages with suppliers in hard-to-abate sectors, to better understand their difficulties in decarbonisation, and to identify possible partnerships for the co-development of projects

- An energy company fosters continuous improvement in supplier sustainability through ESG assessments and action plans, with the objective of sharing good market practice.Through a comprehensive strategy, another company rewards suppliers based on "sustainability factors", with requirements associated with social, environmental, health and safety and circular economy aspects that can be applied to bid evaluation. Another energy company combines supplier collaboration with ESG scores, compelling suppliers to continually improve their scores. Another example is an energy company which incentivises low-carbon solutions in tender procedures and requires transparency on GHG emissions throughout a product's life cycle.
- On the telecoms side, a company has adopted an internal carbon price mechanism, integrating carbon considerations into purchasing decisions.
- Across sectors, there are cases in which companies encourage their suppliers to adopt science-based targets.

What is the outcome?

- **Supply chain engagement with sustainability practices**
  - The EU companies interviewed confirmed active engagement with their supply chains on sustainability, following a range of practices.
  - Notable strategies include the German pharmaceutical firm's detailed supplier code of conduct and collaboration around industry standards.
  - Challenges persist, such as sourcing reliable data from suppliers for comprehensive emissions reporting.
- **KPIs for steering sustainability practices among SMEs**
  - Diverse strategies similarly emerge across European industries to steer SME sustainability practices.
  - These include comprehensive supplier scores, including ESG performance, plans incentivising sustainable practices within bid evaluation criteria, through sustainability KPIs.
- **Tracking and Reporting GHG Emissions (Scope 3)**
  - Among the EU companies interviewed, 10 out of 12 track and report Scope 3 GHG emissions.
  - Diverse approaches are taken, including the use of third-party providers for data calculation and the adoption of the GHG Protocol as the main reference.
  - Energy companies widely use LCAs, while others use the GHG Protocol and ISO certifications.
- **Dealing with the lack of reliable GHG data from suppliers**
  - Addressing the challenge of obtaining reliable GHG data from suppliers is a common theme across Europe.
  - Strategies include relying on third-party providers, employing average data methods, using benchmarks and incorporating supplier programmes.
  - Pragmatic approaches involve utilising default values from recognised databases and actively engaging suppliers in defining reduction plans.
- **Levers for supply chain decarbonisation**
  - EU companies leverage a range of levers for supply chain decarbonisation, with strategies varying across sectors.
  - Some involve engaging with industry associations and suppliers for climate targets and renewable energy adoption, while others seek continuous improvement in supplier sustainability through ESG assessments.
  - Across sectors, there are companies that encourage the adoption of science-based targets to drive sustainability practices in the supply chain.

Data and methodology used to compile the market practice

Data and Methodology	Data was collected through questionnaires submitted to a set of European companies.
Internal resources	The approach to the case study, questions and the collection of the data were shared with the companies' Stakeholder Group and SG1 more broadly.

2. Credit institutions

This annex compiles a stocktake and analysis of current practice. Considering the early stages of adoption of the EU sustainable finance framework, none of those market practices represent or should be interpreted as best practice or 'market standard'.

The market practices span three areas: 1) the use of the EU sustainable finance framework for business strategy, transition planning and target setting; 2) finance and transactions; and 3) reporting, monitoring and assurance. They are contributed by seven stakeholder groups of large corporates, credit institutions, investors, insurers, public institutions, auditors and consultants, and SMEs (small and medium-sized enterprises).

Disclaimers

This document is not an official European Commission document nor reflects an official European Commission position. Nothing in this document commits the European Commission nor does it preclude any policy outcomes.

This report represents the overall view of the members of the Platform on Sustainable Finance. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

The considerations below are compiled under the aegis of the Platform on Sustainable Finance and cannot be construed as official guidance by the European Supervisory Authorities (ESAs). As a result, the views and recommendations do not purport to represent or anticipate any future official guidance and views issued by the ESAs which may differ from the contents of this report. The inclusion of market practices in this report cannot be construed as their endorsement or validation, in particular for the purpose of assessing Taxonomy-alignement of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission. The market practices described in the Annex to this report shall not be deemed to be automatically compliant with the legal obligations under the Commission Delegated Regulation (EU) 2021/2178 or other relevant EU legislation or Commission guidance documents.

Introduction to credit institution market practices

Introduction to the stakeholder group's context

Credit institutions will play a significant role in financing the sustainability transition of the EU economy, given that they provide 70% of external finance to companies, in the form of debt financing.

Credit institutions are affected by different aspects of the EU regulatory framework when they lend, invest or provide advisory services. Similar to companies, they are also subject to transparency measures, including under the Taxonomy Article 8 Delegated Act and the European Sustainability Reporting Standards (ESRS), to be used by entities subject to the Corporate Sustainability Reporting Directive (CSRD). As investment advisors, they are subject to the provisions of the Sustainable Finance Disclosure Regulation. In addition, as supervised entities, they must comply with relevant ESG risk disclosures under the Capital Requirements Regulation framework (Pillar 3 of its Implementing Technical Standards) and are also subject to sound risk management practices, including climate risk management under the Capital Requirements Directive framework.

Although regulation is an important driver, credit institutions have reasons beyond regulation to progress their sustainability agendas. These include changing customer demands and financing needs, and related opportunities, in the context of increased societal and political concern about sustainability. The regulatory framework should therefore not be seen merely as a compliance exercise but complementary to and supportive of changing business strategies.

The Credit Institutions stakeholder group brings together representatives from banks as well as other similar institutions. It sought out experiences, collected as market practices, in the EU market on how the EU sustainable finance framework facilitates or could facilitate their efforts to finance sustainable objectives, as well as of the challenges faced.

Objective of the credit institution market practices

The market practices illustrate observed practices which are by no means exhaustive; additional practices exist in the market and/or are under development.
While some of the identified practices are used in a way that are complementary to fulfilling reporting obligations, the resulting report focuses on the voluntary use of the regulatory framework and reflects current approaches of credit institutions to selected practices.

This report demonstrates several approaches to using the existing EU sustainable finance framework that could be considered by credit institutions when designing dedicated internal frameworks, tracking their own sustainability performance and that of their clients, and facilitating the fulfillment of reporting and other obligations. Simultaneously, the report sheds light on common obstacles identified by market players and suggests considerations for the improvement of the overall framework's implementation and usability.

Key opportunities identified

The Compendium of market practices complements the practices already identified in the Platform report on usability from October 2022, given developments since then. The following observations, on the voluntary use of the framework, are worth highlighting:

- Credit institutions can use the EU Taxonomy Regulation, in particular the technical screening and do no significant harm (DNSH) criteria, either in combination or separately, for the identification and screening of green loans, in order to integrate them into credit decision-making processes. In some instances, this can impact pricing, although this is not yet widely seen.
- Other existing market-based sustainability criteria and guidelines can serve as additional tools to complement the current framework.

- Transition finance and transition target-setting can be supported by some of the tools provided by the EU framework, such as the EU Taxonomy and the ESRS, both at product and portfolio level. While specific targets pursued by credit institutions may differ, based on internal objectives and strategies, specific elements of the EU sustainable finance framework have been used to establish a roadmap to identify and screen transition finance practices in credit institutions.
- The Taxonomy can be used at the product level to monitor sustainability performance, as well as for voluntary reporting regarding specific types of transactions or financial services, including mortgages, green bond issuance or issuance of green securitisations.
- The Taxonomy's substantial contribution and DNSH criteria can also be used to identify positive activities to finance while avoiding negative impact.

Key challenges/shortcomings identified

Similarly, key challenges have been observed previously. They primarily concern:

- data availability and quality in the market, related to the early stages of reporting for both financial and non-financial companies
- data collection and verification, mainly related to different types of products and counterparties, hindering the ability to demonstrate compliance for both mandatory and voluntary reporting (especially with respect to the Taxonomy's DNSH criteria)
- interpretation of the EU Taxonomy Regulation
- complexity in the categorisation of some activities, such as in real estate, where credit institutions are unable to gather information for new buildings (7.1)
- allocation of NACE codes and challenges around automation of data collection
- in the context of transition finance, the lack of commonly recognised roadmaps and pathways that can serve as benchmarks to measure the credibility of corporate transition plans
- for mortgages, the complexity, high degree of detail and documentation required for a Taxonomy-alignment assessment (especially with the DNSH criteria), as the information is not published by the counterparty, because they are not required to disclose under the Non-Financial Reporting Directive (NFRD).

Peer-to-peer Recommendations

- use the EU Taxonomy and the wider sustainable finance framework in relevant sustainable banking products and services for the purpose of engaging with business and retail clients to support them in achieving their climate transition plans and strategies;
- provide high-quality and comparable sustainability-labelled or green financing products, and monitor the positive impact of these products in line with the EU Taxonomy and with reliable market-led sustainable finance frameworks;
- enhance the transparency of disclosures at entity-level, including through sourcing data and addressing its limitations, and ensure accountability of sustainability commitments to prevent greenwashing, making use of the EU sustainable finance framework;
- raise awareness amongst SMEs and retail clients of the benefits of the EU sustainable finance framework for planning their business strategies, including transition planning, and for improving their access to sustainable finance;
- use the EU Taxonomy as a tool to measure alignment (or misalignment) of client entities with the EU environmental objectives, for risk mitigation assessment purposes, as relevant; and
- enhance the integration and uptake of the EU sustainable finance framework within market-led initiatives.

Conclusion

Current market practices show that European credit institutions are willing to use the tools available in the existing sustainable finance framework not only to comply with existing obligations but also to support the implementation of their sustainability strategies. Notwithstanding the early phase of implementation for both companies and financial

institutions, the use of available tools fosters the ability of credit institutions to adjust their business practices, engage with clients and integrate ESG considerations to help progress towards both their own and their clients' sustainability objectives.

2.1 Lending and Reporting - using the EU Framework holistically

The market practice combines information provided to the Platform on Sustainable Finance by five leading credit institutions. The main topics covered relate to green lending, reporting and data origination

Objective of the market practice

The market practice provides examples of:

- How the EU sustainable finance framework, and specifically the EU Taxonomy Regulation, has been integrated into green loan origination within credit institutions. More specifically, it shows how the integration of the EU Taxonomy technical screening criteria (TSC), do no significant harm (DNSH) and minimum social standards criteria can support a framework to originate and identify environmentally sustainable loans.
- How the Taxonomy can enable institutions to structure loan incentives that can help them increase Taxonomy-aligned exposures.
- How impact reporting can be done for sustainable finance instruments using specific KPIs based on the Taxonomy TSC.
- How elements of the EU Taxonomy in combination with other market-based sustainability criteria and standards have been used for sustainable loan monitoring.

Please provide further description and details on the case

To illustrate the voluntary use of the EU Taxonomy framework by credit institutions, below are outlined six examples, as provided by five banks, in the implementation of the framework and its elements for the origination of green loans.

The EU Taxonomy can be used in this assessment to help identify, track and record sustainable finance transactions and assets in a centralised manner and to facilitate the auditing of the information, increasing overall transparency. Often the reporting is done for green bond issuance by the credit institutions as well as for reporting its green asset ratio (GAR, i.e., the ratio of Taxonomy-aligned to conventional assets on its balance sheet). Moreover, the market practice showcases how proxies can be used in the set-up of the voluntary GAR reporting process and how the EU Taxonomy framework can be a vehicle towards meeting other disclosure requirements in the wider EU sustainable finance regulatory environment.

Example 1 – Green loan origination: thresholds based on the technical screening criteria

In this example, the EU Taxonomy is used to establish the eligibility criteria for the origination of green loans (see Figure 1 for a summary example). In this example, the eligibility criteria are used as exclusion criteria, to filter out similar projects that do not comply. Specific impact indicators (KPIs) are used to monitor impact as well. The term 'Eligible projects' is used in the market for green projects that can be financed via ("are eligible for") green lending instruments or refinanced via green funding instruments; these projects are not necessarily fully EU Taxonomy-aligned.

Sector	Eligible green project and activities	Key eligibility (exclusion) criteria, based on EU Taxonomy	Possible impact indicator (KPI)
Power generation	- Wind power - Geothermal energy - Solar energy	- Hydropower projects with lifecycle emissions greater than 100g CO_2eq/kw - Geothermal energy production from sources that emit more than 100 g CO_2eq/kw	- % of GHG reduced or avoided (at least xx%) - % installed renewable generation capacity equal to or greater than (xx%) of total consolidated installed capacity

Clean transportation	- Upgrading or replacement of land passenger and freight transport vehicles with new electric or hydrogen-based technology		- % of GHG reduced or avoided (at least xx%)

Figure 1: Green loan eligibility (exclusion) criteria, exclusions and impact indicators (KPIs)

Once potential green loans have been assessed based on the criteria summarised in figure 1, they are presented to the ESG team, at least every quarter, to be recorded as green loans, typically in a separate register to conventional loans. This process contributed to the wider greening of the credit institution's portfolio of assets. Assets that are classified as green under this framework can initially be financed in the same way as the other assets. However, when a portfolio of green assets achieves critical mass, the credit institution can issue (senior or subordinated) green liabilities against that green asset portfolio, issuing green bondsI.

Example 2 – Green loan incentives based on EU Taxonomy alignment
The EU Taxonomy can be used to develop a set of loan incentives to support and attract clients and projects totally or partially aligned to the Taxonomy, increasing the volume of EU Taxonomy aligned exposures and therefore contributing to GAR enhancement. One bank has implemented loan incentives in the following way. It has created step-by-step guidance aimed at identifying aligned or potentially-aligned counterparties to the EU Taxonomy:

1. In the first operational step, the bank counterparties that are required to comply with the Non-Financial Reporting Directive (NFRD).
2. In the second operational step, the banks identifies the percentage of alignment of counterparties.
3. In the third step the incentive is applied. The incentives apply to general corporate purpose lending. There are two incentive buckets: medium and high (see Figure 2). Counterparties in the high incentive bucket receive a higher discount on the loan interest rates they are offered. The assumption is that transactions with a higher percentage of Taxonomy alignment are a lower (climate transition) risk), which is used as a justification to modify loan pricing.

Type of green financing	Medium incentive Bucket	High incentive bucket
Non-dedicated (general corporate purpose) financing to NFRD counterparties with EU Taxonomy alignment percentage; (thresholds are subject to change based on the monitoring of the initiative)	Taxonomy alignment higher than 10%	Taxonomy alignment higher than 35%

Figure 2: Incentive scheme depending on taxonomy alignment

Sustainability transactions facilitate compliance with the wider EU sustainable finance framework and disclosure requirements, such as the GAR and those under Pillar 3 of the Capital Requirements Regulation (CRR). The incentive framework is structured in a way that aims to 'steer' new origination towards clients with better ESG perspectives, and also in terms of EU Taxonomy compliance. This can positively impact ESG risk management and mitigation.

Example 3 – Use of market-based sustainability criteria and guidelines to complement the EU Taxonomy framework
The information needed to issue green loans, and to identify them as such, can be supported using other market-based sustainability criteria and guidelines. For example, a credit institution used due diligence on eligibility criteria developed by SACE, Italy's credit export agency, to check a transaction's Taxonomy eligibility. SACE has assembled a specialised team to evaluate green investment projects and it assesses the compliance of investment projects with the EU Taxonomy, integrating it with guidelines provided by

the Italian Ministry of Environment to address any gaps compared with the Taxonomy. This enables it to identify and support projects within Italy that contribute to the EU Taxonomy's environmental objectives. The bank has structured a dedicated credit granting process together with SACE (under a convention agreement), which relies on SACE's evaluation and the corresponding certification of environmental objectives. Loans classified as green by SACE are eligible for guarantees that serve to reduce bank's credit exposure, and thus costs for the borrower.

A well-known framework is the Loan Market Association (LMA) Green Loans Principles (GLP). This is a useful proxy to assess alignment of green use-of-proceeds loans. The GLP are voluntary recommended guidelines, to be applied by market participants on a deal-by-deal basis depending on the underlying characteristics of the transaction. The GLP build on and refer to the International Capital Market Association's Green Bond Principles, with a view to promoting consistency across financial markets. As the eligibility criteria of the GLP are aligned with the thresholds for carbon emissions outlined in the EU Taxonomy, they can be a supporting tool for those sectors included in the EU Taxonomy.

Example 4 – Impact reporting

In some cases, banks measure the impact of a green loan portfolio or progress against sustainable finance targets and publish a dedicated impact report. The reporting exercise can also be used to set objectives for the upcoming financial year. Many banks publish this kind of impact report for their green bonds. Green bond reports can include the impact of an entire green loan portfolio financed by multiple green bonds (portfolio approach), or they describe such impact for individual bonds (bond-by-bond or gradual approach). Key elements of such an impact report could be:

- a description of relevant eligible green loans
- a breakdown of the eligible green loan portfolio by the nature of what is being financed (financial assets)
- a high-level overview of volumes per category of granted green loans
- a detailed overview of the number of companies and projects financed by green loans
- Metrics regarding the environmental impacts of the eligible green loans, for specific sectors, as described in Figure 3.

Green Residential/Commercial Buildings	• Estimated annual energy consumption in KWh/m2 or savings in MWh • Estimated annual reduced and/or avoided GHG emissions in tonnes of CO2 equivalent • % of buildings with Energy Performance Certificate (EPC) with energy class A or B
Renewable Energy	• Renewable energy generation in MWh per year • Total installed capacity in MW • Estimated annual reduced and/or avoided GHG emissions in tonnes of CO2 equivalent
Clean Transportation	• Estimated annual reduced and/or avoided GHG emissions in tonnes of CO2 equivalent • Number of vehicles (units per year)
Environmentally Sustainable Management Of Living Natural Resources And Land Use	• % of certified fishery measured in number of certification schemes • % of fishery stocks with biomass at or above sustainable levels • Estimated annual reduced and/or avoided GHG emissions in tonnes of CO2 equivalent • % of certified sustainably-sourced and produced feed • Energy used (in kWh) per ton of production

Figure 3: Example of impact indicators that a bank uses for a portfolio of green loans

Many of these impact indicators can be drawn from the EU Taxonomy's substantial contribution and DNSH criteria. In addition to the examples presented above, the EU Taxonomy framework can be used as a key reference to develop entity-level strategies on transition finance or for risk assessment.

Example 5 Monitoring sustainable lending

In this example, a bank is applying specific elements of the EU Taxonomy framework to assess whether transactions can be earmarked in the loan systems as sustainable (a separate 'sustainable transaction' checkbox is implemented), and whether they align with the credit institution's entity-level transition strategy. The process to document a transaction as sustainable follows the following steps:

1. Client eligibility assessment is undertaken to ensure that sustainable finance clients are not deemed unsustainable, based on whether the client operates in a restricted sector/activity, the outcome of the standard ESG risk assessment for the client, and its controversy level as per two ESG data providers (principle adverse impact). If the client does not pass the eligibility criteria, then a sustainable transaction is normally not possible. It is possible to submit a request to a quality committee and ask for a waiver.

2. A preliminary screening is applied to identify whether a transaction (term loan, revolving credit facility or guarantee) is 'general corporate purpose' or 'known use of proceeds', and what type of sustainable transaction is foreseen (and whether the transaction is also labelled and unlabelled).

3. The employee must indicate the reason why the transaction is sustainable, what the positive environmental or social impact of the transaction is and which criteria are met.

4. It must be indicated if the loan complies with the GLPs, Social Loan Principles or Sustainability-linked Loan Principles and if the facility agreement has a reference to these principles. If that is not the case, then the other option is to do an in-depth sustainability assessment to demonstrate why the loan should be labelled as sustainable. In this in-depth assessment, the system populates the assessment with tailored, sector-specific questions for completion. This proprietary assessment includes questions on EU Taxonomy substantial contribution criteria but also questions on other market-based taxonomies and sustainability criteria and standards. The latter include various sustainability certifications and classifications (product specific, asset specific or certifications at the level of the borrower), and it also shows information from specialised data suppliers if the loan is asset-based lending, meant to finance green assets in certain sectors (such as data on green ships, buildings, vehicles or airplanes).
5. The final outcome of the assessment is documented via a 'sustainable transaction checklist' (STC). This must be filled in for all sustainable transactions and recorded in the loan system (see figure 1 for an example checklist). The bank's front office is in charge of providing the respective answers, while the sustainability department is in charge of signing them off. Once positive sign-off is obtained, the front office sends the filled-in STC to deal execution to file it in the loan system as sustainable. It is also possible to record in the STC whether the transaction contributes to the bank's GAR or its Paris-aligned steering methodology (i.e., whether the associated emissions financed are in line with the bank's Paris Agreement-aligned emissions trajectory).

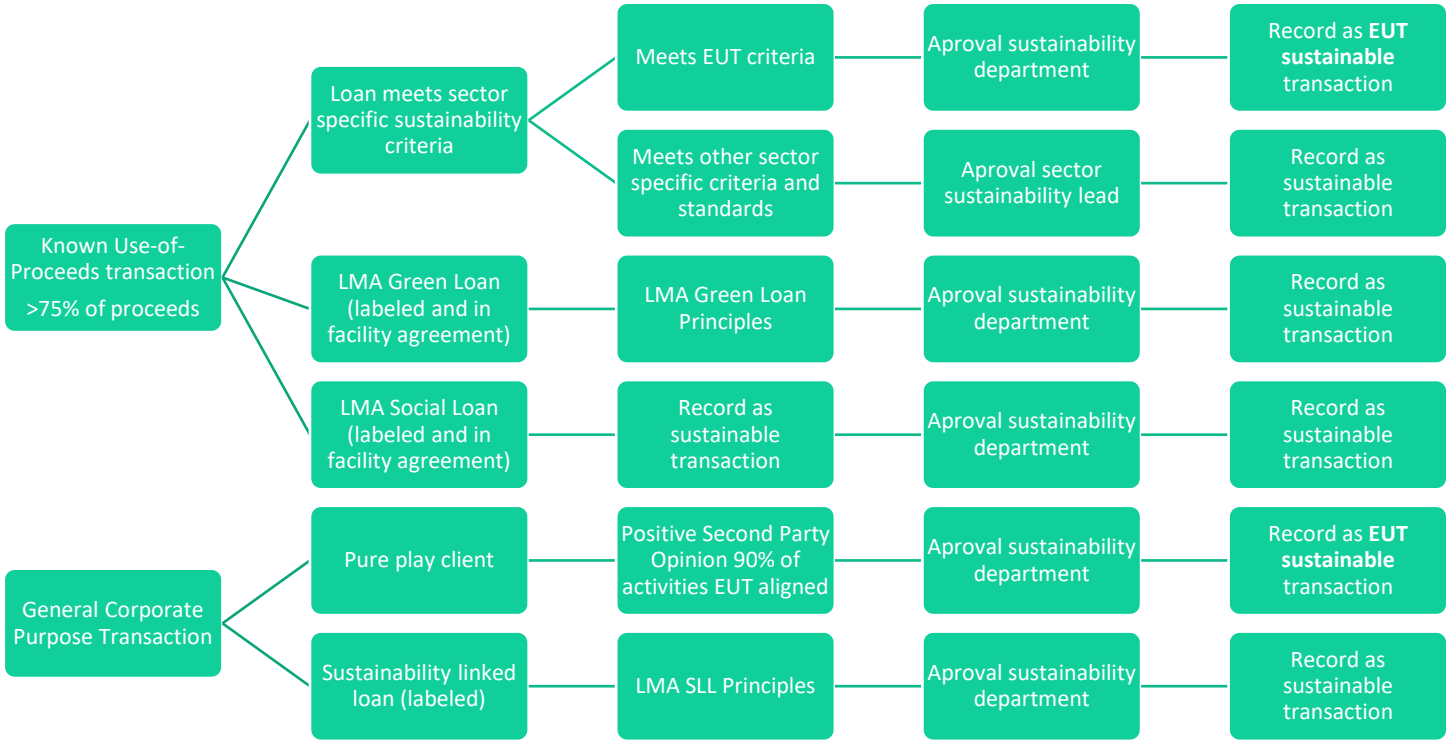


Figure 4: Schematic overview of sustainable loan classification and approval of the classification

Classifying loans in loan systems as sustainable has also benefits for reporting. Using the EU Taxonomy's TSC criteria to identify green retail loans enables reporting under Template 10 of the Pillar 3 disclosure requirements. These require financial institutions to report on climate change mitigating actions for exposures that are notincluded in the EU Taxonomy. For Template 10 reporting purposes, financial institutions report on green loans and bonds which are issued pursuant to international voluntary standards such as certifications or LMA principles.

Applying a green finance classification will not initially change the bank's credit risk profile, since the bank will simply earmark the existing portfolio. However, over time it may be possible to actively seek out lending opportunities that fully comply with the Taxonomy framework. These commitments will be expected to align with the bank's existing risk strategy and credit policy.

Table 1: Sustainable transaction checklist

Question	Working instruction
1) Sustainable transaction?	If the transaction is not to be classified as sustainable, then the sustainable transaction check, including sign-off, by the sustainability department, is not required.

2) Bank's ESG role?	It should have the following values: Sole coordinator/structurer, joint coordinator/structurer, sole lender or participant. Evidence for the ESG role to be provided in the form of, e.g., mandate letter or screenshot of the facility agreement frontpage where the roles are defined.
3) Number of structuring parties?	In case the previous field was filled with joint coordinator/structurer, a number from 2 to 10 should be filled in. In practice, there are mostly two or three Joint Coordinators. In all other cases, the number should be 1.
4) Product?	Should have the following values: Known use-of-proceeds 1. EU Taxonomy loan - EU Taxonomy-aligned (environmental) 2. Loan that meets other market-based taxonomies, sustainability criteria or standards (environmental or social) 3. Green loan (labelled, LMA Green Loan Principles compliant) 4. Social loan (labelled, LMA Social Loan Principles compliant or draft PSF social taxonomy aligned). General Corporate Purpose 5. Loan to pure-player 6. Sustainability-linked loan (ESG rating based, KPI-based, Other)
5) Paris-aligned steering?	Indicate if the transaction is subject to the Paris-aligned steering process
6) Green asset ratio?	Indicate if the transaction qualifies for the green asset ratio.
7) Sustainability assessment form? (Only eligible for deals with known use of proceeds)	For deals with known use of proceeds, add evidence that the sustainability assessment form is filled out, including the outcome.

What is the outcome?

Credit institutions have considerable experience in identifying sustainable loans. They are so far based on various market standards. The EU Taxonomy is, however, gradually becoming more important. Credit institutions have been using their green loan portfolios for sustainable funding for some time. More recently, we also see banks steering their portfolios towards a higher GAR. The latter is being done via pricing incentives based on Taxonomy-alignment percentages. One bank made the process for green loan origination more effective by leveraging external and institutional due diligence, to reducing risks around both greenwashing risk and credit (with the help of a guarantee). Another bank has introduced an obligation to classify loans as sustainable; this creates awareness within the credit institution around sustainable lending and may have an indirect steering effect as well.

Data and methodology used to compile the market practice

Data and Methodology	• Sector-specific sustainability data, systems and providers • Taxonomy criteria, as well as other market-based taxonomies.

Use of Proxies	In some cases, the use of NACE codes has been necessary, as certain management data was not available. In particular, NACE codes as an estimate or proxy have been used in the following cases: - Exposure to corporates: • specialised lending operations with corporate counterparties subject to NFRD. The NACE code considered is the one assigned to the core economic activity of the counterparty due to the impossibility of conducting a comprehensive assessment on the specific underlying scope of the financing and of opening historical contracts for distinguishing between general and specific financing, to associate the correct NACE code for the specific underlying activity. The result was to take into consideration the counterparty's NACE code, treating everything as a general financing and, in this sense, applying a proxy-based approach, as suggested by FAQs. • In the case of specialised lending to local authorities (municipalities or regions), in the absence of a relevant NACE code, the main economic purpose of the **loan can be analysed and matched** with the list of economic activities considered eligible according to the EU Taxonomy. - Equity exposure: the assignment of NACE codes is based on the counterparty's core economic activity, with the same approach adopted for general corporate lending.
Internal resources	• Sector teams, including the sustainability specialist in the sector team • Sustainability department and the deal team • Subject matter experts from the various loan divisions (identifying sustainable loans) • Loan business line managers and sustainability department (for sign-offs) • Information, communications and technology staff (to build dedicated sustainable transaction assessment and checklist screens in loan and credit risk management systems) • Functions of the bank responsible for new product development and controls • Organisational units responsible for ESG reporting activities, supported by the planning and control area, and the business units dealing with business transactions and ESG issues. In addition, cloud information technology platforms are increasingly used to collect relevant qualitative and quantitative information and to minimise operational risks.
External resources	• Sector-specific sustainability data, systems and providers • Agreement with guarantee provider

Did you encounter any obstacles or gaps? If so, please describe.

The following challenges have been identified in the voluntary use of the EU Taxonomy Regulation to create a framework to assess, implement and monitor green loan opportunities:

Data collection and verification

Challenges include:

- Collection of specific information from counterparties for both general and use-of-proceeds lending.
- Collection of information from counterparties not subject to NFRD (e.g., local entities and public counterparties).

- Demonstrating and evidencing DNSH compliance and appropriately labelling loans when they are not fully EU Taxonomy-compliant. For example, for Activity 6.5 (financing electric/hybrid cars), the DNSH criteria for pollution prevention requires cars to comply with its external rolling noise requirements. It is very difficult for banks to verify and check this data for the tyres, as lease companies or customers may change tyres after the manufacture process.
- Verifying 100% alignment of the economic activity/project to be realised by the client with the substantial contribution criteria, and the contribution that the application of the Taxonomy is providing to increase the awareness of the bank's network and clients about sustainability topics, given the timeline of application of the EU Taxonomy Regulation.
- Automation of information collection, in the absence of certified databases and aggregated information from ESG data providers.
- For specialised lending, the allocation of the NACE code was based on the core economic activity of the counterparty due to the impossibility of conducting a comprehensive assessment of the specific underlying scope of the financing and, in the case of groups, on companies' structures.
- Identification of an official list of national, European and international counterparties subject to the NFRD and, in future, the Corporate Sustainability Reporting Directive (CSRD).

Interpretation of the EU Taxonomy Regulation

Challenges include:

- Identifying the correct NACE code for counterparties and transactions.
- The reconstruction of the corporate chain in the case of groups where some counterparties are subject to the NFRD because of their subsidiaries; the different activities undertaken may imply different Taxonomy alignment.

Solutions: How were the obstacles addressed?

- By turning to third-party, institutional and specialised bodies, credit institutions can accelerate changes to the processes to adapt to the EU Taxonomy. It can help them keep up with the evolving framework and more quickly build new skills, while reducing the effort needed.
- The inclusion of the economic activities defined by the EU Taxonomy to be supported by green financing/sustainability-linked financing in a global policy can provide a guide on how to apply the substantial contribution criteria, helping to identify eligible activities.
- Establishing a process to validate the eligibility of Taxonomy-aligned criteria. For some categories of economic activity, credit institutions have also internally simplified the application of the criteria.
- Based on the first evaluation process, credit institutions defined a formal/institutional certification tool or service (for free or at least for controlled cost) to easy calculate and certify the percentage of a project or initiative that is Taxonomy-aligned.
- Creating a procedure to ensure that the bank is collecting documentation from the customer about the sustainability purpose of the loan.

Benefits of applying the EU Taxonomy & Framework:

Using the EU Taxonomy to identify and assess green lending provides benefits in terms of simplification and comparability, by providing widely recognised criteria and KPIs. Identifying which loans are Taxonomy-aligned – or which nonetheless made a substantial contribution to EU environmental objectives – can support the credibility of banks and the products they offer and provide protection against accusations of greenwashing. In addition, documenting the Taxonomy alignment of transactions can be useful input for further reporting.

☐ Simplification
☒ Client engagement
☒ Credibility
☒ ESG risk management / mitigation

☒ Greenwashing mitigation
☒ Transparency
☒ Comparability
☐ Other – *please specify*

Other aspect you would like to mention?

The use of the EU Taxonomy framework and taxonomy alignment (in particular with regard to the criteria underlying the substantial contribution to the climate change mitigation objective) can be a useful tool to help credit institutions monitor progress regarding sustainable finance, because both companies and specific activities aligned will be able to guarantee an effective reduction of emissions. In this sense, the more that banks' GAR increases and the more of the activities they finance are aligned with EU Taxonomy, the more substantial their contribution will be to the climate change mitigation objective. However, some improvements to the sustainable finance framework agenda would facilitate the voluntary use of the EU Taxonomy framework for credit institutions – as summarised below.

Engagement with non-financial undertakings
One of the major issues for adopting the EU Taxonomy lies in engagement with non-financial undertakings. As of today, companies and, in particular, SMEs have no incentive to provide additional information to financiers and investors about their ESG performance and their alignment with the EU Taxonomy. It would be crucial to promote a virtuous circle, including through the solutions proposed above, by requiring that every counterparty collect relevant information and analyse, measure and compare its level of alignment with the EU Taxonomy.

2.2 Green Bond: internal certifications and external verification – use of SPOs and data quality

The market practices combine information provided to the Platform on Sustainable Finance by several banks from the European Banking Federation.

Objective of the market practice

The market practice presents an example of EU Taxonomy alignment assessments by second-party opinion providers and bankers in the process of structuring green bonds and environmentally sustainable loans by financial institutions. The assessments include the use of the Taxonomy's substantial contribution, do no significant harm (DNSH) and minimum safeguard criteria. In addition, the case study provides insights into green bond impact reporting.

Please provide further description and details on the market practice

Green bond issuers need to translate the requirements of the EU Taxonomy into practical criteria that reflect the situation and regulation in the member state(s) where the loans are originated. For example, they may need to reference a member state's relevant building codes or analyse the local top 15% energy efficient buildings. The examples below show how financial institution green bond issuers did so. The second example illustrates how an issuer also wants to meet Climate Bonds Initiative criteria.

Example 1: Using EU Taxonomy criteria to define use-of-proceeds eligibility for a green bond

A Danish bank has developed eligibility criteria for a green bond that finances residential and commercial buildings. It has used the following technical screening criteria (TSC) for climate change mitigation, based on the EU Taxonomy and local regulation.

Mortgage loans showed as TSC-aligned in the bond reporting must have been made to:

1. **Buildings constructed before 31 December 2020 (except for non-residential buildings greater than 5,000 m^2 in floor area).**
    a. The building must be among the top 15% in terms of energy efficiency, based on primary energy demand (PED). According to the analysis of an external consultant (in line with the EU Taxonomy requirement that the top 15% definition must be "demonstrated by adequate evidence"), "Top 15% energy efficient buildings under the EU Taxonomy", buildings with an energy performance certificate (EPC) of A (A2020, A2015 and A2010) or B, or which were built after 2009, will be in the top 15%.
2. **Large commercial buildings constructed before 31 December 2020.**
    a. The buildings must also meet criteria 1a above
    b. They are also required to have heating, ventilation and air-conditioning systems. All buildings in Denmark above 5,000 m^2, built after 2018, are compliant with this, according to the building code BR18.
3. **Buildings constructed after 31 December 2020 and under 5,000 m^2:**
    a. They must also exceed by 10% the national nearly zero-energy buildings (NZEB) requirements. In Denmark, the NZEB requirement for yearly kWh per square meter is equal to the upper bound of EPC A2015. This also includes buildings with EPC A2020 or with A2015 where the estimated yearly energy consumption is 10% lower than the upper bound.
4. **Buildings constructed after 31 December 2020 and above 5,000 m^2:**
    a. They must meet criteria 3a
    b. They must have been tested for airtightness and thermal integrity. All buildings in Denmark above 5,000 m^2 built after 2018 meet this requirement, according to building code BR18.

c. Life cycle global warming potential calculations must have been made. Buildings in Denmark above 1,000 m^2 built after 2023 are required to have done so, according to building code BR23.

The bank applies the criteria of activity 7.7 to the entire portfolio of buildings. The main criterion is 7.7.(1), buildings with A label or "as an alternative" belonging to the top 15% in terms of PED. The term "as an alternative" provides the option to apply the EPC label A criterion or the top 15% criterion, for the same apartment/building. The bank used both options simultaneously to demonstrate alignment with activity 7.7 without double counting. If the apartment/building is included in the green bond portfolio with demonstration of EPC label A or as NZEB -/-10% (under activity 7.1.(1)) or as a refurbished building (under activity 7.2) then the same building/apartment is not included under the top 15% criteria for the second time. This also applies the other way around: if buildings with A labels are included in the green bond portfolio through demonstration of the top 15%, then they are not reported for the second time under the A-label criterion as well. Put simply, a building is reported in either of the two buckets; the same building cannot be counted twice.

All buildings in the bank's loan portfolio have an EPC or an estimated EPC score. For properties with no valid EPC, the distribution of EPCs for the total population is used to estimate energy performance. To this end, distributions have been made for all properties with a valid EPC in Denmark, based on property type, geography, year of construction and type of heating used to heat the property.

Example 2: Using TSC to develop criteria for a green bond certificate by the Climate Bonds Initiative that (re)finances low-carbon buildings and renewable energy projects

A. Green buildings

The bank used the following TSC for climate change mitigation, based on Sections 7.1, 7.2, 7.3, 7.4, 7.6 and 7.7 of Annex I to the EU Taxonomy's TSC for construction, renovation and acquisition of buildings:

Residential real estate is eligible for financing if it falls within one of the following categories:

- Residential buildings built after 31 December 2020 (considered to be new construction), complying with a 10% reduction in PED compared with Poland's NZEB standard, based on the Energy Performance of Buildings Directive (EBPD), implemented in Technical Condition 2021 (TC 2021, the Regulation of the Minister of Infrastructure on the Technical Conditions (TC) to be met by buildings and their location). For a given building project to obtain a construction permit, its assumed energy efficiency ratio must comply with the technical standard.
- Residential buildings built before 31 December 2020 (existing buildings), complying with the requirements in PED of Poland's NZEB standard, based on the EBPD, implemented in Technical Condition 2021 (TC 2021) – that is, PED ≤ 70 kWh/m year for single-family buildings and PED ≤65 kWh/m^2/year for multi-family buildings.
- Residential buildings built before 31 December 2020 (existing buildings), with a minimum EPC level A or within the top 15% low-carbon buildings in Poland (a best-in-class approach).
- Refurbished existing residential buildings with a reduction in PED of at least 30% compared with before the renovation.
- Refurbished existing buildings or renovations designed to fulfil the cost-optimal minimum energy performance requirements, in accordance with the EBPD.
- Residential buildings complying with Technical Condition 2017 (TC 2017) or newer, by year of construction, are automatically eligible for qualification for green bonds, where the mid-point of the bond term is no later than 2025, based on the CBI's low-carbon buildings criteria, in compliance with CBI's established residential market proxy for Poland. The required technical conditions are subject to change, based on year of bond issuance and bond duration. They must comply with established 2050 zero-carbon linear trajectories for single-family or multi-family houses, in compliance with the CBI's criteria for low-carbon buildings.
- Residential buildings with an EPC stating TC 2017 or newer, depending on year of bond issuance and bond duration, based on the CBI's low-carbon buildings criteria in compliance with the CBI's established residential market proxy for Poland.

- Residential buildings built in 2017 or later, depending on year of bond issuance and bond duration, based on the CBI's low-carbon buildings criteria in compliance with the CBI's established residential market proxy for Poland.
- Refurbished existing residential buildings with an improved PED of at least 30%, based on EPC data before and after the retrofit, depending on each bond term.

B. Commercial real estate, such as offices, hotels, retail and other buildings, is eligible for financing if it falls within one of the following categories:

- Buildings built after 31 December 2020 (considered to be new construction), complying with a 10% reduction in PED against Poland's NZEB standard, based on the EBPD, implemented in Technical Condition 2021 (TC 2021).
- Buildings built before 31 December 2020 (existing buildings), complying with the requirements in PED of Poland's NZEB standard in Poland, based on the EBPD, implemented in Technical Condition 2021 (TC 2021).
- Buildings built before 31 December 2020 (existing buildings), with a minimum EPC level A or representing the top 15% low-carbon buildings in Poland (a best-in-class approach).
- Refurbished existing buildings with primary energy savings of at least 30% compared with before the renovation.
- Refurbished existing buildings or renovations designed to fulfil the cost-optimal minimum energy performance requirements in accordance with the EBPD.
- New, existing and refurbished commercial buildings which received at least one of the following certifications: LEED® Gold and above, together with 30% improvement above the levels in ASHRAE 90.1, BREEAM Excellent and above, HQETM Excellent and above, EDGE, PassivHaus or DGNB® Gold and above.

The bank in this case study had not yet used the top 15% approach as defined by the Polish government. The Polish Ministry of Development and Technology conducted an analysis of data gathered in the official governmental EPC register. As a result, it was established and publicly communicated that residential buildings with PED lower than 76.59 kWh/m^2/year belong to the top 15% of the building stock built before the end of 2020 (for further details).

C. Renewable energy

The bank used the following TSC for climate change mitigation, based on sections 3.1, 3.3, 3.4, 3.5, 4.1, 4.3, 4.5, 4.15, 4.16, 4.17 and 4.25 of Annex I to the EU Taxonomy's TSC, for development, acquisition, maintenance and operations of renewable energy sources, understood as production of energy from renewable sources, manufacturing of equipment or appliances, development, expansion and maintenance of infrastructure, technology and processes related to smart grids, energy storage and district heating, connection of renewable energy production units to the electricity grid, transportation through the network, etc. Specific eligibility criteria comprise, in particular, energy generation and equipment manufacturing for:

- Onshore and offshore wind energy
- Solar energy, including photovoltaics (provided that 85% or more of the electricity production comes from solar energy sources)
- New hydropower plants, if they meet one of the following: (i) life cycle carbon emissions intensity below 50 gCO_2e/kWh; (ii) power density above 10 W/m^2; or (iii) run-of-river without artificial reservoirs, as well as the refurbishment or refinancing of existing hydropower plants, provided that such plants meet one of the criterion for new hydropower plants and such refurbishment does not result in an increase in the size of the water reservoir, and provided a complete environmental and social impact assessment of these projects has been carried out (with any identified risks reasonably mitigated).

The bank engaged an SPO provider to review the assets refinanced through the issued green bond, and to provide an assessment as to whether the assets refinanced meet the post-issuance requirements under the low-carbon buildings and renewable energy criteria of the Climate Bonds Standard Version 3.02. The criteria were approved by the bank's sustainable development committee. Compliance with the CBI criteria was confirmed by the SPO provider.

Example 3: Taxonomy alignment assessment of a green bond by an SPO provider

The bank commissioned an SPO provider to undertake an audit to assess the Taxonomy alignment process for a green bond. The SPO provider assessed the alignment of the issuer's project selection process and company policies for the nominated use of proceeds project categories with the relevant climate change mitigation, DNSH, and minimum safeguards requirements of the EU Taxonomy Climate Delegated Act, based on information provided by the issuer.

The issuer was required to answer a list of questions on all EU Taxonomy criteria. The SPO provider evaluated the answers and the evidence provided and indicated for each green bond category whether it was of the opinion that it fully, partially or does not align with the EU Taxonomy criteria.

Substantial Contribution Criteria

1) 4.1 and 4.3: For solar and wind projects, the assessment is relatively straightforward, since there are no specific criteria for these activities. This results in an assessment that renewable energy projects are aligned with the Taxonomy's substantial contribution criteria 4.1 and 4.3.
2) 7.1.1. New buildings (built after 2021) have to meet the NZEB criteria -10%. This was relatively easy, since for these new buildings, all energy labels (EPC documents) were available. Primary energy demand is listed in the EPC document. Since it is known what the PED threshold is for NZEB criteria, buildings that are 10% lower than this threshold are aligned. The assessment was that new buildings built after 2021 (and smaller than 5,000 m^2) are aligned with substantial contribution criteria 7.1.1.
3) 7.1.2 and 7.1.3: Some new properties in the portfolio are part of larger buildings, such as apartment complexes. For (apartment and office) buildings larger than 5,000 m^2 and built during or after 2021, the issuer must demonstrate for alignment with the EU Taxonomy that:
    a. 7.1.2: the building has undergone testing for airtightness and thermal integrity (the so-called blower door test), and any deviation in the levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative, robust and traceable quality control processes in place during the construction process are acceptable as an alternative to thermal integrity testing. The issuer demonstrated that it is obligatory for building companies to provide evidence for airtightness and thermal integrity in the local building code. This can be measured or calculated. For new buildings, a calculation is obligatory and available. The bank did not have these obligatory calculations.
    b. 7.1.3: the life cycle global warming potential (GWP) of the building has to be calculated for each stage in its life cycle and can be disclosed to investors and clients on demand. For new buildings, an environmental performance assessment calculation is obligatory under the local building code. The GWP is essentially the embodied carbon of the building materials during the life cycle of the building. The GWP follows from the environmental impact of the production of building materials (production phase) and their application in a building (construction phase). Both can be obtained from mandatory calculations that are made by construction companies. The bank did not have these obligatory calculations.

    No building-specific data was available for the larger apartment and office buildings, with only the energy label and PED known. For large apartment buildings, these PEDs are known for some individual apartments that are financed within a bigger apartment building. The SPO provider interpreted the Taxonomy in such a way that the airtightness, thermal integrity and GWP criteria only apply for commercial buildings and not for apartment buildings, because the bank is only financing individual apartments. The bank lacked evidence to confirm compliance with the two additional TSC for large commercial buildings as well, and was not able to show this at the level of individual buildings. The SPO provider assessed the larger (5,000 m^2) office buildings as not aligned with 7.1.2 and 7.1.3. and the potential larger residential buildings as aligned with these criteria.
4) 7.7.1: For existing buildings (built before 2021), external consultants were asked to identify the top 15% most sustainable buildings in terms of PED, based on statistical evidence. The outcome was that those built from 2006-2020 are in the top 15%. The building year 2006 corresponds with a change in the building code for energy efficiency. Building years are the basis of the assessment and used as the first and main criterion. For buildings outside the top 15% (i.e., those built before 2006), energy label information was used from public databases. Only A labels were selected. The A label serves as second criterion. There is no double-counting between the two criteria. There was no haircut applied to compensate for the time between the building permit and completion of a building. The statistical evidence showed that this time was on average two years. Because this haircut would have to be applied at both ends (in moving 2006 to 2008 and 2020 to 2022) it was decided to assume that the net effect would be negligible, and it would be clearer to keep the cut-off years for the top 15% identical to the years in which the energy requirements

in the building code changed. The assessment was that existing buildings before 2021 were aligned with the Taxonomy's substantial contribution criteria 7.7.1, because the top 15% methodology was supported by independent external research and statistical evidence.

DNSH Criteria

It was a significant amount of work to complete the DNSH assessment. DNSH information is not yet available in the lending documentation of banks in a structured manner. There is also no overview available of the transposition of European regulation into local legislation, which makes the process time-consuming. It was therefore not possible to provide positive assurance on compliance with all EU Taxonomy DNSH criteria. The SPO provider assessed that the DNSH criteria were partially met. The SPO provider followed the process as below:

1) The basis of the DNSH alignment check were the ESG policies of the bank, as the issuer of the green bond. The bank also follows the requirements of the Equator Principles, which guarantees that environmental and social impact assessments are undertaken for renewable energy projects. The renewable energy loans are project finance loans. The borrower and owner of the project is a special purpose vehicle (SPV); such SPVs are legal entities, but are project companies with no or limited staff, and which are not required to report against the EU Taxonomy.
2) In addition, European regulations and directives are important for the DNSH assessment. For example, for solar panels, circular economy criteria are part of the EU regulations for waste electrical and electronic equipment (within the EU's Waste Electrical and Electronic Equipment Directive 2012/19/EU). The SPO provider assessed whether it can be assumed that these regulations and directives are transposed into national legislation and guidance. The same is done for biodiversity and ecosystems. For wind farms, other DNSH criteria are applicable, for which the same process is followed.
3) Taxonomy activity 7.7 for existing buildings has only one DNSH criterion, which is the physical climate risk assessment (DNSH climate change adaptation). The bank undertook a physical risk assessment at portfolio level, with the help of a technical consultant. A report was available, demonstrating low risk. In the substantial contribution criteria for 7.7, it is stated that criteria 7.1 for new buildings needs to be applied. The bank interprets this requirement as that only the substantial contribution from 7.1 must be applied. The DNSH criteria for 7.1. (new buildings) are not used by the bank. This is deliberate because, for construction of new buildings, the DNSH criteria are designed for construction companies, for example with information on the percentage of construction and demolition waste recycled, or information regarding building components and materials used in construction. Only the construction company has this type of information, and financial institutions tend not to be in contact with the construction company. The SPO provider approved this approach. To avoid repetition, the evaluation of the alignment of the issuer's assets to the DNSH criteria to climate change adaptation is provided in a separate section, and is applicable to all activities.
4) For assets outside of the European Economic Area (EEA) and the UK, the bank (as green bond issuer) is not able to provide specific documentation to substantiate full alignment with all the respective applicable DNSH criteria, which often relate to specific EU directives. This is largely due to the misalignment with national regulations and the Equator Principles requirements with specific EU directives and Taxonomy requirements. The issuer requires all project finance to be in compliance with the Equator Principles, where an environmental and social impact assessment is an integral part. In addition, ESG factors are built into the issuer's environmental social risk assessment process. The SPO provider therefore concluded a partial EU Taxonomy alignment assessment on DNSH for renewables outside the EEA and the UK, because the issuer is not able to provide specific documentation to substantiate full alignment for non-European countries with all the respective applicable DNSH criteria, which often relate to specific EU directives.

Minimum Safeguard Criteria

The SPO provider assessed alignment of the issuer (rather than the individual loans) with the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organization (ILO) on Fundamental Principles and Rights at Work and the International Bill of Human Rights. The SPO provider assessed that there is sufficient comfort that the minimum safeguard criteria were fully met.

1) The bank showed that it is a signatory of the OECD Guidelines, the UN Guiding Principles and the ILO's Core Conventions

2) The bank showed that it considers environmental and social risks an essential factor when deciding whether to engage with clients and potential clients and when deciding what to finance (evidence was provided)
3) The bank showed that human rights assessments are a key aspect of the banks' overall environmental and social risk assessment. The bank showed a specific human rights policy and its policies for sectors known to be sensitive to human rights-related issues.

The end result of EU Taxonomy assessment for the green bond can be summarised as follows (with fictive numbers):

Total green loan portfolio: 96% EU Taxonomy-aligned (€10bn)				
Loan asset category	Residential buildings	Commercial buildings	Renewable energy (solar and wind)	
Economic activity	**7.7 (including 7.1.1)**	**7.7 (including 7.1.1, 7.1.2, 7.1.3)**	**4.1 and 4.3**	
Geography	EEA	EEA	EEA and UK 67% of portfolio	Rest of world 33% of portfolio
€35bn	**€4bn (100% aligned)**	**€4bn (95% aligned)**	**€1bn (100% aligned)**	**€1bn (0% aligned)**
Substantial contribution criteria (TSC)	Partial alignment 95% built before 2021 Aligned 5% built after 2021 Aligned	Partial alignment 95% built before 2021 Aligned 5% built after 2021 Partially aligned (of which commercial buildings greater than 5,000 m^2 not aligned)	Aligned	Aligned
Do no significant harm	**Aligned**	**Aligned**	**Aligned**	**Not aligned**
Minimum safeguards	Aligned	Aligned	Aligned	Aligned

What is the outcome?

For each individual activity, the SPO provider is able to define if the activity is aligned with the Taxonomy criteria. This is valuable information, especially for investors who want to invest in green bonds.

Data and methodology used to compile the market practice	
Data and Methodology	Data • Activity information related to the establishment of loans is from the bank's own data warehouse. • Buildings: national EPC label databases, EPC information in bank systems, country-specific reports providing statistical evidence for the top 15% PED approaches • Equator Principles reporting
Use of Proxies	Some banks use proxies or estimates for green bonds. This may lead to partial alignment in the external assessment.
Internal resources	Loan business line managers (for sign-offs) ICT staff (to run loan database queries) Treasury and debt capital markets staff (to manage the process)

External resources	The country-specific reports providing statistical evidence for the top 15% PED approaches and the impact reports were provided by external technical consultants. The assessment was conducted by a SPO provider The assurance for the allocation report was conducted by an accountant.

Did you encounter any obstacles or gaps?

When applying DNSH criteria for 7.1, the complexity and high degree of detail and requirements for documentation in the Taxonomy and especially in the DNSH definitions makes it difficult for a financial institution to verify all the listed criteria. This is especially the case for mortgage lending, where the exposure is to a large number of buildings.
For assets outside of the EEA and the UK, the issuer is not able to provide specific documentation to substantiate full alignment of the (project finance) SPV with all the respective applicable DNSH criteria, which often relate to specific EU directives. This is largely due to the misalignment between national regulations and the Equator Principles requirements and specific EU directives and EU Taxonomy requirements.

How were the obstacles addressed?

To address these challenges, financial institutions must invest in developing the necessary expertise and capabilities to navigate the EU Taxonomy Regulation effectively. Collaboration with data providers, industry associations and other stakeholders could help improve data availability and quality, but there will be a need to engage all financial institutions in the market. Furthermore, engaging in industry dialogue and participating in standard-setting processes could contribute to the development of more standardised methodologies and practices.

What were the benefits of applying the EU Taxonomy and the sustainable finance framework:

☒ Simplification
☐ Client engagement
☒ Credibility
☐ ESG risk management/mitigation
☒ Greenwashing mitigation
☒ Transparency
☒ Comparability
☐ Other – *please specify*

The EU Taxonomy can be a very effective tool to mitigate greenwashing risk. Requiring 100% compliance with EU Taxonomy DNSH and minimum safeguard criteria will reduce the risk of negative impacts related to green bonds and increases credibility and reliability. However, as the EU Taxonomy has many levels of DNSH criteria, the sustainable activity filter is strict and currently few investments are able to pass the filter.

Are there any other aspects you would like to mention?

Financial institutions tend to support the standardisation of definitions of sustainable activities. However, for this standardisation to be usable for financial institutions, it must be simple to use and not create high costs for both financial institutions and their customers.

Action from national legislators is needed on how they will use the Taxonomy in national legislation. If the Taxonomy requirements for new buildings become a requirement in national legislation when constructing new buildings, they would be much simpler to apply, reducing costs significantly.

In the research conducted on green bonds, investors point to the following challenges caused by the lack of standardisation:
1) difficulties in determining/verifying the use of proceeds from the bond issue

2) the low quality of allocation and impact reports provided by issuers.

2.3 Real Estate

The market practices combine information provided to the Platform on Sustainable Finance by a number of European banks. The main topics covered relate to financing, reporting and disclosure.

Objective of the market practice

The market practice presents an example of how various European banks have developed methodological approaches to identify sustainable residential properties with the help of the EU Taxonomy's criteria to meet the climate change mitigation objective. These approaches include identifying properties that are among the most efficient 15% in terms of primary energy demand. In many cases, green building technical consultants have helped provide the necessary evidence via research into the local building stock. Such evaluations have been conducted in many countries; this case study provides examples from banks in Austria, Belgium, Denmark, France, Germany, the Netherlands and Poland. It also gives insight into the challenges and solutions to identifying new and refurbished properties. Finally, the case study suggests setting up climate transition risk appetite frameworks for residential mortgage portfolios and linking them to European building regulations and practices.

Please provide further description and details on the market practice

This case study considers how several European banks evaluate the environmental sustainability of (completed) buildings based on the EU Taxonomy. This provides the banks with insight into the greenness of their mortgage lending for calculating their green asset ratio (GAR), which is an important cornerstone for their green bond funding (by which mortgages are financed and refinanced using green bonds and green covered bonds) and for green mortgage lending. For real estate financing, the following three economic activities in the EU Taxonomy are most relevant:

Taxonomy economic activity	Summary of EU Taxonomy criteria (substantial contribution)	How banks are using the Taxonomy criteria to identify sustainable buildings
7.1 Construction of new buildings	Buildings built after 31 December 2020 7.1.1. NZEB -10%. The property must use 10% less energy than the requirements for the national primary energy demand (PED) of the nearly zero-energy building standard (NZEB), based on the Energy Performance of Buildings Directive (EBPD). For buildings larger than 5,000 m^2 (such as apartment buildings) there are additional technical screening criteria, namely: 7.1.2 Testing for airtightness and thermal integrity, using the 'blower door test' and infrared camera inspections. 7.1.3. Global warming potential (GWP). This is the CO_2 footprint of the building, including the materials used in construction, during the entire life cycle of the building (its embodied carbon).	Banks in this case study have developed a methodology to identify sustainable mortgages for new buildings that comply with activity 7.1. All banks identify sustainable mortgages based on criterion 7.1.1 (NZEB -10%). This is relatively easy, since these banks collect energy performance certificate (EPC) labels for new buildings, and the PED is displayed on the label. PED is the energy that is needed for a building's heating, cooling and ventilation, based on the relevant national calculation methodology. No bank has been able to identify buildings that comply with 7.1.2 and 7.1.3. Banks argue they do not build houses, and therefore do not have access to data on these technical aspects of building and renovation processes and building materials. The information needed for 7.1.2 and 7.1.3 is not yet in buildings' EPC label documentation and cannot be obtained from mortgage clients (building owners).
7.2 Renovation of existing buildings	**7.2.a Properties are required to comply with the applicable requirements for "major renovations". The energy performance of the building or the renovated**	**Banks in the case study have not developed specific selection criteria or methodologies to identify mortgages that comply with activity 7.2.** **As a rule of thumb for credit Institutions, major renovations would typically lead to an EPC label A and renovated buildings that achieve label A will be included in 7.7.** **A few banks have a "renovation date" in their systems that helps them to identify buildings that were renovated. This is currently best practice.**

	part that is upgraded meets cost-optimal minimum[5] energy performance requirements, in accordance with the EPBD[6]. **As an alternative, 7.2.b requires a relative improvement in PED ≥30% compared with the performance of the building before the renovation, verified by an energy performance certificate, equivalent energy study or energy audit.** **The 30% improvement must result from an actual reduction in PED (where reductions in net PED through renewable energy sources are not taken into account) and can be achieved through a succession of measures within a maximum of three years.**	**Banks cannot identify buildings that meet the criteria of "major renovations" (measures based on the so-called cost "optimal level" from EPBD), and other "improvements".** **Banks have various methods to identify buildings that are refurbished. There are basically three methods:** • **Calculating the PED difference before and after renovation (mentioned on the EPC labels)** • **An improvement of two EPC label steps** • **A renovated building meets the PED thresholds (targets) for renovations in a specific year, as defined in the member state's long-term building renovation strategy (LTRS).**
7.7 Acquisition and ownership of buildings	Buildings built before 31 December 2020 7.7.1. Energy performance certificate with EPC rating of A or better. As an alternative, buildings are eligible when they are within the top 15% of the national or regional building stock in terms of PED, demonstrated by adequate evidence (a study). 7.7.2 Buildings built after 31 December 2020 must meet the criteria specified in Section 7.1 (new buildings). 7.7.3 Large non-residential buildings with a heating system over 290kW must have an energy management system (out of scope for this case study).	All banks in the case study have developed selection criteria to identify mortgages that comply with 7.7.1 There are different interpretations of the wording in 7.1.1 "as an alternative". A number of banks in this case study successfully use both criteria simultaneously (A label and top 15%), in various ways, and in all cases without double counting. This results for various reasons in a fair representation of the sustainable building stock (see hereafter). In green bonds issued by banks in the case study, it is common to use both criteria simultaneously and green bond allocation reports are audited. In the process of defining the GAR methodology, some banks mentioned that their accountants are not familiar with the simultaneous application. In line with FAQ 107 of the draft Notice issued in December 2022, the Credit Institution has the choice to apply the criteria of activity 7.1 or activity 7.7.
7.7 Acquisition and ownership of buildings	**DNSH (do no significant harm)**	**Taxonomy activity 7.7 has only one DNSH criterion, which is a physical climate risk assessment (DNSH climate change adaptation). Banks use external climate risk consultants and climate risk data providers, including reinsurance companies, to undertake that physical risk assessment is done at portfolio level.** **In the substantial contribution criteria for 7.7, it is stated that one needs to apply the criteria in 7.1 for new buildings. Many banks interpret this as requiring only the substantial contribution from 7.1. The DNSH criteria for 7.1 (new buildings) are therefore not applied by these banks. This is in line with the FAQ 149 issued in December 2022 and, if activity 7.7 is applied, only the DNSH criteria of the activity 7.7. are applicable, as it states that "for determining Taxonomy-alignment, it should be demonstrated that a building is within the top 15% (or 30% for climate change adaptation) of the national or regional building stock, by adequate evidence."** **There are some banks that attempted to apply the DNSH criteria for 7.1 as well, but they said it proved impossible to get the data.**

Experiences working with 7.1 new buildings

[5] The cost-optimal level is defined as "the energy performance level which leads to the lowest cost during the estimated economic lifecycle established by applying the cost-optimal methodology." Based on benchmark averages for each EU country, EU member states' long-term renovation strategies or trajectories may define the PEDs or energy label after renovation that needs to be reached in a certain year.

[6] Member States should be able to choose to define a 'major renovation' either in terms of a percentage of the surface of the building envelope or in terms of the value of the building. If a member state decides to define a major renovation in terms of the value of the building, values such as the actuarial value, or the current value based on the cost of reconstruction, excluding the value of the land upon which the building is situated, could be used. Source: EPBD recast 14 March 2023. As an indication, some earlier EPBD recasts mentioned 25% of the surface or 25% of the value.

Banks using 7.1.1 (NZEB -10%) for new buildings
Banks in this case study have developed a methodology to identify sustainable mortgages for new buildings that comply with activity 7.1.

All banks identify sustainable mortgages based on criterion 7.1.1 (NZEB -10%). This is relatively easy, since these banks collect EPC labels for new buildings, which include PED data.

No bank in the case study has been able to identify buildings that comply with 7.1.2 and 7.1.3, given that banks do not have direct access to the technical data needed. The information needed for 7.1.2 and 7.1.3 is not yet in the building's EPC label documentation and cannot be obtained from mortgage clients (the building owners). Real estate companies often have such information if they acquire new buildings.

Example. Throughout Europe, regulation has been put into place to provide a legal background for NZEBs. Both the Building Performance Institute Europe (BPIE)[7] and Concerted Action EPBD (CA EPBD)[8] have published studies on NZEB values for a number of EU member states. NZEB equates, in most countries, to PED of between 50 and 85 kWh/m^2/year. Based on the EPC label, it is easy to identify mortgages that comply with NZEB -10%. NZEB -10% is seen as a very strict criterion. It means that the PED of the house is 10% lower than the local building code requires. Only a very limited number of buildings will comply with this first TSC (7.1.1). The EU Taxonomy clearly encourages zero energy buildings, which are required from 2030 (or potentially from 2028) in Europe.

Type of residential building	PED requirement in kWh/m^2/y for NZEB	NZEB-10% in kWh/m^2/y
Single family house	30	27
Multi family house	**50**	**45**

Table 1: Example of NZEB requirements. Primary energy demand (PED) values in the Netherlands

As an example, see Table 1, which shows NZEB -10% values for the Netherlands, used by various banks in green bonds. Here, there is differentiation between flats/apartments and houses, with the latter having slightly stricter criteria for NZEB -10%. Flats and apartments have a higher PED (that is, they can use more fossil energy), because it is more difficult to install on-site solar panels on an apartment. The PED requirement for houses is stricter because almost half of the energy of such a house can be generated via solar panels, which lowers PED. For the EU Taxonomy criterion to be applied correctly, the only other datapoint needed is the type of residential building. If this datapoint is unavailable, to ensure alignment banks must apply the strictest criterion for NZEB -10%, namely 27 kWh/m^2/year, to the entire portfolio from 2021 onwards.

Banks using 7.1.1 (NZEB -10%) as well as 7.1.2 (door blower test and heat camera images) and 7.1.3 (GWP) for new buildings
To be fully aligned with the technical screening criteria, apartment buildings larger than 5,000 m^2 must not only meet 7.1.1. but also both criteria 7.1.2 and 7.1.3.
Some banks argue that both 7.1.2 and 7.1.3 are included in national building codes, building practice and building code enforcement, and that it can be assumed that new apartment buildings comply with both criteria. Most indicated that only applying 7.1.1 would not receive a positive audit statement from their accountant for the GAR, and they may have to report zero alignment for the majority of new buildings. For green bonds, which do not have to be fully EU Taxonomy aligned, getting assurance based on 7.1.1 is not a problem.

[7] Building Performance Institute Europe (BPIE), Nearly Zero: A review of EU Member State implementation of new build requirements, June 2021.
[8] Concerted Action EPBD (CA EPBD), New Nearly Zero Energy Buildings (NZEB), Status in 2022.

One bank indicated in its green bond prospectus that it was only applying 7.1.1 for the identification of sustainable mortgages for a green bond transaction, while excluding 7.1.2 and 7.1.3. It received a "no comment" statement from the supervisory authority on this position and the prospectus was approved.

Banks using 7.7 Acquisition and ownership of buildings

Banks using 7.7.1 for new buildings (A label)

Criterion 7.7.1 is for an EPC with an A rating or above. All banks in this case study use 7.7.1, and identify sustainable mortgages based on definitive A labels, expired A labels and/or "preliminary" A labels. The banks said that this leads to very low numbers of sustainable mortgages for various reasons: EPCs have not been recorded in banking systems for some time; EPCs are not widespread in many member states; there is no public EPC label database; EPCs expire on average every 10 years and are removed from or invisible in the (public) databases; or the EPC label is considered sensitive information and the information in the database is not accessible at all; EPC labels are not yet harmonised in Europe (for example, in Austria, an A label is lower than 25 kWh/m^2/year, while it can vary from 160 to 50 kWh/m^2/year or lower (an A+++ label) in the Netherlands)

Using only an A-rated EPC is not sufficient to provide a fair representation of the sustainability quality of the mortgage portfolio in terms of average PED, expressed in kWh/m^2/year for the reasons mentioned above.However, using an EPC label A and the top 15% calculation simultaneously, as some banks in the case study do, results in a good method, providing a fair and comparable representation of the GAR, as explained below.

Banks using 7.7.1 A label and top 15% simultaneously (both A Label and top 15% without double counting)

Criterion 7.7.1 allows that, as an alternative to using A labels, buildings built before 31 december 2021 are eligible when they are within the top 15% of the national or regional building stock in terms of PED, demonstrated with adequate evidence.

There are different interpretations of the wording in 7.7.1 "as an alternative". A number of banks in this case study successfully use both criteria simultaneously, in various ways, without double counting. For green bonds issued by banks in these case studies, it is common to use both criteria simultaneously, and green bond allocation reports are audited. In the process of defining the GAR methodology, some banks mentioned that their accountants are not familiar with this simultaneous application.

Banks did not double count buildings in this simultaneous approach. If the apartment/building is included in a green loan portfolio with demonstration of an EPC label A or as NZEB -10% (under activity 7.1.(1)), or as a refurbished building (under activity 7.2), then the same building/apartment was not included under the top 15% criteria for the second time. It also applies the other way around: if buildings with A labels are included in the green loan portfolio with demonstration that they are in the top 15%, then they were not reported for under the A-label criterion as well. Put simply, if a building was reported in either of the two buckets, the same building was not counted twice. The calculation for such a green loan portfolio was done as in Table 2.

Acquisition and ownership of buildings	EU Taxonomy Criteria	PED (example, varies per member state)	Number of buildings
EPC-label A (before 31 December 2020)	7.7.1	0-75 kWh/m^2/y	50,000
Top 15% PED (before 31 December 2020, based on building code 2013 to 2020, includes buildings without EPC labels and with other EPC labels than A	7.7.1	0-120 kWh/m^2/y	200,000
New buildings NZEB -10% (after 31 December 2020)	7.1.1	0-50 kWh/m^2/y	10,000
Total			**265,000 (no double counting)**

Table 2: Calculation of new, existing EPC A label, existing top 15% PED and renovated buildings, simultaneously without double counting (based on an example where top 15% is from 1 January 2013 to 31 December 2020)

The reason why many banks use a top 15% approach to identify sustainable mortgages is because their loan systems almost always include building years and that data is relatively complete. EPC label data is relatively new data for banks and only a small part of the loan portfolio is covered. Banks that use both A label and top 15% criteria in 7.7.1 simultaneously argue that this combined method will be essential to identify sustainable mortgages in large portfolios over the next few years. Beyond that, when all existing buildings have a new-style EPC rating (i.e., including PED figures), then the application of this method will become easier.

The banks in this case study have commissioned various green building engineering and consultancy firms to provide a methodology for identifying buildings that comply with the EU Taxonomy criteria. The main purpose was to develop concrete guidance to identify buildings belonging to the top 15% of national building stock. This approach is based on the PED requirements in national building codes that were applicable in a certain year, and in some cases based on end-energy demand.

According to the EU Taxonomy, the top 15% claim must be "demonstrated by adequate evidence, which at least compares the performance of the relevant asset to the performance of the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings". The engineering firms provide such evidence and summaries of the reports are often published by the banks that commissioned the research. The engineering firms have analysed PED requirements in building codes and the impact on the local building stock from a statistical perspective. Their reports show that PED requirements in building codes are updated every few years by the member states, but the frequency and year of update varies by member state and even differ by region within a member state. The engineering firms have determined the most appropriate cut-off year for the top 15% in terms of PED, as prescribed by the building code in that year. They have created criteria overviews for different types of buildings (residential, office, commercial, logistics), with which banks can demonstrate fulfilment of the screening criterion and Taxonomy-alignment. The reports are used as evidence for the use-of-proceeds allocation in green bond transactions and may also be used in future GAR reporting.

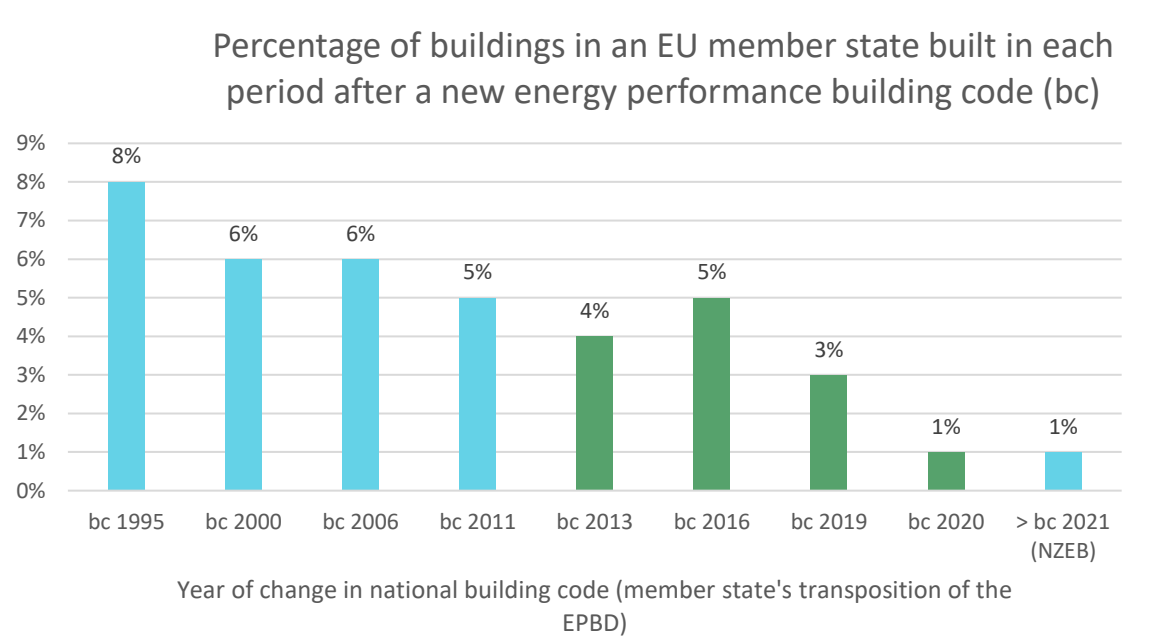


Figure 1: Example of calculating a top 15% in terms of Primary Energy Demand (PED) for a EU Member State for buildings built before 31 December 2020 (fictive numbers).

A practicalexample of how to calculate the top 15% is shown in Table 2. The top 15% of sustainable residential buildings in this example consist of buildings that meet the member states' energy building codes from 2013 to 2020. In fact, in this member state, these represent only 13% (4%+5%+3%+1%) of the building stock. Adding buildings that were built under building code 2011 would in total represent 18% of the building stock, and thus outside the top 15%. Based on recent available data, banks were able to demonstrate that EPC labels other than A are within the top 15% of their market for residential assets. These kind of studies from consultants

are typically based on data from tens of thousands of buildings with calculated or observed energy performance certificates. The EPC letter is not important, but rather the PED value behind that letter: a B label may represent a PED of 120 kWh/m²/year in one member state but, in another, it might be a C label. The top 15% most efficient buildings in terms of PED therefore often include (many) buildings without EPC labels (in the above example, a building from 2016 without a label because it never got one), A labels (for example, an old-style EPC label without a PED calculation), B labels, C labels and higher, depending among other things on the energy labelling system in the member state and the PED thresholds for these labels. Some member states, like Poland, have published the upper limit PED for buildings in the top 15%. The objective of the consultant studies is to look through the EPC letters, identifying buildings with a low PED, and the corresponding building year.

Banks apply the top 15% calculation in a simple way to their mortgage portfolio. If, in the example above, the PED in the 2013 building code is identified as the cut-off for the top 15% energy efficient buildings in terms of PED, then all buildings built from 2013 are, in principle, part of the top 15%. Since banks record building years in their systems, they are able to identify sustainable mortgages quickly and without additional costs. Some banks have spent some time completing the missing building year data for a number of buildings for this reason. The assumption that there is a relationship between the building code and the building year was very important for all banks. Without that, buildings could not be identified in the loan systems.

Using the combined approach (both A rating and top 15%, without double counting) banks are able to report much larger and much more realistic portfolios of sustainable mortgages, enabling investors to invest in these green assets via green bonds or securitisations. This combined method most likely also results in a higher GAR for banks since, for many banks, mortgages make up 99% of their GAR. Using the combined method, not only are buildings with a definitive, valid A label identified as sustainable but so are buildings with expired EPC labels or buildings that are supposed to have a good PED performance based on the building permit year, such as buildings with a B or C label. The combined method presents the sustainability quality of a mortgage portfolio in a more realistic way than when it is only based on A-rated buildings, because it is in ultimately based on PED, similarly to the NZEB standard for new buildings.

Some banks apply a two-year haircut to compensate for the building period (between the building permit or deed date and completion). In the above example, that would count properties mortgaged in 2015 (two years after 2013). It could be that a building permit is based on an older building code (2011 in the above example) that is not within the top 15%. Some consultants provided evidence that a two-year haircut is sufficient, because most buildings are completed within two years. Other consultants suggested that it is not necessary to apply the haircut, because one would have to apply the haircut on both ends of the top 15% spectrum (7.7 is about existing buildings and ends on 31 December 2020, when the NZEB period starts) and the net effect would not be material. One consultant showed a large sample of EPC data evidencing that the effect of a change in building regulations is smoothed out in the real world, and there is no sudden decrease in PED data when a new building code enters into force. Some buildings meet the new PED requirements before the new building code has entered into force, and other buildings are completed after the change. To keep things simple, most banks do not apply such a haircut.

Banks using 7.2 Renovation of existing buildings

Only a few banks in the case study have developed specific selection criteria or methodologies to identify mortgages that comply with activity 7.2. These banks have a “renovation date” in their systems that helps them identify buildings that have been renovated. This is currently best practice.

Some banks are in initial stages of developing transition risk strategies in relation to renovation of buildings. ESG credit risk departments have implemented transition risk appetite frameworks based on member states’ long-term building renovation strategies (LTRS). The strategy of the member state results in a required average PED for a mortgage loan portfolio in a certain year. In practice, this means there are limits to financing G-, F- and E-rated buildings, including mortgages for such buildings with long maturities. The front office of the bank then has to find a way to steer the loan origination in this direction. As a side note, some banks use a European grid factor to calculate the CO_2 emissions of a loan portfolio, while others use national or market-based grid factors. This choice has an effect on perceived transition risk. PED definitions need further harmonisation, as

national methodologies are different. PED is a major metric within the EPBD, but the methodology used to calculate its value is left up to each member state to decide. Green bond impact reports of the banks in the case studies show that two buildings with very similar PED in two different member states have different CO_2 emission footprints. Bank policies will mirror government policies to encourage renovation. A bank's transition risk appetite framework will therefore be in sync with national MEPS as set out in the LTRS or in the local transposition of the EPBD.

Banks using 7.2 (criterion: major refurbishment in line with EPBD)
To meet criteria 7.2, properties are required to comply with the applicable requirements for "major renovations", defined in the EBPD and based on the cost-optimal level.
Banks currently do not have data on whether buildings after renovation comply with the specific technical requirements in the EPBD for "major renovations". Banks can therefore not distinguish between buildings that meet the criteria of "major renovations" (resulting in a "cost-optimal level" renovation from EPBD), versus other large or small "improvements".

Many banks use in their green bond frameworks criteria that are based on the renovation requirements in their local energy performance building code (based on EPBD renovation requirements). The banks in this case study have however not yet identified these buildings, even though the criteria are already in their green bond frameworks. Major renovations would typically lead to an EPC label A and renovated buildings that achieve this are included by the bank in 7.7.

See Table 3 for a fictive example to show how this works. A cost-optimal major renovation could, according to some member states, lead to a certain minimum PED. Building that undergo major renovations would be therefore qualify as NZEB buildings. Such a so-called 'deep renovation' would typically lead to a more than 60% improvement in PED. The minimum PED per building type is sometimes referred to as the MEPS. The MEPS is an indication of the standard to which a certain building type of a certain size and a certain age has to be renovated before 2050. When setting the MEPS standard, member states may thus not only make a distinction between building types, but also between the size and the age of the buildings. This means a very old large building may not have to meet the same MEPS as a very old small building.

Building	Size of house or apartment	Age	PED of a refurbished house or apartment in kWh/m²/y (from 2050) (MEPS)	Comparable NZEB requirement In kWh/m²/y (from 2021)
House	Small	<1945	30	30
		>1945	**25**	
	Large	<1945	30	
		>1945	**25**	
Apartment	Small	<1945	50	50
		>1945	**40**	
	Large	<1945	50	
		>1945	**40**	

Table 2: Minimum energy performance standard (MEPS). Example of how a member state could define cost optimal renovations, specifying the required PED level after renovation for houses and apartments, split into large and small buildings, as well as by age (before and after 1945). Numbers are fictive.

Based on such MEPS tables, it should be possible for banks to identify renovated buildings that meet Taxonomy criteria, as long as they have a renewed EPC label. As said, because these buildings are NZEB, banks would include them in 7.7, and hence this is only relevant when buildings are being refurbished in multiple steps. This brings us to the 30% improvement criteria.

Banks using 7.2 (criterion: 30% improvement)

The second (alternative) Taxonomy criteria for refurbished buildings is a relative improvement in PED ≥30%, in comparison with the performance of the building before the renovation. This must be verified by an energy performance certificate, equivalent energy study or energy audit.
There are essentially three options to identify renovated buildings seen in the market:

1. The first option is to calculate the PED difference before and after renovation (mentioned on the EPC labels), based on the EPC label. The 30% improvement must result from an actual reduction in PED (where the reductions in net PED through renewable energy sources are not taken into account). The initial PED and the estimated improvement should be based on a detailed building survey, an energy audit conducted by an accredited independent expert or any other transparent and proportionate method, and validated through an EPC. This is only possible if two relatively recent EPC labels are available, before and after renovation. Both EPC labels must include the PED in order to be able to calculate the difference. None of the banks in the case study has demonstrated use of this method. EPC labels are not sufficiently widespread for this exercise.
2. The second option is to check if the renovated building has improved by two EPC label steps (for example from D to B). This can be seen as a 30% improvement.[9] Some banks use an improvement of two EPC label steps as a proxy for a 30% improvement, with a minimum of C after refurbishment. They compare the current EPC label with an "implied EPC label" that the building would have had when the house was built, based on the building laws in that country. Table 4 demonstrates energy improvements from the old to the new EPC label.

Renovations resulting in a change of two EPC label steps (30% improvement								
		TO EPC LABEL (EUR)						
	EPC	**A**	**B**	**C**	**D**	**E**	**F**	**G**
FROM EPC LABEL	A							
	B							
	C	X						
	D	**X**	**X**					
	E	X	X	X				
	F	**X**	**X**	**X**	**X**			
	G	X	X	X	X	X		

Table 3: A renovation resulting in two EPC label steps of improvement, equal to a 30% improvement in PED. Some banks require an EPC C label as a minimum after renocation (mid green). Major renovations often result in an EPC A label (dark green)

[9] This method was for example used by Climate Bonds Initiative for the Netherlands. The inclusion of this option cannot be construed as their endorsement or validation, in particular for the purpose of assessing Taxonomy-alignement of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission. The market practices described in the Annex to this report shall not be deemed to be automatically compliant with the legal obligations under the Commission Delegated Regulation (EU) 2021/2178 or other relevant EU legislation or Commission guidance documents.

3. EU Taxonomy criteria 7.2, however, requires that the refurbishment is completed within a maximum of three years. No bank has data available at this level of detail. This kind of information may be available to authorities who subsidise these measures and who have such a requirement or to companies that carry them out. The third method is to check if a renovated building meets the PED thresholds (targets) for renovations, as defined in the member state's long-term building renovation plan . The plan defines the cost-optimal MEPS for the refurbishment of various types of buildings, in a specific year. The MEPS can be expressed as the minimum EPC label or PED level (or other metric) that a renovated building of a certain type, age and size should reach in specific years.

Banks using DNSH criteria from taxonomy activity 7.7

Taxonomy activity 7.7 has only one DNSH criterion, which is the physical climate risk assessment (DNSH climate change adaptation). Banks are using external climate risk consultants and climate risk data providers, including reinsurance companies, to undertake that physical risk assessment at the portfolio level. Banks in this case study use the EU Taxonomy criteria to identify sustainable residential buildings, and they have translated these to regional building code requirements. Similar criteria are available for non-residential buildings (although these are not in the scope of this case study). The table below shows the criteria that these banks have published, usually prepared by a green building consultant in combination with their green bond or green finance frameworks.

Data and methodology used to compile the market practice	

	Data
	• Proprietary information from a number of banks
	• Public green building consultancy reports prepared for individual banks and for VDP
	• Research documents (such as from BPIE)
	• Background documents (such as long-term building renovation strategies)
	
	Methodology
	Example. As an example, we provide the EPC data process provided by a bank in Denmark.
	
	• The EPC score for buildings in Denmark is retrieved from the Danish Energy Agency.
	  ○ Data is retrieved for all properties in Denmark with a valid EPC. For properties for which the bank has granted loans and which have a valid EPC, this EPC is attached directly to the building.
	  ○ For properties with no valid EPC, the distribution of EPCs for the total population is used to estimate energy performance. To this end, distributions have been made for all properties with a valid EPC in Denmark, based on property type, area (Copenhagen and environs, Aarhus and environs, large provincial towns and small provincial towns), year of construction and type of heating used to heat the property (gas, oil, district heating etc.). For the distributions, only combinations of categories (property type, area, year of construction of the property and source of heating) with more than 20 observations are used.
	  ○ For properties in the bank's portfolio with no valid EPC or with a combination of categories for which a distribution cannot be made, a less granular distribution is made of all properties with a valid EPC, based on property type, area and year of construction.
	• Approximately 61% of the properties (in terms of outstanding debt) of the bank's Capital Centre E have a valid EPC.
	  ○ About 33% are assigned an EPC value based on the distribution using property type, geographical area, year of construction and source of heating.
	  ○ About 2% are assigned an EPC value based on the less granular distribution.
	  ○ It has not been possible to assign an EPC value to about 0.5%.

	○ It is not relevant to assign an EPC value to about 4.5% (because they are manufacturing plants, warehouses, holiday homes, undeveloped plots etc.).
Did you encounter any obstacles or gaps?	
The challenges the banks experience in the use of the EU Taxonomy for real estate credit provision relate especially to data availability and criteria interpretation. A majority of the banks' Taxonomy-eligible assets are household exposure, which means that institutions need to conduct the Taxonomy-alignment assessment for those exposures whereas, for the assessment of companies that fall under the Non-Financial Reporting Directive, the alignment KPIs are received from the counterparties from an external vendor. The data required to perform the Taxonomy assessment for retail exposure has, for the most part, not been collected from bank customers. Other obstacles relate to the lack of common definitions and inconsistencies between different regulations. For example, should a bank decide to review the product methodology for green mortgages with the purpose of enhancing its consideration of the Taxonomy, it would be beneficial from a regulatory perspective to ensure consistency in relation to household exposures (whereas, currently, differences exist between the simplified approach in Pillar 3 versus Article 8)[10]. Challenges have also occurred in performing the DNSH test for the climate change adaptation objective for activity 7.7, since the Appendix A instruction leaves room for interpretation, e.g., when it comes to adaptation solutions.	
How were the obstacles addressed?	
Where gaps regarding criteria or regulatory interpretation are identified, the bank's approach is to first discuss them internally. If internal discussions do not lead to solutions or conclusions, it consults external parties and discusses issues in external forums with its peers. To overcome regulatory gaps, the bank seeks to ensure that there are no significant discrepancies in the regulatory instructions. When it comes to data availability, it would be important to ensure that, where the regulation requires or suggests external data be used, this data is in fact available to access and apply where needed.	
Are there any other aspects you would like to mention?	
The financial institutions featured in this case study support standardisation of the definition of sustainable activities. For this standardisation to be effective, it must be simple to use and not create high costs for both financial institutions and their customers.	

[10] The approach of the European Commission for assessment of Taxonomy alignment of retail mortgage portfolios under the Taxonomy Delegated Act is at odds with the instruction of the EBA for GAR calculation under Pillar 3, where the EBA allows Taxonomy Alignment assessment of households for the objective of climate change mitigation based on a simplified approach according to the energy efficiency of the underlying collateral, as clarified in the Pillar 3 Implementing Technical Standards.

2.4 Transition finance

This market practice combines information provided to the Platform on Sustainable Finance by six large European banks.

Objective of the market practice

This market practice showcases the voluntary use of the EU Taxonomy and the EU sustainable finance framework in the following manner:

- How the use of the EU sustainable finance framework has been integrated into decision-making within credit institutions' internal management systems. Current practice on transition target-setting at financial product and portfolio levels (for risk and transition purposes), including the use of the Taxonomy.
- How specific elements of the EU sustainable finance framework have been used to help establish roadmaps to identify and screen transition finance practices in credit institutions.
- How banks have designed tools aimed at accelerating the transition to a low-carbon society, achieving more sustainable loan and investment portfolios, improving transition risk management, and enhancing alignment between clients' transition plans and the banks' own transition pathways towards net zero.
- How specific elements of the EU Taxonomy and European Sustainability Reporting Standards (ESRS) were considered when assessing transition plans, mainly to develop methodologies to measure performance.
- How, in most cases, the banks supplemented the EU Taxonomy framework with their own market-based sustainability criteria and tools, such as green weighting factors.

Please provide further description and details on the case

This market practice case study encompasses the voluntary use of the EU Sustainable Finance framework by six European credit institutions in their transition risk management and transition finance. The market practices below illustrate their actions varying from mapping the quality of clients' climate transition plans in the loan portfolio, designing risk appetite frameworks including target setting to align the climate pathway of the institution and the client, client engagement to improve the transition plan as well as incentives and financing options.

More than 550 financial establishments have pledged, as participants in the Glasgow Financial Alliance for Net Zero (GFANZ), to support the transition to net zero by 2050. Numerous European banks have engaged in ventures like the NZBA. Such voluntary commitments are made on a best-efforts basis and rely for their success on the cooperation of banks, their clients and other stakeholders. In this context, the EU Taxonomy is used as a reference framework to provide benchmarks and guidelines to support credit institutions' business with carbon-intensive industries. The EU Taxonomy definition of transition activities is used to develop the credit institutions' transition risk management and finance strategies and provides a key reference framework for establishing net zero commitments in banks' credit and commercial processes.

A step-by-step approach is described below, which summarises best practice as applied by the six banks. Based on the identified practices, the common approach to identify transition finance practices addresses transition plan mapping, engagement with clients, risk management, and incentives and financing options.

Step 1: Transition plan mapping:

The first step for banks to deliver on their entity-level net zero targets is an assessment of their clients' transition plans. To do so, they have developed dedicated transition plan assessment tools to map (identify, track and record) these plans, in centralised systems. These tools are not intended to create transition plans for clients nor provide in-depth technical advice on these plans, but to investigate alignment between the client's transition plan and the bank's own transition pathway towards net zero, to create inputs for the banks' climate transition risk management systems.

Below are some examples of how banks set up transition plan mapping tools, with the support of internal resources.

Ingredient 1 – Surveys

Surveys can prove invaluable to banks when evaluating clients' transition plans. Well-designed surveys can provide comprehensive insights into clients' current sustainability practices, future goals and challenges. They can illuminate specific areas where clients may require financial or advisory support to align with their net zero targets effectively. Moreover, surveys provide a structured platform for clients to articulate their intentions, allowing banks to tailor their assistance precisely. This data-driven approach enables banks to align their offerings with clients' needs, fostering collaboration and enhancing the likelihood of successful net zero transitions.

One of the banks contributing to this market practice has developed a client transition plan assessment tool designed to chart the trajectory of its clients towards achieving net zero. It comprises a set of multiple-choice questions based on the ESRS E1-1 (16) reporting standard for transition plans as well as various other reporting frameworks. A transition plan in accordance with ESRS E1-1 (16) has 10 elements, as listed below. One of the important elements is the financing plan behind the transition. Another part is the impact of the plan on taxonomy alignment of the company's revenues, capex and opex. To develop this survey, the bank employed a sector-agnostic methodology. The data is collected as much as possible from public sources and external data providers. If necessary, clients are approached by the relationship manager. Each client is assigned a quality score for the transition plan, which is approved by the relationship manager. The score is an input for the bank's risk management and commercial processes. The bank's risk appetite framework sets limits on the exposure to clients with low-quality climate transition plans. In the credit approval committee, the client's climate transition plan score forms part of the approval process. The information on the financing needs of the transition for part of the commercial dialogue with the client. This financing need may be broader than loans and may lead to various product offerings or advisory services.

The survey is built on the elements from ESRS E-1 (16), set out in The following list:

- 16 (a) GHG emission reduction targets limiting global waming to 1.5° C
- 16 (b) Decarbonisation levers indentified and key actions planned
- 16 (c) Financial resources supporting the implementation of the transition plan
- 16 (d) Locked-in GHG emissions from key assets and products (*stranded assets*)
- 16 (e) the impact of the plan on EU taxonomy alignment (revenues, CapEx, OpEx, CapEx plans) of the company
- 16 (f) CapEx related to coal, oil and gas-related economic activities
- 16 (g) Disclosure whether the undertaking is excluded from the EU Paris-aligned Benchmarks
- 16 (h). how transition plan is embedded in overall business strategy and financial planning
- 16 (i) Whether the transition plan is approved by the administrative, management and supervisory bodies
- 16 (j) Progress in implementing the announced transition plan

Another approach to such surveys involves measuring the client's performance across the four alternative pillars below. This alternative approach focuses only on a limited number of elements in ESRS E1-1 (16)

1. Targets: Quality and ambition of quantitative targets to reduce GHG emissions
2. Action plan: Depth of decarbonization strategy to achieve GHG emissions reduction targets
3. Disclosure: Transparency on GHG emissions reporting across relevant scopes
4. Governance: Management oversight and governance of transition strategy

Essentially, these assessments are based on company disclosures with respect to their climate transition plans. The key difference with other environmental disclosures is that these are forward-looking. A company that only publishes GHG emissions data (which is backward-looking), would not get a good score in these assessments. In assessing clients' transition readiness, banks adopt comprehensive approaches that encompass factors beyond CO_2 emissions, namely management statements, sustainable product development strategies, metrics related to the use of renewable energy, forecasted capex over the next five years, and current and future alignment with the Taxonomy.

Ingredient 2 – Scoring

The outcome of the surveys above are used to score clients, and to categorise them into colours, tiers or groups based on their transition plans. This can significantly enhance a bank's assessment process. This approach offers a structured and objective framework to evaluate clients' varying degrees of transition willingness and preparedness. Assigning colours, tiers or groups can help banks prioritise engagement efforts and facilitates tailored guidance, as clients within the same colour, tier or group often share similar transition needs and challenges. Furthermore, scoring promotes transparency and accountability, encouraging clients to improve their plans to achieve scores.

To enhance alignment between their clients' transition pathways and their own, European banks have designed methods for assessing clients' transition readiness. The assessment of client alignment allows, in turn, an assessment of the banks' own alignment or misalignment. The outcome of these two steps allows the categorisation of clients into tiers according to their degree of alignment and quality of the transition plan, as per Table 1.

Tier	Client climate score	Above/below banks 2023 CO_2 threshold?	Above/below banks 2030 CO_2 threshold?	GHG emissions profile aligned with banks' pathways?	Quality of climate transition Plan
1	Leader	Below	Below	Fully aligned	Positive
2	**Strong**	**Below**	**Below**	**Fully aligned**	**Improvement required**
		Above	Below	Partially aligned	Positive
		Below	**Above**	**Partially aligned**	**Positive**
3	Moderate	Above	Below	Partially aligned	Positive
		Below	**Above**	**Partially aligned**	**Improvement required**
		Below	Below	Not aligned	Positive
		Below	**Below**	**Not aligned**	**Improvement required**
4	Weak			Not aligned	Negative

Table 1: Tier-based climate classification based on alignment with the banks' pathway and the quality of the clients' transition plan

Another example of a transition plan scoring used by a bank is shown below. The score shows to what extent a client has a plan encompasses all requirements of ESRS E1-1 (16). 'Complete' means that most of the 10 elements are reasonably covered in the client's plan, which means there are, for example, targets and levers defined and a financing plan is in place. 'Partial ' means that some elements of a good plan are missing. For example, there is no financing plan or no Taxonomy-alignment statement. 'Committed' means that there is an ambition to be net zero on the website or in the annual report, and there may be some targets, but in most cases, the levers and

financing plan are not disclosed and unknown. In this approach, the plan of the client it is not benchmarked against a pathway that the bank has set for a certain sector. Under ESRS E1-1 (16), the requirement is that the target is to limit global warming to 1.5°C.

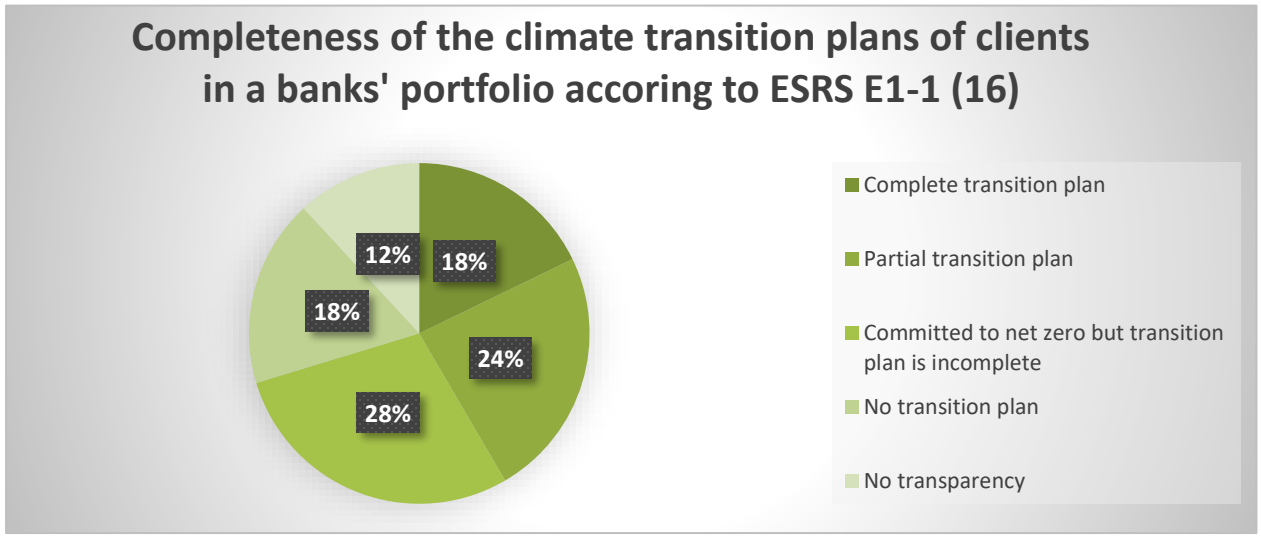


Figure *1*: Score expressing to what extent a client has a transition plan that meets all requirements of ESRS E1-1 (16)

Step 2: Climate transition risk management with different commercial and risk actions

The assessment of the quality of the climate transition plan feeds into climate risk management within the bank's sustainable finance framework. With the dual objectives of encouraging clients towards net zero commitments and achieving net zero status itself, the bank's overarching strategy integrates these objectives within its risk management framework.

The client transition plan scores are grouped (poor, moderate, strong, advanced) and translated into 10 climate transition risk levels based on financial information. This transition risk level indicator plays a pivotal role in gauging the effectiveness of clients' transition plans, enabling the bank to effectively manage and navigate transition risks across its portfolio. Different business outcomes depend on the risk assessment, including increasing the business with clients that have good transition plans (advanced, strong), and risk mitigation measures for clients with poor transition risk plans (weak).

In another bank both readiness and willingness scores are input for a climate transition risk score. The climate transition risk score includes:

- the inherent, present climate risk, to differentiate clients in a sector based on specific elements, such as emissions intensity (low/medium/high);
- the risk that the client is financially able to transition, and whether the client's financial position is strong enough to make the necessary investments in the financing plan (low/medium/high);
- the willingness to transition, which is concluded from the completeness of the transition plan. The numeric completeness score is translated into a simple risk score (low/medium/high);

- rhe ability and willingness to transition override the inherent risk. The combined end result of the three risks is the residual climate transition low, medium or high risk.

Step 3: Engagement with clients

Climate transition risk management also leads to engagement. If the client does not have a good transition plan, then the bank can take risk measures, such as limiting exposure, limiting the maturity of loans, or setting risk appetite limits for a whole sector or for clients that have a low climate transition plan score. Engaging closely with clients can be a strategic cornerstone for banks striving to meet their transition finance and net zero targets. By fostering open and collaborative dialogue, banks can gain insights into their clients' circumstances, sustainability goals and challenges. This enables banks to tailor financial solutions and advisory services that precisely match their clients' needs, and which effectively align with their transition plans. This approach fosters transparency, ensures informed decision-making and minimises uncertainties, ultimately enhancing the success of clients' transition journeys and reducing associated risks. In addition, a strong client-bank partnership can help identify potential investment opportunities that promote sustainable growth. By working hand-in-hand with clients, banks can drive impactful change, contributing to the broader mission of achieving net zero emissions. The bank needs to engage with the client to make sure bank and client are aligned over time.

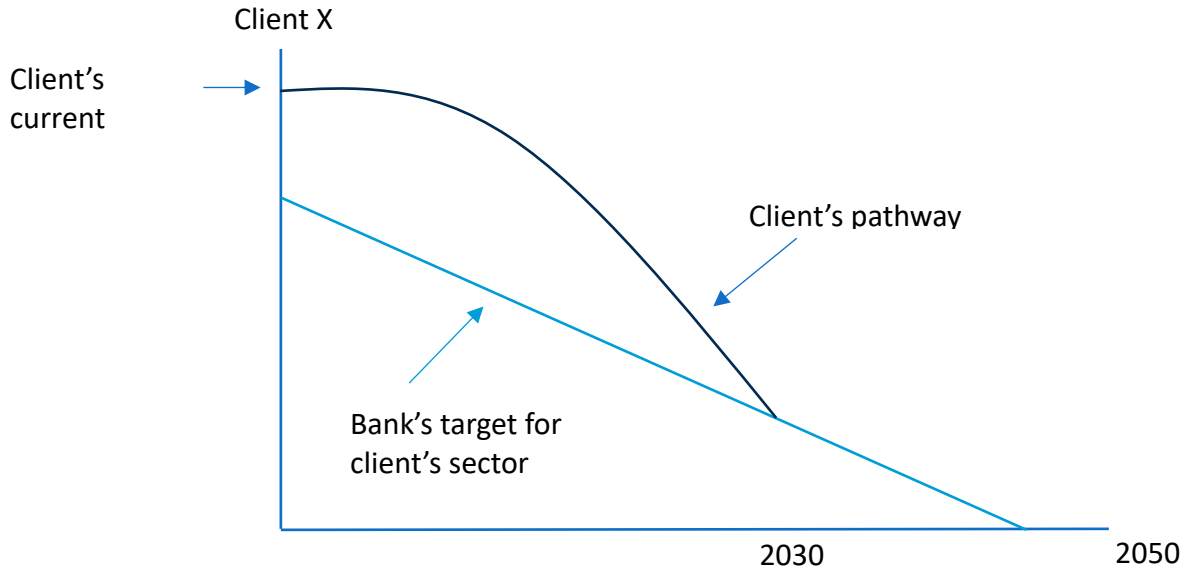


Figure 2: A dynamic engagement pathway

Banks that use this type of engagement strategy usually focus on high-emitting clients, to discuss assessment outcomes and address data gaps to identify opportunities to support clients' transition plans e.g., with financing. The methods involved might include discussion and agreement on commitments, follow-up and corrective actions, and performance monitoring and timelines, as illustrated in the following example.

One bank has introduced a comprehensive engagement strategy centred around climate risk and net zero objectives. Within this framework, the bank focuses on integrating climate risk assessment methods inspired by the European Central Bank's (ECB) ESG risk management practices for financial institutions. The primary intent is to conduct a meticulous readiness assessment by evaluating the client's level of preparedness in relation to climate risk and the net zero transition.

Engaging in ongoing dialogue with clients can help banks establish robust transition finance strategies. Such interactions go beyond transactional relationships, offering a dynamic platform to fine-tune the alignment between the client's transition strategy and the bank's trajectory towards net zero. This practice can help banks meet their sustainability targets, improve risk management, and provide opportunities for business development and investment.

Incorporating target setting into the engagement process can offer substantial benefits for banks and clients. By collaboratively defining clear and measurable targets, banks and clients can establish a shared roadmap for progress. This approach enables banks to proactively identify potential risks and challenges associated with clients' transition journeys.

Target setting promotes accountability, and can help banks can offer more tailored support and resources to assist clients in meeting these targets. Ultimately, this approach fosters a stronger partnership between banks and clients, driving collective efforts towards the net zero transition. Furthermore, this method enhances risk mitigation by promoting transparent communication between banks and clients, fostering a mutual understanding of expectations and progress. Target setting also enables banks to allocate resources more efficiently, prioritise engagements and offer tailored support to clients with varying levels of willingness and readiness.

One bank, after becoming a member of the NZBA, enacted such an approach. Its methodology entailed singling out three high-risk sectors – automotives, oil and gas, and power generation – and establishing specific decarbonisation targets with their clients. This target-oriented process is triggered when the following conditions are met:

- When transactions involve counterparties belonging to the aforementioned hard-to-abate sectors
- When transactions necessitate clearance from the group credit committee (for transactions exceeding €75 million of risk-weighted assets).
- When transactions are more than five years in duration
- When a counterparty's ESG score falls below the sector average for one of its E, S or G components, as determined by both external ratings and internal analysis.

Once this process is triggered, the bank embarks on a thorough evaluation of the company's transition plan. This analysis serves to screen the company's decarbonisation strategy and pinpoint potential warning signs that could impact credit decisions. It considers three dimensions:

- GHG reductions: This involves examining the company's GHG emissions and targets by benchmarking them against peers' emissions and evaluating targets against climate scenarios and the bank's internal objectives, which are aligned with the NZBA commitment.
- Technical robustness: The bank scrutinises the company's disclosed reduction actions and decarbonisation strategy. This entails mapping the counterparty's actions against core decarbonisation levers, spanning its primary activities (upstream to downstream) and assessing the strategy against International Energy Agency guidelines and industry trends.
- Economic impact: The bank undertakes a multifaceted evaluation, comparing the client's investment benchmarks against its peers, estimating the investment required to meet the bank's internal GHG reduction targets, assessing the impact of any emissions trading systems and carbon taxes within specific regions, and an assessment of the technical and financial feasibility of its emissions reduction actions.

Step 4: Incentives and financing options

In order to align a clients' transition finance strategy and the bank's goals, the bank can, among other things, use labelled financing options and incentives. For instance, banks use green loans with the EU Taxonomy as a foundational framework. This framework can help direct the credit strategies of financial institutions operating within carbon-intensive sectors. By aligning their lending with the EU Taxonomy's definition of transition activities, banks can formulate transition finance strategies. This approach can provide a point of reference for embedding net zero objectives within banks' credit and commercial processes.

Example 1 – Use of the EU Taxonomy for green lending

As an example, one bank has drafted a global policy (ESG product guidelines) to provide precise rules and methodologies for the application and evaluation of the Taxonomy Eligibility Criteria. When the bank is asked to finance a green project, it uses the global policy to verify if the project:

- is eligible according to the criteria listed in the guidelines (which provide a list of Taxonomy-eligible activities, alongside the list of the related NACE economic classification codes)
- fulfils at least one of the Taxonomy's criteria for substantial contribution to climate mitigation or to climate adaptation. The Taxonomy's do no significant harm (DNSH) and minimum safeguards criteria are not used.

Furthermore, to streamline the eligibility verification, simplified criteria for some activities are provided and a process for the verification of eligibility criteria is set. Each year, the bank provides each relationship manager with industry credit risk strategies and a related set of steering signals. These steering signals include dedicated guidelines to ensure that this sector lending evolves consistently with the bank's net zero commitments and which aim to identify companies and transactions deserving support due to the positive environmental impact they have. The bank has also developed an internal survey tool it is rolling out gradually to all countries, which is aligned with the EU Taxonomy. The tool reveals whether colleagues apply the substantial contribution, DNSH and minimum safeguards criteria to their financing of large enterprises, corporates and retail customers.

Example 2 – Green Weighting Factor

Another bank, also a member of the NZBA, has developed a green weighting factor (GWF). The GWF is an internal mechanism to guide capital allocation depending on to the degree of climate and environmental performance of each financing. It was designed to actively manage and steer origination & balance sheet's transition with a long-term objective: align the climate trajectory of bank's balance sheet with Paris Agreement objectives (+1.5°C trajectory). It is fully integrated into the bank's internal credit processes and IT systems as a mandatory and systematic step ahead of credit decisions, and helps to enhance the bank's strategic dialogue with its clients.

It should be noted that the GWF is not a go/no-go decision process: the bank considers all activities as eligible for financing, although the most polluting are strongly penalised in terms of their capital allocation. and underpins a system of incentives and target setting Targets are set internally for each business line to set the bank's financing on a trajectory consistent with the objectives of the Paris Agreement.

It is divided into two parts: 'known use-of-proceeds' transactions are those where the bank knows what is being funded (an asset or project financing); and 'general purpose funding' are those where financing is for general corporate use. For General Corporate Purpose transactions, see Figure 10. For General Corporate Purpose transactions the score is a combination of a client climate score and a client environmental score. The climate score is based on carbon intensity (Scopes 1 to 3 and avoided emissions) as well as a forward-looking evaluation of the company's climate transition plan. The 7 point score includes 'always significantly harmful' activities and activities 'requiring an urgent transition'. The environmental score shows the impact of the client on their most material environmental issues

For 'known use-of-proceeds' the evaluation starts with a score reflecting the absolute climate impact of the specific sector. The score is adjusted according to the specifics of the actual asset, such as location, technology choices, impact mitigation and other material environmental externalities (using a decision tree). These decision trees use a climate change-centric bonus/malus system, adjusted by the most material environmental externalities: biodiversity, water, pollution and waste. This type of taxonomy uses specific closed questions to enable the bank to evaluate the environmental impact of a specific object being financed. This is different to the EU Taxonomy, which assesses activities against each objective. Depending on the absolute impact, the loan is assigned a specific GWF.

What is the outcome?

Many financial institutions aim to support their clients' transition plans while simultaneously effectively managing the associated climate transition risks. In pursuit of this goal, a spectrum of strategies have been developed. A frequently deployed approach involves the strategic use of the EU Sustainable Finance framework, to integrate incentives for clients' transitions through the sale of financial products. This two-pronged strategy not only serves commercial interests but also forms a vital part of transition risk management.

In a parallel vein, banks are assessing clients' transition plans with reference to their own net zero commitments, with a view to aligning clients' plans with banks' own net zero pathways. This strategic synergy can enhance banks' overall transition evaluations while grounding them in established sustainability criteria. Moreover, these institutions are identifying and scrutinising transition plans and targets, notably within high-risk sectors, spotlighting potential vulnerabilities in pursuit of comprehensive risk management. This assessment process operates within the framework of the EU Taxonomy, further underpinning its credibility and relevance.

Meanwhile, client engagement strategies are emerging to help mitigate transition risks. These support clients' transitions and enable engagement strategies for those not yet committed to the transition journey. The development and utilisation of assessment frameworks for clients' transition plans also bear the imprint of the EU Sustainable Finance framework, contributing not only to banks' transition assessments but also amplifying risk mitigation efforts. Lastly, banks are creating dynamic tools to help them steer transition efforts. In line with the broader EU Sustainable Finance framework, these tools align bank balance sheets with the goals of the Paris Agreement, helping to foster a climate-resilient future.

Data and methodology used to compile the market practice	
Data and Methodology	Data and methodologies used include: • Sector specific sustainability data, systems and providers • Data provided by clients, including through surveys built on the principles of the EU Sustainable Finance framework • Data related to Scope 3 emissions targets for oil and gas companies (reflecting the need to progressively phase out fossil fuels) and emission intensity metrics for other sectors, where substantial investment is needed to fund transition • Data produced internally including ESG scoring, data related to general purpose financing and use of proceeds • Taxonomy criteria, as well as other market-based taxonomies • Internal instruments such as colour ratings, transition indicators, decision trees, environmental scores and client climate scores • Analysis of clients' GHG emissions and targets, reduction actions, decarbonisation strategies and disclosed investments • Evaluation of transition risk and portfolio alignment • Principles of transition finance initiatives, such as GFANZ and TPI.

Did you encounter any obstacles or gaps? If so, please describe.

Transition finance is essential for the achievement of the EU objectives. Given the need for solutions at entity-level, transition plans are an essential step forward in the right direction. However, this still needs to be complemented by science-based transition pathways and roadmaps against which it is possible to measure the progress of a company in achieving its targets. It will be fundamental that transition pathways and roadmaps cater to geographical and sectoral specificities. This will facilitate banks' engagement with clients and provide a benchmark to measure the credibility of a transition plan.

2.5 Securitisation

The market practices combine information provided to the Platform on Sustainable Finance by a German bank. The main topics covered relate to the securitisation of retail assets.

Objective of the market practice

The market practice presents an example of the use of the Taxonomy for green securitisations (asset-backed securities, or ABSs) and covered loans. The transactions were not designed as Taxonomy-aligned but the Taxonomy was used to set their sustainability criteria, helping to increase their appeal to sustainability-minded investors.

Please provide further description and details on the market practice

Securitisation is the process by which banks and other credit institutions package various forms of debt (residential mortgages, commercial mortgages, auto loans, or credit card debt obligations) into securities and then sell them to investors. It allows banks to transfer the risk of some loans to other banks or long-term investors such as insurance companies and asset managers. Securitisation transactions are arranged by banks for the bank itself (loans on the balance sheet of the bank) or for external third parties (like car leasing or credit card companies).

The asset class enables investors to invest directly in sustainable assets rather than investing indirectly via an investment in the bank, leasing or credit card company that originates the debt. They get direct exposure to these risks rather than exposure to the company. The return and maturity of the asset-backed securities depend directly upon the performances and the prepayments of the underlying loans. From a sustainable development point of view, this can be beneficial.

Securitisation issuance programmes are executed by banks for several purposes: balance sheet steering transactions, liquidity and funding, contingency planning or as capital relief transactions. As the balance sheet risks are strongly related, they need continuous management by their asset and liability risk management (ALM) departments. Risk management means selecting the assets mobilised in the securitisation or covered bonds pool, keeping oversight of asset pools and sustaining high quality reporting for asset encumbrance.

Since the pool of assets is essentially sold to investors, the characteristics of the assets sold is precisely defined and it must be guaranteed that all assets in the pool must also meet those criteria. Any potential deviations are also precisely described, and if an asset does not comply any more with the sustainability criteria then it may be necessary to replace it. This means that sustainable assets must be identified on the balance sheet of the bank or the company, based on precisely defined criteria (such as EU Taxonomy criteria), and it must be possible to monitor and report on the quality of the assets, even monthly. Supervisors who approve the prospectus will carefully look at green (including taxonomy alignment) claims and investor expectations with respect to such claims. From a sustainable product development of view, this means that all data challenges that banks and debt issuing companies have in sustainability come together in a securitisation.

Securitisation case study 1: green residential mortgage-backed securities

A European bank wanted to give the opportunity to investors to buy into a green residential mortgage portfolio via green residential mortgage-backed securities (RMBSs). The bank was offering a sustainable investment opportunity to bondholders who would otherwise invest in non-green securities. It also aims to facilitate and finance society's shift to a low-carbon future with more sustainable residential housing. Green RMBSs are the perfect instrument for this strategy. They diversify the banks' funding sources and investor base, helping it obtain funding under different conditions and to better weather volatile markets. Investors appreciate the green angle, which is still scarce in RMBS transactions. Several bank departments were involved, including the mortgage department, the sustainability department, group treasury and several finance and risk teams.

The RMBSs were issued under the bank's green bond framework and strict criteria ensured the mortgages in the pool only finance properties that meet the highest energy standards. All mortgages in the pool were for energy-efficient homes with at least an 'A' energy rating or near-zero emissions, in line with the EU Taxonomy. In addition, any mortgages that are repaid before maturity will be replaced with new ones with similar green characteristics.

The transaction has a double-layered approach, with green collateral and green use of proceeds. The International Capital Markets Association (ICMA) defines the transaction as a secured green collateral bond. However, market participants have their own views on what this means. The full green collateral is easy to interpret, but the green use of proceeds has some ambiguity around it. Typically, the bond proceeds are used to purchase the green collateral pool. There are two views on this method. On the one hand, a market participant could state that this double-counts the green collateral and green use of proceeds. However, this was a revolving transaction and was also forward-looking in terms of its use of proceeds. For static transactions, this is a different story. On the other hand, one could question what "proceeds" really means. Is a purchase of existing collateral the most ideal approach? Or could one demand that the proceeds be used for origination of green collateral – new green mortgages – in future? This second approach is the most impactful, but it involves a lot of legal and operational hurdles. Committing to prospective origination in a rapidly changing environment is challenging and is therefore currently seen as unrealistic.

The transaction demonstrated there is currently a lively debate between green credentials and demonstrated credit performance. Green collateral (e.g., mortgage loans) tends to be a more recent phenomenon than non-green collateral. This means that there is little track record of borrowers to demonstrate strong credit performance. Many participants expect green collateral to perform better than non-green collateral (given the lower energy costs of energy efficient homes), but one should be wary of falling victim to confirmation bias. More data needs to be available to demonstrate credit performance of green collateral. Several market participants are cautious with their decisions, given this limited performance insight, but in general it is perceived as credit neutral (i.e., the perceived benefits offset the limited track record).

Data availability is key for identifying green collateral, however data availability remains an issue as only a few jurisdictions and originators make data available for the required assessments. However, even when it is available, the data isn't always consistent. In the transaction in the case study, the originator was strongly committed to identifying suspect ESG records and removing them from the transaction. Greenwashing claims can arise when suspected records are used; these cannot be ignored from an assurance perspective. This also means that the available green collateral base for future issuances is scarce and only a few originators are available to provide recurring secured green collateral bond investment opportunities. Also, for some parts of the EU Taxonomy (and therefore the EU Green Bond Standard) no data or models are in place, which further complicates things. The transaction clearly defined what assurances can be given and what can't be assured, which was perceived as a transparent and well-received approach by market participants. It is perceived as raising the bar in ESG disclosures.

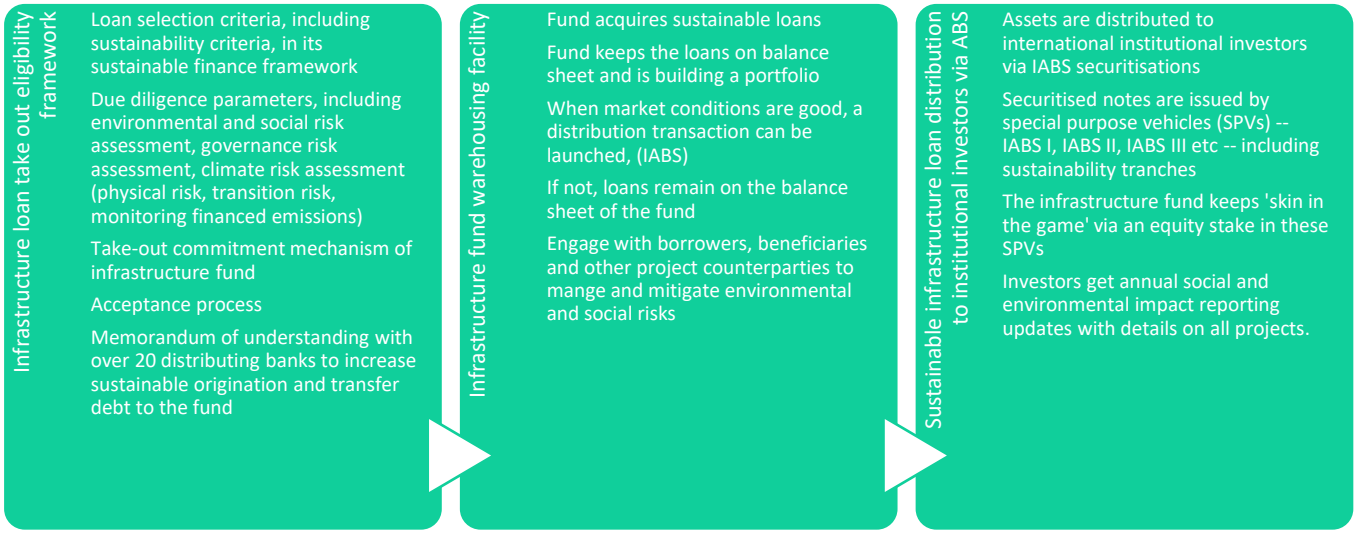
The transaction provided granular ESG disclosures to investors, through various formats:

- The prospectus set out a lot of information on the green collateral and use of proceeds, as well as on the general market and regulatory dynamics.
- This was supplemented by an investor presentation, providing a more digestible source for investors to make their required analyses. It also included several climate risk assessments of the green collateral pool, which have not yet been seen in other comparable transactions. The presentation also included what information was and wasn't assured.
- A second-party opinion was made available, which will be updated annually to account for the revolving nature of this transaction.
- An impact report was also published, showing the carbon emissions of the green collateral pool (including comparisons with a reference group) and the green bond's financed emissions. This will be updated annually.
- Finally, a monthly investor report was provided, showing energy performance certificate (EPC) labels, primary energy demand (PED) data, construction or building year as well as EPC label-issuance year (the latter is not often provided) and stratification tables.

Overall, the detail provided was well-received by investors.

Securitisation case study 2: Sustainable infrastructure asset-backed securitisation

This sustainable infrastructure asset-backed securitisation (IABS) transaction addressed the infrastructure financing gap by facilitating the mobilisation of private institutional capital into infrastructure financing markets, driven by issuance of IABSs. The issuer was a dedicated infrastructure fund. The financing structure was as follows:



The proceeds of the sustainability tranches were fully allocated to a portfolio of eligible green and social loans (following ICMA) that meet criteria within the issuers' sustainable finance framework. This framework is part of the issuer's infrastructure loan take-out eligibility framework. The framework was reviewed by an external SPO provider, with the SPO, the framework and the impact report all made public. The SPO provider was not asked to undertake an EU Taxonomy alignment assessment.

The loans backing these ABS transactions were project finance loans acquired from various banks. Environmental categories included clean transportation (rail and zero-tailpipe vehicles), green hydrogen, biofuel production, waste recycling, renewables, education, telecommunications, energy efficient datacentres, drinking water assets and smart metering infrastructure. The sustainable assets were located on various continents. The loans provided by the banks had to meet the funds' sustainability criteria, but it was not a requirement that they be EU Taxonomy-aligned. One of the participating banks which originated the loans, however, does a check against substantial contribution criteria as part of the loan origination process. The funds' framework contains sustainable loan selection criteria, due diligence parameters, including environmental and social risk assessment, governance risk assessment, climate risk assessment, a take-out commitment mechanism and acceptance tests. The infrastructure fund's environmental and social risk assessment includes an exclusion list, to ensure that investors are not investing in harmful activities (meeting the do no significant harm (DNSH) criteria). The infrastructure fund's climate risk assessment consists of a physical and a transition climate risk assessment. The fund is also monitoring financed emissions.

Securitisation case study 3: A green covered loan facility for SMEs

A corporate car leasing company had a green covered loan in place and wanted to replace the facility with an (initially bilateral privately placed) green securitisation. The bank planned to incorporate green language directly into the transaction documents, as time did not allow for a fully-fledged green financing framework to be put in place. The green covered loan transaction structure can be described as in line with market standards, with the addition that the bank created the necessary (legal) basis to label the transaction as green use-of-proceeds. The company planned to put in place a public green ABS finance framework once the private transaction closed.

The green covered loan transaction was secured by a pool of lease receivables, which is typical for an ABS. These lease receivables are against SME customers of the car leasing company, and the underlying assets are defined as green, e.g., various types of zero tailpipe vehicles and bikes and their charging infrastructure.
The sustainability-related definitions and clauses in the documentation for the green covered loan were similar to the wording used in the ABS documents.
The green covered loan had to be in accordance with the Green Loan Principles and fall under the eligible green project category of clean transportation ('eligible green project') and could only be used to finance or refinance the green assets. Accordingly, and subject to ongoing adherence to the Green Loan Principles at the lender's sole discretion, the green covered loan was considered a green loan, as described in the Green Loan Principles. Green assets means assets of zero (tailpipe) emissions vehicles and related charging infrastructure. Asset types that qualify as green assets are:

(a) fully electric buses (i.e., no hybrids);
(b) fully electric trucks (i.e., no hybrids);
(c) fully electric passenger vehicles (i.e., no hybrids);
(d) electric scooters;
(e) charging infrastructure and stations for electric vehicles; and
(f) electric and traditional bikes.

A use-of-proceeds clause ensures that the borrower was to use the loan solely for the purpose of funding the acquisition of green assets by refinancing a portfolio of eligible equipment lease and hire purchase receivables to be originated by the borrower, and stemming from activities that are aligned with the definition of green assets (as per the EU Taxonomy technical screening criteria).

A collateralisation clause required the borrower to grant as security for the loan a portfolio of receivables meeting the eligibility criteria and the portfolio criteria and the criteria relating to green assets (the 'cover pool'), to be identified from time to time in a report to be provided by the Borrower. The borrower had the right to add or remove receivables to the cover pool as long as the added receivables qualify as eligible green assets in order to ensure ongoing compliance, including the satisfactory completion of the monthly report, in accordance with the terms of the trust agreement and always subject to compliance with the eligibility criteria and the portfolio criteria.

What is the outcome?

The transactions followed extensive pre-deal investor engagement processes, including a number of changes in transaction structure. There was already significant investor interest built ahead of announcement. Major institutional investors were willing to pay a premium for bonds backed by sustainable assets, but there were also investors who were not sure about the risk versus a normal transaction where green and non-green assets are mixed.

Data and methodology used to compile the market practice

Data and Methodology	Project loan-related sustainability data as well as external sustainability data on the projects, including EPC data for the mortgage loans. The impact metrics were estimated based on available actual data or proxy data, where actual data was unavailable. Data has been annualised for projects where full-year data is not available. The attribution of impacts was determined using the approach set out in the Global GHG Accounting and Reporting Standard. This approach is based on the GHG Protocol and allocates impacts based on the investor's outstanding commitment amount as a proportion of the total project's assets.
Internal resources	• Subject matter experts from the various loan divisions (identifying the sustainable loans) • ICT staff (to run loan database queries) • Debt capital markets staff (managing the process).

External resources	• SPO provider to provide an opinion on the sustainable finance framework • The impact metrics were prepared by independent consulting firm • The assurance for the allocation report was conducted by an accountant.

2.6 Sustainability Guarantee Products

The market practices combine information provided to the Platform on Sustainable Finance by a supranational financial institution. The main topics covered relate to transition finance.

Objective of the market practice

This mark practice study shows how the EU Taxonomy informed the design of a sustainability guarantee offered by a public financial institution. This market practice aims to showcase how InvestEU integrates the EU Taxonomy and does not intend to showcase how InvestEU can be used as an alternative framework to the EU Taxonomy.

The unfunded portfolio guarantee product, backed by the European Commission InvestEU Programme, is designed to contribute to climate action and environmental sustainability objectives, in addition to supporting sustainable enterprises and, to a limited extent, social objectives. Through providing portfolio guarantees to financial intermediaries – including commercial banks, national promotional banks and institutions, guarantee institutions, microfinance institutions and alternative lenders – the sustainability guarantee supports debt financing solutions for European small and medium-sized enterprises (SMEs), small and mid-cap companies (with up to 500 full-time equivalent employees) and, to a limited extent, natural persons and housing associations, whose investments can contribute to the EU's climate goals.

The objective of the case study is to show how the EU Taxonomy criteria has been used by the European Commission for SME finance in a proportionate manner to determine whether an economic activity is environmentally sustainable, including with the principle of do no significant harm. The guarantee's product eligibility criteria were designed in the spirit of the EU Taxonomy, as required by the InvestEU Programme Regulation and its adopted guidance documents.

Please provide further description and details on the market practice

The preamble to Regulation 2021/523, which establishes the InvestEU Programme, makes reference to the EU Taxonomy Regulation in:

- "the contribution of the InvestEU Fund to the achievement of the climate target will be tracked through a Union climate tracking system to be developed by the Commission in cooperation with potential implementing partners, appropriately using the criteria established by the EU Taxonomy Regulation for determining whether an economic activity is environmentally sustainable. the investment projects that receive substantial Union support, in particular in the area of infrastructure, should be screened by the implementing partner to determine whether they have an environmental, climate or social impact. Investment projects that have such an impact should be subject to sustainability proofing in accordance with guidance that should be developed by the Commission in close cooperation with potential implementing partners under the InvestEU Programme, using the criteria established by the EU Taxonomy Regulation, including the principle of 'do no significant harm', and consistent with the guidance developed for other programmes of the Union. Consistent with the principle of proportionality, such guidance should include adequate provisions for avoiding undue administrative burdens, and projects below a certain size as to be defined in the guidance should be excluded from the sustainability proofing.

In accordance with the InvestEU Regulation, the European Commission used the Technical Expert Group (TEG) report and the EU Taxonomy's first Climate Delegated Act's Annex 1 substantial contribution criteria as inputs to design the InvestEU climate and environment climate tracking guidance. Annex 4 of this guidance document was developed specifically for tracking climate and environmental sustainability finance provided predominantly to SMEs via intermediated financing portfolios of banks, guarantee institutions and fund managers.

The sustainability guarantee product in this case study uses, among other investment criteria, a subset of these activities and criteria adopted by the Commission (with slight updates to some criteria that the Commission subsequently changed following the adoption of the Taxonomy Climate Delegated Act).
In line with the InvestEU Regulation, the Commission further adopted a sustainability proofing guidance, taking into account the EU Taxonomy: Commission Notice – Technical guidance on sustainability proofing for the InvestEU Fund (europa.eu), with chapter 3 of the document specifically dedicated to indirect financing operations.

Following subsequent agreement with the Commission, and in order to comply with the sustainability proofing requirements set out in the sustainability proofing guidance, the following requirements apply to demonstrate no significant harm:

a) For any final recipient transactions whose purpose covers anaerobic digestion of bio-waste, landfill gas capture and utilisation, the final recipient must have in place a monitoring plan for methane leakage.
b) For any final recipient transaction whose purpose covers transport of CO_2 and its underground permanent geological storage, the final recipient must have in place a detailed monitoring plan in line with the provisions of the EU CCS Directive 2009/31/EC and EU ETS Directive 2018/410.
c) For final recipient transactions whose purpose covers projects requiring an environmental impact assessment in accordance with applicable national legislation, the relevant assessments, permits and authorisations required under applicable laws with respect to the project must have been obtained by the final recipient.
d) The final recipient shall comply in all material respects with the national environmental, climate and social regulations to which it is subject.
e) If the final recipient transaction is granted or issued to a final recipient and with the specific purpose of financing the acquisition of a vehicle for the purpose of transport, the final recipient transaction shall not finance any mobile assets dedicated to transport fossil fuels.

For the purpose of the assessment of the eligibility criteria set out in (a), (b), (c), (d) and (e) above, the financial intermediary may rely on representations of the final recipient.

In addition, the implementing partner must assess within the due diligence process the financial institution's environmental, climate and social risk management procedures and its capacity to screen, assess and manage environmental, climate and social risks associated with its business activity, including the presence of an environmental and social management system. In the case study, this is done by means of an ESG questionnaire used during the selection process. Other provisions and restrictions in the form of restricted sectors and activities apply, to address potential significant impacts that final recipient transactions might have on climate, environment and social dimensions.

The main purpose of the sustainability guarantee is to support the green transition of SMEs, with a limited focus on small- and mid-cap companies, housing associations and natural persons, by covering part of the risks of the green and sustainable loans issued to these final recipients. The product covers investment loans (including related opex), sustainable enterprises defined by certain company-level criteria, and accessibility investments for reducing barriers to disabled people.

The product eligibility criteria which the financial intermediary has to use when determining whether the final recipient transaction qualifies for the guarantee coverage were designed in the spirit of the EU Taxonomy, adapted to the specific needs of the targeted final recipients, and taking into account proportionality considerations, as per the InvestEU Regulation preamble and as seen from the above-mentioned guidance documents adopted by the European Commission and the subsequent product criteria and reporting requirements.

The product eligibility criteria for green investments are based on Annex 4 of the InvestEU climate and environmental tracking guidance, adding limited adjustments from the published Taxonomy Climate Delegated Act to the mitigation section to ensure consistency between the two sustainable finance initiatives.

The Commission's InvestEU climate and environmental tracking guidance and its sustainability proofing guidance were developed during 2020-2021, with final adoption in mid 2021, covering all six Taxonomy environmental objectives, despite the absence at that time of a delegated act focusing on environmental sustainability. The objective was to provide for a framework through which financing could be tracked in terms of its contribution to climate action and environmental sustainability objectives at the time, when signing a financing contract with a financial intermediary (ex-ante) and for later portfolio-level inclusions by the financial intermediary (ex-post).

Compared with the Taxonomy Climate Delegated Act, the InvestEU guidance for intermediated financing is simpler in its wording and clearer to understand for banks, fund managers and final beneficiaries (mostly micro- and SMEs), and more proportionate in terms of the assessment burden for the final recipients and intermediaries.For example, it does not require the assessment of the activity-based DNSH criteria but relies on higher level DNSH principles, as described in the sustainability proofing guidance. Several further simplifications have been made in the drafting of the specific guarantee product eligibility criteria, for example: i) leaving out some criteria that were considered not typical activity among SMEs, and which required additional technical assessment (e.g., bioenergy, energy-intensive industries such as manufacturing of cement, aluminium); ii) grouping criteria of a similar nature together under one single reporting requirement (e.g., renewable energy-related activities); iii) replacing the Taxonomy substantial contribution criteria of the Climate Delegated Act with a shorter and simpler but equivalent criteria (e.g. for research, development and innovation, green data-driven solutions, information and communications technology (ICT), and adaptation).

The guarantee product also goes beyond capex investments and captures sustainable enterprises as part of its eligibility criteria. This is intended to capture and support companies that are considered sustainable from an entity perspective. The criteria are based on a predefined list covering whether the business: a) has won clean-tech or "green" prizes and/or a grant or funding from a public support scheme; b) owns clean energy- or climate-related intellectual property rights; c) carries an eco-label; d) generates climate action and environmental- or sustainability-aligned revenues; e) has a sustainable or green business model and impact, incorporated in the enterprise's business model and practices; or f) is an environmentally-certified enterprise.

In addition, the product includes eligibility criteria for accessibility, targeting investments to enhance accessibility of services, products and infrastructure, or that develop assistive technologies, or which are making the organisation and its premises accessible for customers and employees with disabilities and/or impaired function. These loans are not, however, counted towards the climate finance targets of the InvestEU Programme.

What is the outcome?

The product documentation includes relevant conditions, thresholds, minimum reduction levels, certificates and pre-defined lists of compliant operations. A final recipient and/or final recipient transaction that conforms with the relevant provisions of the product document is deemed to meet the product eligibility criteria and is thus eligible for the sustainability guarantee.

The product eligibility criteria focusing on investment loans (including related opex) are grouped into six environmental objectives derived from the Taxonomy and the initial TEG proposal, which are broken down into categories of investments in economic activities which are also derived from the Taxonomy Regulation. These are:

1. **Climate change mitigation**
   - 1.1 Renewable energy: Investments in renewable energy projects, production and/or transmission of renewable energy, electricity storage solutions, renewable heating and/or cooling systems, manufacturing of products, components and machinery for renewable energy
   - 1.2 Green and energy efficient buildings – commercial: Investment in the construction or renovation of commercial buildings resulting in minimum qualifying energy performance or meeting minimum thresholds
   - 1.3 Green and energy efficient buildings – residential: Investments in renovation of residential buildings resulting in minimum qualifying energy performance or meeting minimum thresholds
   - 1.4 Industrial-, commercial- or services-related energy efficiency
   - 1.5 Zero- or low-emission mobility: Investments in low- or zero-emission transport assets, in the renewal and retrofitting of transport assets and infrastructure for zero-emission and clean energy vehicles and vessels
   - 1.6 Green ICT: Developing or adopting green ICT or digital solutions, tools, equipment or applications that enable a decrease in energy consumption and emissions or contribute to climate mitigation objectives.

2. **Climate change adaptation**
   2.1 Climate resilience: Investments that enable higher climate resilience of the company or territory

3. **Transition to a circular economy, waste prevention and recycling**
   3.1 Sustainable use of materials
      3.1.1 Investments that contribute to the circular economy transition, by allowing reduction of primary raw material use and/or higher use of secondary materials compared with existing practice
      3.1.2 Investments in activities that are key to net resource saving through reuse, repair, refurbishment, remanufacturing, repurposing or recycling activities
   3.2 Waste reduction, collection or recovery: Investments in the segregated collection of waste, redundant products, parts, materials and residues to enable high-quality recycling, reuse, recovery and/or valorisation
   3.3 Product as a service, reuse and sharing models that enable circular economy strategies: Products-as-a-service, reuse and sharing models based on, among other things, leasing, pay-per-use, subscription or deposit return schemes, that enable the circular economy
   3.4 Green ICT enabling the circular economy: Investments in development or deployment of tools, applications and services enabling circular economy business models.

4. **Investments related to environmental impact and the sustainable management of natural resources**
   4.1 Water resources: Investments in water resource management and efficiency and related technologies
   4.2 Pollution prevention and control: Investments in reduction, control or prevention of pollutant emissions into air and noise reduction

5 Protection and restoration of biodiversity and ecosystems/nature-based solutions
   5.1 Investments in nature-based solutions or final recipients operating in sectors providing nature-based solutions
   5.2 Investments or enterprises operating or providing services in: Landscape/green spaces restoration and management; green buildings: living green roofs, facades, living green indoor/outdoor walls; sustainable biomaterials for construction (e.g., timber frames) or food preservation (e.g., edible coatings); sustainable tourism and nature-based solutions for health and wellbeing; solutions that improve environmental performance or reduce environmental impacts; advisory services such as urban greening design and planning, landscape architecture or water management; ICT solutions that explicitly aim to contribute to the conservation and protection of biodiversity, ecosystems and the services they provide

6 Agricultural and forestry activities
   6.1 Sustainable forests and other climate mitigation investments
   6.2 Sustainable and organic agricultural or aquacultural practices.

The product document provides for each of these product eligibility criteria a description of how the eligibility assessment for the final recipient transaction should be made, i.e., what kind of information needs to be provided by the final recipient and, for some criteria, the threshold requirements. It also includes details on when the assessment should be made (at signature date or prior to disbursement).

An online support tool was launched to support the implementation of the sustainability guarantee. Financial Intermediaries can use this tool in the implementation of their product and to assess alignment with the criteria.

The financial intermediaries entered into contract with under the sustainability guarantee are required to provide semi-annual reporting on all final recipients. For eligibility criteria linked to renewable energy and energy efficiency, the following should be provided for each final recipient: additional renewable and other safe and sustainable zero- and low-emission energy generation capacity installed (in MW); estimated primary energy savings generated by the projects (in kWh/year); annual GHG emissions reduced or avoided in tonnes of CO_2 equivalent/year; kWh of storage capacity.	
Data and methodology used to compile the market practice	
Data and Methodology	Data ○ InvestEU Programme climate and environmental tracking guidance (link) ○ Technical guidance on sustainability proofing for the InvestEU Fund (Commission Notice – Technical guidance on sustainability proofing for the InvestEU Fund (europa.eu)) ○ The Taxonomy Regulation and Climate Delegated Act Annex 1 substantial contribution criteria ○ An online support tool. Methodology The sustainable guarantee product is established on the basis of the InvestEU Programme guidance and eligibility criteria.
Use of Proxies	The below proxies are used by the InvestEU climate and environmental tracking guidance and partly in the sustainability guarantee product*:* Proxy criteria are used for industrial energy efficiency, as this is not addressed in the Taxonomy but is a typical measure of decarbonisation and resource efficiency implemented by SMEs (energy efficiency and resource efficiency for all sectors of manufacturing, industry, services, and agriculture, unless the company's main activity based on revenues falls in a restricted NACE code, such as high-emitting industries like oil, coal, gas, cement, aluminium, chemicals, plastics in primary form and aviation). The sustainability guarantee's criteria here is for: "Production, installation of products or application of technology that reduce significantly energy consumption/GHG emissions, including investment in replacing existing technology, equipment, machines providing at least a decrease in energy use (kWh) of at least 30% or GHG emission reduction of minimum 30%." To evidence that the loan meets the criteria, the financial intermediary can use the online tool developed for the product or one of the following options: i) other technical documentation, including technical parameters, as applicable; ii) an external ex-ante energy assessment/audit/opinion performed by an independent expert/supplier; iii) internal energy-efficiency plans certified by an internal or external accredited technical expert or certified under an energy management system (e.g., ISO 50001); or iv) an energy (or GHG emission or fuel) ex-ante reduction certified by manufacturers, suppliers or installers. For all options, control of use of funds, together with legal covenants, need to be kept on file. Proxy criteria for the research, development and innovation (9.1, Annex 1of the Taxonomy Climate Delegated Act) Taxonomy substantial contribution. This is significantly shorter and, at the same time, broader in scope, and does not differentiate between technology-readiness levels. It covers: "Research, development and innovation activities that · directly support 'other activities' identified in the InvestEU climate tracking guidance or in the EU Taxonomy as substantially contributing to climate change mitigation; or · support activities with the principal objective of mitigating climate change that are not included because they are new, innovative technologies, applications, practices or solutions that are still far from commercialisation.

	In all cases, activities should aim to promote substantially lower GHG emissions compared with current practices, except where the current practice is already low in carbon and activities focus on development of equally low- or lower-emission technologies, services or solutions with new advantages, such as lower cost or better usability. Activities that directly support exploration, extraction, processing or transportation of fossil fuels, or fossil fuel power generation (with the exception of technologies for carbon capture and storage), cannot be considered." <u>Proxy criteria for green data-driven solutions (8.2, Annex 1 of the Taxonomy Climate Delegated Act) Taxonomy substantial contribution. Allowing for the criteria to work without the requirement to perform a full life cycle assessment.</u> "The ICT solutions are predominantly used for the provision of data and analytics enabling substantial GHG emissions reductions or the ICT solutions demonstrate life cycle GHG emissions savings compared to the best performing alternative technology/ solution available on the market. Life cycle GHG emissions and net emissions are calculated using the Commission Recommendation 2013/179/EU or, alternatively, using ETSI ES 203 19931, ISO 14067:2018 or ISO 14064-2:2018" <u>Proxy criteria for the Manufacture of other low-carbon technologies (3.6, Annex 1 of the Taxonomy Climate Delegated Act) Taxonomy substantial contribution.</u> "Manufacturing and investment in other low carbon technologies not included elsewhere in the InvestEU Climate & Environmental Tracking Guidance: Technologies and products that result in substantial GHG emission reductions. This covers production of renewable and other forms of low-carbon hydrogen; capture of landfill gas; carbon capture and storage." Other examples include: electric, hybrid and other disruptive propulsion technologies. There is no detailed requirement for life cycle analysis nor for third-party verification. <u>Proxy criteria for Professional services related to energy performance of buildings (9.3, Annex 1 of the Taxonomy Climate Delegated Act) Taxonomy substantial contribution.</u> This allows for wider technical assistance and technical services supporting climate mitigation beyond only buildings. "Technical assistance and services should directly support 'other activities' that comply with the climate change mitigation criteria. Examples include design services that support the development of renewable energy projects or technical services that support the deployment of electric vehicle charging stations." <u>Proxy criteria for climate change adaptation and all other four remaining environmental objectives not yet adopted by the Commission,</u> stemming from the InvestEU climate and environment tracking guidance. As an overall proxy for determining a sustainable enterprise, the product also includes a list of criteria which account for a 40% climate marker instead of 100%. Green investments in climate change mitigation and adaptation count for 100%, with all environmental sustainability and agriculture and bioeconomy activities counts only 40% as climate finance. These are: a) has won clean-tech or "green" prizes and/or a grant or funding from a public support scheme; b) owns clean energy- or climate-related intellectual property rights; c) carries an eco-label; d) generates climate action and environmental- or sustainability-aligned revenues; e) has a sustainable or green business model and impact, incorporated in the enterprise's business model and practices; or f) is an environmentally-certified enterprise.
Internal resources	Human capital (thousands of hours) Financial intermediary-level targets are agreed at contract signature stage, captured in the IT system; portfolio reporting is collected from financial intermediaries through Excel reports and is stored in the IT system. Different KYC and risk management tools, internal methodologies for assessing the intermediaries prior to commitment, including ESG due diligence questionnaires and climate risk assessments.

External resources	The entity developed an online tool with an external consultant and the resources of the European Commission to assist with the eligibility checks. It is currently further specifying dedicated technical assistance with a consultant to be able to address all the technical questions received by intermediaries (with the EU budget available under the programme resources).

Did you encounter any obstacles or gaps?

Challenges related to the use of the EU Taxonomy (incl. data availability, criteria interpretation, clarity on scope of application, other)

One challenge was the lack of simple, clear, short criteria across the Taxonomy that work for a granular portfolio of SME loans across all sectors of the economy. There are a few comparatively simple substantial contribution criteria in the Delegated Act (e.g., for solar and wind energy and electric passenger vehicles that are seen as low-hanging fruit, in climate terms); however, the majority are perceived as complex. It has proved challenging to put in place eligibility criteria that keep the core of the climate criteria credible while catering for economic sectors across the EU. Such criteria need to be easily implementable and understandable on a pan-EU basis and for a very diverse pool of financial intermediaries through their respective banking branch networks. Additionally, the eligibility needed to be structured in a manner that would not affect the unconditionality feature of the guarantee offered to financial intermediaries.

Another challenge was the lack of simple undertaking- or entity-level criteria for energy and resource efficiency that works across SME industries and services without the need to split reporting into 10-20 different lines of activity, or when financing via a sustainability-linked loan or equity investment in a company that supports a combination of measures. InvestEU climate and environment tracking guidance provides this (.e.g., a 30% reduction of GHG emissions or increase in energy or resource efficiency). In combination with excluding the most energy-intensive and fossil fuel-related sectors from the product, this approach reduces significantly any potential greenwashing risks and allows the intermediaries to support greening across most SMEs, and to set entity-level decarbonisation, energy efficiency, or resource efficiency targets in cases where a company is active in several sectors, products or services, and where some are eligible under the Taxonomy, while others may not be.

Overall, the experience with implementing the portfolio guarantee product shows that data availability linked to evidencing the product eligibility criteria and complying with restrictions – even though these do no align with Taxonomysubstantial contribution and DNSH criteria and minimum standards– continues to pose issues for the market. The targeted final recipients of this product are not in scope of the Non-Financial Reporting Directive or the Corporate Sustainability Reporting Directive and are thus not required to assess and report non-financial data. This makes assessing these entities in the level of detail that the Taxonomy Technical Screening Criteria (TSC) expects either costly for the banks, and/or impossible across granular SME loan portfolios, and/or impossible due to lack of specialists able to understand the criteria and which documents should be used to evidence compliance.

Challenges in terms of coherence and consistency of the EU SF framework

The Taxonomy TSC took some time to develop, with the initial proposal from the TEG followed by the Delegated Acts, with the environmental Delegated Acts published only in June 2023. The InvestEU mandate design was taking place in parallel (2020-2021), and the InvestEU Regulation was adopted by the Commission around the same time, as the first Climate Delegated Act. The mandate criteria are for 2021-2027. InvestEU, like other EU funding or grant programmes, has a specific policy focus, targets and target final recipients in mind, and has to report itself based on budgetary rules agreed at the Commission level for a given multi-annual financial framework. Furthermore, dedicated climate and environmental tracking and sustainability proof guidance was adopted by the Commission, to be used for all InvestEU implementing partners, which offers a credible equivalent to the Taxonomy TSC. Similar, although not identical, climate tracking/tagging and DNSH guidance notices have been adopted under the Recovery and Resilience Facility Regulation, put in place as a Covid measure, as well as the different EU structural funds. All of these can be combined with financial instruments. in addition, there is the REPowerEU programme, the Net Zero Industry and Critical Raw Materials acts, also with their own financing priorities, which make reference to being consistent with Regulation (EU) 2020/852, although they do not require the use of the full Taxonomy TSC.

All the above regulatory and non-regulatory measures have been put in place to, among other objectives, support investments in climate and environment goals, and they are crucial for the mobilisation of private sector finance in the EU. Because all these measures relate to public funding, with their own investment eligibility criteria, transparency and reporting obligations, it is difficult to develop one set of green finance criteria that comply with the legal requirements of all EU budgetary regulations, Commission priorities and expectations to support SMEs and other actors in critical sectors, that work across both debt and equity investment products, and that voluntarily integrate the EU Taxonomy TSC in the eligibility definitions and checks at the same time. Consequently, the sustainable guarantee product's eligibility criteria are a subset of different European-level frameworks, developed with the specific intention to support SMEs' green and transition financing, taking into account the associated risks, financing ticket size and proportionality considerations.

How were the obstacles addressed?

It was considered feasible to use the InvestEU climate and environmental tracking guidance, with the integration of substantial contribution criteria, as a basis for intermediated financing for households, SMEs and mid-cap companies. Sector-specific restrictions from the InvestEU Regulation, its own list of additional restricted sectors and activities, ESG-related due diligence assessment of financial intermediaries procedures and practices, and legal compliance clauses acted as a safeguard for DNSH and minimum safeguard criteria. It would be helpful if further guidance is provided on the usability of the Taxonomy for SMEs, for example based on the EU frameworks that have been adopted in the context of public finance initiatives such as the InvestEU and the Recovery and Resilience Facility.

The examples listed below are the outcome of the voluntary application of elements of the EU Taxonomy framework for InvestEU and other public finance initiatives, to inform the future work of the PSF on the simplification of the treatment of SMEs. The inclusions of these examples should not be construed as endorsement or validation for the purpose of assessing Taxonomy-alignment of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission.

On data availability, it would be helpful if the European Sustainability Reporting Standards (ESRSs), which are currently being developed for listed SMEs, and the voluntary standards being developed for non-listed SMEs, align as closely as possible with and provide helpful input to information that can be required from SMEs by corporates or financial institutions to fulfil their Taxonomy or SFDR reporting obligations. This includes, for example, information on transition plans and targets. Additionally, significant simplifications and the use of estimates, proxies and certification schemes should be introduced in the Taxonomy TSC themselves. This to ensure that the reporting burden for SMEs does not increase and synergies are catered for and, on the other hand, that the burden of evidence does not fall on the financial sector, which would pass on the costs to SMEs. The voluntary SME standard could become a proxy to evidence alignment with some or all of the Taxonomy TSC.

A simple entity- or undertaking-level green criteria should be established that could be used across all non-energy-intensive industries and services to support greening. Developing individual activities is confusing, takes too much time and is burdensome to implement across a variety of sectors in granular loan portfolios disbursed through banks' branch networks and regional offices. It also does not work for non-use-of-proceeds products. Calling this 'transition' or 'not significantly harmful' is not, however, a solution or a strong positive message to the market. Entities undertaking such investments and changes in business models, including through operating costs or a combination of non-investment measures across their supply and value chains, deserve recognition for their decarbonisation efforts and financing should be offered with an appropriate cost, recognising these efforts positively. This could be achieved Inside the EU and neighbouring countries by, for example, introducing a minus 20-30% reduction in GHG emissions criteria to be achieved over a maximum five- to 10-year period as a result of the loan/equity investment, excluding sectors dedicated to fossil fuels or identified in the climate Taxonomy as high-emitting transition sectors (i.e. cement, aluminium, chemicals and aviation) as a simple company-level DNSH measure, combined with compliance with the law and basic minimum safeguards criteria proposed by Platform 1.0 for SMEs.

What were the benefits of applying the EU Taxonomy and the sustainable finance framework:

☐ Simplification

☐ Client engagement

☒ Credibility

☐ ESG risk management/mitigation
☐ Greenwashing mitigation
☒ Transparency
☒ Comparability
☐ Other – *please specify*

Applying the Taxonomy, or any other publicly adopted criteria such as those developed by the InvestEU Programme, helps to create transparency within the market, allows for greater comparability between such criteria, and creates more credibility among external stakeholders.

What was the feedback from stakeholders?

Banks and guarantee institutions are, in general, very supportive of the product. There has been considerable interest from commercial banks, guarantee institutions and national promotional banks. However, some of the product's green criteria are still seen as very challenging to meet, or raise many questions among both financial intermediaries and beneficiaries. It is therefore still to be seen what results implementation will bring, as the product was only launched in 2022. As an additional measure of support for users, an online tool has been developed to help with energy savings calculations for some activities. Additional technical assistance, provided by an external consultant, is currently being further added to the product, to provide answers to technical questions arising from the hundreds of company and investment examples the entity is receiving.
The banking sector has very much welcomed the entity-level sustainable enterprise criteria and intermediaries note the importance of continuing to support with guarantee products enterprises that have already implemented environmental measures and therefore continue to operate more sustainably.

Are there any other aspects you would like to mention?

The use-of-proceeds approach does not work for equity products or entity- or undertaking-level financing. An entity-based approach is needed for venture capital and private equity and for all non-high emitting sectors in general. It should include criteria that take into account opex, and reductions in emissions across all three Scopes, therefore covering changes in supply chains. Significant reductions achieved (i.e., of 20-30%) should be clearly classified as climate finance and not transition or low environmental impact financing.

3. Investors

This annex compiles a stocktake and analysis of current practice. Considering the early stages of adoption of the EU sustainable finance framework, none of those market practices represent or should be interpreted as best practice or 'market standard'.

The market practices span three areas: 1) the use of the EU sustainable finance framework for business strategy, transition planning and target setting; 2) finance and transactions; and 3) reporting, monitoring and assurance. They are contributed by seven stakeholder groups of large corporates, credit institutions, investors, insurers, public institutions, auditors and consultants, and SMEs (small and medium-sized enterprises).

Disclaimers

This document is not an official European Commission document nor reflects an official European Commission position. Nothing in this document commits the European Commission nor does it preclude any policy outcomes.

This report represents the overall view of the members of the Platform on Sustainable Finance. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

The considerations below are compiled under the aegis of the Platform on Sustainable Finance and cannot be construed as official guidance by the European Supervisory Authorities (ESAs). As a result, the views and recommendations do not purport to represent or anticipate any future official guidance and views issued by the ESAs which may differ from the contents of this report. The inclusion of market practices in this report cannot be construed as their endorsement or validation, in particular for the purpose of assessing Taxonomy-alignement of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission. The market practices described in the Annex to this report shall not be deemed to be automatically compliant with the legal obligations under the Commission Delegated Regulation (EU) 2021/2178 or other relevant EU legislation or Commission guidance documents.

Introduction to investor market practices

Introduction to the stakeholder group's context

The investor stakeholder group is comprised of representatives from asset owners and asset managers as well as UN-supported international networks which contributed their technical and economic expertise to the compilation of the group's market practices.

Institutional investors, as allocators and stewards of private capital, play a key role within the sustainable finance framework in delivering its goal of steering capital flows towards the transition of the real economy. Investors have therefore been at the centre of policy developments under the European Commission's sustainable finance agenda.

With the introduction of the Sustainable Finance Disclosure Regulation (SFDR), the Taxonomy Regulation and the amendments to Solvency II, the UCITS- and AIFMD Framework, as well as the Insurance Distribution Directive and MiFID II, EU legislators have created tools to which investors can revert when making investment decisions. Whilst there is evidence of investors making use of these tools, the speed and complexity of policy developments have posed substantial implementation challenges, with many investors focusing their efforts on compliance and interpretation of reporting requirements.

Introduction to the market observations

The market practices compiled showcase this reality and reflect both the challenges and the opportunities and potential benefits of using the EU framework and tools strategically. The market practices on investment activities vary in focus from the use of the Taxonomy across a range of asset classes (infrastructure, real estate and listed equity), examples of data origination and principal adverse indicator (PAI) reporting, to the strategic use of the Taxonomy and individual initiatives that target greening of respective business models in setting entity-level net zero targets, as well as the usability of the sustainable finance framework at the point of sale. They were contributed voluntarily, based on observed or own practices, and do not represent a 'market standard'.

Key opportunities identified

- Investors are starting to use the Taxonomy and other EU standards to complement their net zero target-setting strategies, both in the assessment of corporate alignment and in the setting of targets for climate solutions, as well as to support shareholder engagement.
- Climate transition plans, as part of European Sustainability Reporting Standard (ESRS) E1 and the mandatory requirement to report climate transition plans expected as part of the Corporate Sustainability Due Diligence Directive (CSDDD), will help to broaden the scope of issuers providing comprehensive climate disclosures. These disclosures will help asset managers improve the assessment and categorisation of corporate climate alignment.
- The Taxonomy is being integrated into investors' due diligence processes for individual investments, providing a standardised, comparable and robust basis (a common language) to assess the sustainability of particular projects.
- The market practices also showed the benefits of applying the EU Taxonomy to an infrastructure fund of funds and a real estate portfolio, facilitating a consistent way to evaluate sustainability performance not only during the selection of investments but also as part of continuous monitoring.
- The market practices demonstrate that the EU Taxonomy and other standards (such as the PAI indicators) are being implemented across a range of different investments and asset classes, not just listed equity or bonds.
- Due to the push by European institutional investors, some non-European asset managers have started processes to integrate PAI indicators and other SFDR-related metrics into their reporting.

Challenges and shortcomings

- As investee companies only just started to report alignment as of end 2022, reporting against the EU Taxonomy at financial product level was low. As of end June 2023, 70% of Article 9 funds did not report a target in terms of Taxonomy alignment[11].
- Interpretations of the Taxonomy Regulation and its Delegated Acts diverge, particularly regarding the DNSH technical criteria and the minimum safeguards[12].
- There are also diverging interpretations of PAI indicators and sustainable Investments under SFDR, which impair comparability between different products and entity disclosures.
- There are issues around data availability (also regarding geographical barriers) and quality, particularly with the PAI indicators under SFDR, which affect the comparability of disclosures (between investors, or year-on-year to assess the effectiveness of actions to mitigate impacts) and create data gaps due to missing reporting requirements for PAI indicators at fund level.
- Inconsistencies between the various policies in the EU framework (the SFDR, the Taxonomy, the CSRD, etc.), e.g., overlaps between the Taxonomy Regulation and the SFDR in regard to DNSH criteria.

Peer-to-peer recommendations

- use the EU Taxonomy and upcoming CSRD ESRS to support the definition and implementation of entity-level net zero targets;
- use the EU Taxonomy KPIs reported by investee companies in the development and management of green and transition financial products;
- use the EU Taxonomy KPIs reported by investee companies to support shareholder engagement and analysis of transition plans and targets at investee company level;
- use the EU Taxonomy framework as basis for environmental, social and governance due diligence in project financing and investments in unlisted companies;
- continue building capacities of sales staff regarding the EU sustainable finance framework to enhance in a consistent manner end-investors' sustainable finance literacy, with the aim of supporting an effective uptake of MIFID/IDD requirements and sustainability preferences;
- continue engaging with data providers to progressively increase the reliability of datasets and their usefulness beyond disclosure obligations; and
- enhance the integration and uptake of the EU sustainable finance framework within market-led initiatives.

Conclusion

The Taxonomy Regulation and the wider sustainable finance framework have proven to be a robust basis that investors rely on to evaluate the sustainability performance of investments. This, in turn, allows for substantiated product and entity disclosure in regard to sustainability ambition. While investors have built up expertise over the last few years, the level of knowledge and preparedness regarding SFDR and Taxonomy metrics in investee companies and non-European asset managers is often quite low, which impacts data quality. With the CSRD coming into force and the implementation of the European Single Access Point, data gaps and quality issues will improve significantly over the next few years, with positive effects on the comparability of disclosures, in particular for EU companies. However, streamlining the different regulations to remove inconsistencies and close data gaps will be key to improve the quality of disclosures and enhance comparability at the entity and financial product levels.

In addition to the regulatory framework, market initiatives and associations have played a vital role in establishing science-based standards to facilitate the effective implementation of net zero targets over time to support real-world decarbonisation, while also continuing to refine the definition of robust, comparable targets.

[11] Morningstar, data as of End June 2023 based on EET.

[12] The European Commission on the interpretation and implementation of certain legal provisions of the EU Taxonomy Regulation and links to the Sustainable Finance Disclosure Regulation (2023/C 211/01) is expected to support the consistent application of the Taxonomy's minimum safeguards.

3.1 Investor practices on net zero transition target-setting at entity-level

This market practice combines information provided to the Platform on Sustainable Finance by an investor, subsidiary of an insurance company.

Objective of the market practice

The market practice presents an example of net zero target-setting at the asset manager/asset owner level. It examines how an investor used one of the main three methodologies, the Net Zero Investment Framework, to help set net zero targets, and how the development of the EU sustainable finance framework is expected to facilitate these efforts. It particularly considers the use of EU Taxonomy alignment data and upcoming requirements regarding climate transition plans as part of the Corporate Sustainability Reporting Directive (CSRD) and the Corporate Sustainability Due Diligence Directive (CSDDD)[13].

The market practice focuses on the Net Zero Investment Framework (NZIF) guidance on target setting, developed by the Paris Aligned Asset Owners group, a collaborative investor-led forum to support investors to align their portfolios and investment activities to the goals of the Paris Agreement. It is one of the three main net zero methodologies acknowledged by the Net Zero Asset Managers initiative.

Please provide further description and details on the market practice

The main components of the NZIF notably comprise "Governance and Strategy", "Targets and Objectives", "Strategic Asset Allocation", "Asset Class Alignment", "Policy Advocacy" and "Market Engagement".

Specifically, this market practice looks at pillars 5 - Targets and Objectives and 7 - Asset Class Alignment, and reviews:

- how the CSRD and the European Sustainability Reporting Standard (ESRS) E1 regarding climate change and potential requirements under the CSDDD regarding climate transition plans (which are still in the approval process) will help support the bottom-up analysis of investee companies' transition strategies, as required by the NZIF guidance to support progressive asset class alignment;
- how EU Taxonomy data can be accounted for "investment in climate solutions", as defined by the NZIF guidance on target setting; and
- how net zero commitments made by investors on a voluntary basis can help them address their own regulatory requirements, including as part of the Sustainable Finance Disclosure Regulation (SFDR).

As those regulations have either recently been implemented or are due to enter into force in the coming years, the market practice takes the example of an asset manager which is applying the NZIF methodology to set its net zero targets, and considers how the EU sustainable finance framework will facilitate the effective implementation of those net zero targets over time to support real-world decarbonisation, while also continuing to facilitate the definition of robust, comparable targets.

1. **The EU sustainable finance framework supports implementation of net zero targets and asset class alignment**

The NZIF was designed to support real-world decarbonisation via multiple approaches as presented above (i.e., asset allocation, shareholder engagement, etc.). From this perspective, for investments in corporate assets, the proposed asset allocation framework relies on a categorisation of companies based on the level of maturity of their climate transition strategies (see Figures 1 and 2).

[13] The CSDDD proposal and the CSRD serve distinct purposes: the CSDDD requires companies to take environmental and social responsibility and act accordingly, whereas the CSRD ensures that companies are transparent and accountable about their activities, without any behavioural obligation. It is also worth noting that they have different scopes: the CSDDD proposal does not rely on the Accounting Directive, unlike the CSRD.

Figure 1: NZIF categorisation of corporate alignment along the alignment maturity scale. Source: NZIF Guidance on target setting, 2021

Table 1 below looks at how EU sustainable finance and real economy policies support the robust implementation of net zero targets set by the asset manager (specifically for its corporate equity and bond holdings), and will do so to a greater extent in the future.

Targets		Relevance of existing or upcoming EU SF policies
Companies (fixed income and listed equity)		
Carbon intensity reduction	-25% carbon intensity reduction[14] by 2025 and 50% by 2030 compared with 2019	*In addition to real economy policies supporting emission reductions, the achievement of this target is expected to be supported by mandatory transition plans, and emission reduction targets, expected as part of CSDDD[15]*
Share of assets under management (AUM) in material sectors that are net zero-aligned or aligning by 2040 (A)	100% by 2040	*This target relies on the NZIF categorisation framework, which looks at companies' transition strategies, with an expectation that the assessment of transition plans will be greatly facilitated by the CSRD and CSDDD for issuers in scope (see below for the current framework used by the asset manager). The EU Taxonomy is already providing useful information to assess the alignment of capex with those transition strategies, including for high impact sectors, as highlighted in the corporates section of this Compendium.*

[14] Weighted average of carbon intensity of revenue for all companies, regardless of their asset class or fund/separately managed account.
[15] At time of writing, the EU Corporate Sustainability Due Dilligence Directive (CSDDD) is still under negotiation by co-legislators.

Share of AUM dedicated to climate solutions (B)	6% by 2025	*At this stage, the asset manager has based this target on an in-house methodology to define 'green investment', which primarily includes green bonds and green real estate.* *The NZIF has recently revisited its guidance to take the EU Taxonomy into account, as reported data becomes more comprehensive. This may lead to a revision of the target by the investor, with an even more robust, comparable methodology.*
Share of net zero or net zero-aligned financed emissions in material sectors (A)	50% by 2025	*This target relies on the NZIF categorisation framework, which looks at companies' transition strategies, with an expectation that the assessment of transition plans will be greatly facilitated by the CSRD and CSDDD for issuers in scope. The EU Taxonomy is already providing useful information to assess the alignment of capex with those transition strategies, including for high impact sectors, as highlighted in the corporates section of the Compendium.*
Share of financed emissions in material sectors under engagement	70% by 2025 90% by 2030	*The goal of shareholder engagement is to push companies in material sectors to set robust, credible transition strategies with intermediate targets, and to deliver on those. For issuers in scope, the CSDDD and CSRD should greatly support the effort, and allow the investor to focus its engagement activities even more on less advanced companies in other jurisdictions, thus driving real-world decarbonisation beyond the EU.* *Additionally, the expectations set by the Shareholder Rights Directive with regards to shareholder engagement policies and practices help support effective dialogue.*

Table 1: EU sustainable finance policies and the asset manager's net zero targets

The ongoing development of the EU sustainable finance framework is expected to facilitate the assessment of companies' transition strategies, and support asset class alignment with net-zero objectives.

The asset manager has defined a specific target of 100% of assets under management (AUM) in climate-material sectors to be net zero, net zero-aligned or net zero-aligning by 2040, using its own "climate colour" framework based on NZIF guidance.

As described in Figure 4, the framework relies both on quantitative criteria, based notably on the Science Based Targets initiative (SBTi) and the Transition Pathway Initiative (TPI), and using internal qualitative assessments, considering the credibility of transition plans defined by companies and their alignment with the Intergovernmental Panel on Climate Change (IPCC) climate scenarios. At this stage, not all sectors are covered by the SBTi, nor all issuers assessed by the TPI, making a qualitative assessment necessary. This is a complex exercise due to the lack of comparability of data reported by issuers and often limited information on the capex to be deployed to support transition strategies. As the EU Taxonomy has now been in place for two years, the asset manager is reviewing its model to further integrate related information to support its assessment of transition strategies, in particular when reviewing capex plans.

It is expected that the entry into force from 2024 of the CSRD and, in subsequent years, the CSDDD will significantly facilitate the assessment of companies in scope of those regulatory requirements. The introduction of ESRS 1 on climate change will provide more homogeneous, comparable data on climate commitments for climate-material companies, while the CSDDD will require companies to ensure their business strategy is compatible with limiting global warming to 1.5°C.

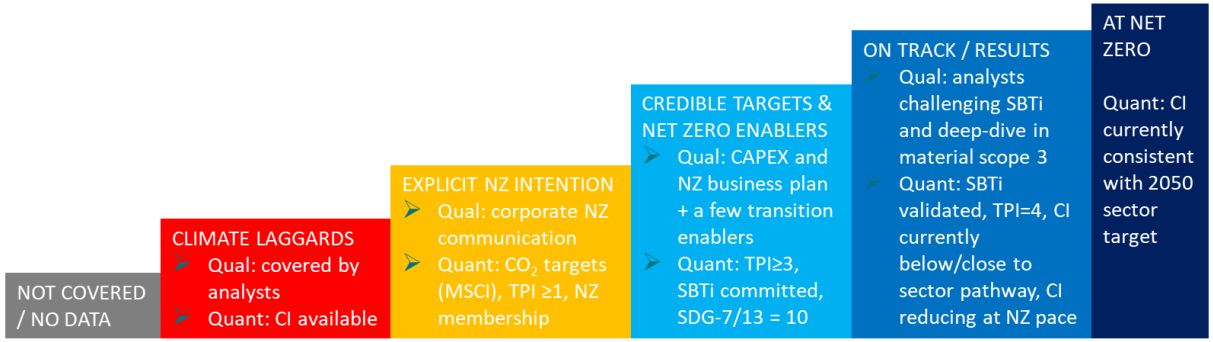


Figure 2: The asset manager's climate colour framework, based on PAII NZIF, 2021. For illustrative purposes only.

2. The EU Taxonomy can become a useful tool to help define more comparable and substantiated targets for investments in climate solutions

The asset manager has defined a target of 6% of AUM to be invested in climate solutions by 2025, using an in-house definition of green investment, which covers three categories: green buildings and infrastructure; green bonds; and green thematic equities. The asset manager has indicated that it could review the methodology in the future, based on additional guidance from the IIGCC for users of the NZIF regarding the definition of climate solutions. In the meantime, the asset manager has disclosed the methodological approach of its in-house definition of climate solutions in its annual climate report.

In this context, the Institutional Investors Group on Climate Change (IIGCC) released in September 2023 its Investing in climate solutions: listed equity and corporate fixed income guide. The document reviews how investors can leverage the EU Taxonomy, as well as equivalents in other geographies, and the resulting metrics on green revenues and green capex, to support more robust, comparable target-setting for the climate solutions components of their net zero targets (see the Solutions section below for more details on the IIGCC guidance).

3. Voluntary net zero commitments and SFDR implementation at the asset manager level can be complementary

The asset manager's net zero targets and its use of the NZIF are disclosed at entity level as part of its requirement under SFDR Article 4 to publish an annual principal adverse impact (PAI) statement on its website. The asset manager has been able to make a parallel between the SFDR requirement to address and mitigate climate PAIs and its entity-level net zero targets. This is especially because those net zero targets included specific targets to: 1) reduce the carbon intensity of its investments with targets set for 2025 and 2030; and 2) ensure comprehensive coverage of engagement activities with high climate impact sectors, which can be associated with the climate-related PAI indicators. These two targets are consistent with the objective of mitigating climate PAIs. At this stage, the metric used for the carbon intensity reduction target differs from the PAI 2 calculation methodology, as Scope 3 emissions have not yet been integrated in the target set by the asset manager, due to data challenges and the measurement of those emissions while they are integrated in PAI 2.

What is the outcome?

- Asset class alignment with net zero: The categorisation of corporate alignment with the Paris Agreement as defined by the NZIF guidance on target setting is currently based on various approaches and benchmarks (SBTi, TPI, Climate Action 100+, and private providers). The climate transition plans (particularly E1-4 – Targets related to

climate change mitigation and adaptation) as part of ESRS E1 of the CSRD and the potential future mandatory requirement to adopt climate transition plans as part of the CSDDD will help to broaden the scope of issuers providing comprehensive climate disclosures. These disclosures will help asset managers improve the categorisation of corporate climate alignment.

- Investment in climate solutions: The upcoming revision of the NZIF methodology (which supports the use of the EU Taxonomy and taxonomies being developed in other geographies), is expected to increase robustness and comparability, and thus facilitate the definition of targets, ultimately helping to channel finance towards climate solutions (see question "Solutions: how could the obstacles be addressed" for more details on how the IIGCC guidance defines climate solutions using the EU Taxonomy).

Did you encounter any obstacles or gaps? If so, please describe.

The definition and implementation of net zero strategies at the asset manager level, to support real-world decarbonisation, requires the asset manager to shift investment towards those issuers and solutions which require funding to transition, and encourage slower-moving issuers through shareholder engagement. This goal is that asset allocation evolves towards more advanced issuers, both through their transformation and through divestment from laggards (in the absence of change).

Key challenges lie in the lack of robust data to help assess climate transition plans when they exist, and even the absence of such plans. At this stage, the NZIF offers some flexibility to allow users to address in particular these data challenges based on their internal capabilities and access to data bases.

Solutions: How could the obstacles be addressed?

A) <u>On defining categorisation of corporate alignment with the Paris Agreement:</u>

In the medium term, when the requirements of the CSRD and CSDDD regarding climate mitigation targets and disclosure of climate transition plans become effective, the following benefits should be seen for issuers in scope:

- Improvements in data availability, comparability, significantly facilitating assessment, in combination with EU Taxonomy information on capex plans.
- The progressive increase in the number of companies belonging to the most advanced categories within the categorisation framework, thanks to mandatory transition plans.

B) <u>On defining climate solutions:</u>

The recent IIGCC guidance on investment in climate solutions provides a clearer framework on which to define climate solution investment targets, using metrics which are more comparable and robust. This is thanks to the deployment of taxonomies, including in particular green revenues and green capex. This should facilitate target-setting, ensuring the data reported by companies supports decision-making and, ultimately, the channelling of flows into green solutions or green capex plans.

In practice, for investors invested in companies which report under the EU Taxonomy, the guidance suggests counting as climate solutions (i.e., green revenues or capex) all assets that at least meet i) the technical screening criteria (TSC) for determining the substantial contribution to climate change mitigation and ii) the minimum safeguards. IIGCC has created an additional category for the application of DNSH, aimed at facilitating implementation, while however potentially creating certain challenges in terms of understanding. In addition, green and labelled bonds for which the use of proceeds are disclosed by the issuer and which can be mapped to climate change mitigation can also be counted as climate solutions. Taxonomy-eligible activities are not considered climate solutions.

An important area for attention is the IIGCC's categorisation of transition activities and enabling activities. While the definitions are not always consistent with the EU Taxonomy, it is nevertheless a positive proposal to encourage the voluntary use of Taxonomy information by investors when setting their net zero targets.

Other aspects you would like to mention?

Shareholder engagement is an important component of the investor's net zero strategy, with a dedicated target, recognising the role investors can play in engaging with investee companies on their climate strategy, highlighting when the latter is not ambitious or detailed enough in terms of emission reduction targets in the short, mid and long term, and of a related roadmap to deliver those targets. In a number of cases, this has led the investor to engage with peers, and use escalation techniques such as sending public letters, voting against management or even co-filing shareholder resolutions.

The EU sustainable finance framework is a useful tool for those efforts, as it provides with the Taxonomy more granularity and disclosure to assess in a comparable manner the robustness of capex plans of issuers in high-impact sectors, for example. The upcoming CSRD and CSDDD will support this even further with additional disclosures. Transparency around those engagement activities, how they are conducted, how escalation techniques are used, and progress over time is essential, ensuring relevant stakeholders are informed, as well as supporting an on-going reinforcement in investors' engagement policies and practices.

3.2 Use of the Taxonomy to assess the sustainability performance of individual unlisted investments

The market practice combines information provided to the Platform on Sustainable Finance by three different institutional investors.

Objective of the market practice

This market practice presents an example of how financial market participants (FMPs) are using the EU Taxonomy on a voluntary basis to assess the sustainability performance of their investments, based on three examples of individual unlisted investments:

- Renewable equity – a minority stake investment in an offshore wind farm
- Renewable debt – a debt financing of the construction and operation of three solar projects
- Infrastructure equity – investment in a project to lay an electricity subsea connector cable.

The market practice explains the processes put in place to undertake the Taxonomy assessment for each investment and summarises some of the key benefits, outcomes and challenges linked to data gathering and reporting against the Taxonomy for individual unlisted investments. Particular focus is given to how the Taxonomy assessment interacts with existing internal ESG due diligence processes and other EU metrics related to the EU sustainable finance framework, such as principle adverse impact (PAI) indicators, and how investors can effectively assess projects according to the EU Taxonomy's minimum safeguards.

Please provide further description and details on the market practice

Example 1 – Renewable equity: a minority investment in an offshore wind farm

This example focuses on an investment in a roughly 20% stake in a 1GW offshore wind farm in Europe that is under construction, with commercial operations expected to begin in 2026. The FMP was one of three in a consortium, and therefore conducted ESG due diligence alongside the other consortium members. This included EU Taxonomy analysis and collection of PAI indicators. The seller, which is retaining a 50.1% stake in the project, will undertake the construction and provide long-term operations and maintenance (O&M) services to the project.

Through the investment process, the investment team engaged a third-party ESG advisor to produce an ESG report. However, the investment team also conducted other ESG checks that are required for internal approval and to mitigate ESG risks. In this regard, there was a standardised approach to ESG due diligence concerning engagement with the third-party ESG advisor, with the consortium members receiving the same ESG reports from the consultant and joining consortium-wide weekly discussions with the advisor. However, the FMP also needed to fulfil internal ESG requirements and processes, which differed from those of the other consortium members.

<u>EU Taxonomy assessment</u>

The external ESG advisor conducted an assessment of the eligibility and alignment of the project under the EU Taxonomy. The project was deemed to make a substantial contribution to the EU's climate change mitigation objectives, given that it will produce electricity from wind. As part of the assessment's do no significant harm (DNSH) checks, a physical climate risk assessment was commissioned, and it was deemed that there were no material physical climate risks to the project that required further mitigation. The other applicable DNSH checks, covering the circular economy, protection of biodiversity, and sustainable use of marine resources, were assessed via an analysis of the project's environmental impact assessment (EIA), environmental documents and other resources provided by the seller.

Finally, the minimum safeguards were assessed. The assessment led to discussions and engagement with the seller on social and governance topics that were guided by the specific minimum safeguards requirements of the Taxonomy.

PAI indicator collection

Where data was available, PAI indicators were collected by the FMP's third-party ESG consultant. Of particular relevance to the project, and as with most renewables investments, are its Scope 3 greenhouse gas (GHG) emissions. The third-party consultant had not received Scope 3 emissions data, but recommended its collection. Some of the PAIs, such as 'activities negatively affecting biodiversity-sensitive areas' and 'lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises', were already partially addressed through the EU Taxonomy assessment.

ESG report

Alongside the EU Taxonomy assessment, an ESG report was commissioned that focused on aspects of ESG risk not currently covered by the EU Taxonomy. This included areas such as cybersecurity (governance) and cultural heritage (social). Each sub-topic was assigned a qualitative risk score.

Internal ESG checks

To help with the EU Taxonomy assessment and to comply with internal ESG processes, the FMP used the Integrated Biodiversity Assessment Tool (IBAT) to assess the proximity of the project site to nature reserves, key biodiversity areas and threatened species' habitat ranges. Further, an ESG questionnaire and reputational risk matrix was completed and approved by the FMP's internal risk management functions.

The number of species threatened, endangered or critically endangered on the IUCN red list is documented within the IBAT reports. Proximity (in km) is also documented.

Health and safety data was also assessed. For example, the lost-time injury frequency (LTIF) was found to be higher for some of the seller's companies than the industry average. In a dedicated expert session, the seller, which is also the intended O&M contractor for the project, shared safety performance data for its existing offshore portfolio and demonstrated that the LTIF issue did not impact the wind farm in question and that appropriate health and safety measures were in place.

Outcome

Given the activity aligns with the 'construction or operation of electricity generation facilities that produce electricity from wind power', the investment is 100% eligible as it makes a substantial contribution to climate change mitigation.

The ESG advisor deemed DNSH criteria to be met and the consultant signed off on 'conditional alignment' for the minimum safeguard criteria. Conditional alignment was based on confirming that the seller monitors a specific case of a project supplier refusing to engage in collective bargaining. However, the supplier has now engaged in negotiations to resolve this dispute and, based on the policies and procedures the seller has in place (e.g., a supplier code of conduct and commitment to fundamental International Labour Organization conventions, among others), the FMP determined the project to be 100% aligned.

Example 2 – Renewable debt: a debt financing for the construction and operation of three solar projects

This example focuses on the application of Taxonomy alignment assessment by a private credit fund manager to a debt investment financing the construction and operation of three solar photovoltaic (PV) projects, totalling almost 80MW, in Spain.

As the borrower is a small entity, it falls below the reporting threshold listed under the Taxonomy Disclosure Delegated Act referencing Directive 2013/34/EU. Pursuant to Article 7 of Taxonomy Regulation Delegated Act 2021/4987, the investor opted to measure alignment of this debt security with the EU Taxonomy, as its purpose is to finance environmentally sustainable activities and to disclose its Taxonomy alignment ratio under the SFDR.

As a solar PV project, the investee's substantial contribution to the climate mitigation objective was evident. During the due diligence process, the investor's ESG team focused on obtaining documentation evidencing the remaining steps required to ensure the investment's Taxonomy alignment.

The DNSH assessment phase focused on three specific inquiries, on the following themes:

Exposure to physical climate risks

The borrower did not commission a climate data provider to assess the project's vulnerability to physical climate risks pursuant to Annex A of regulation 2020/852/EU. The FMP only received an insurance report which assessed natural hazards and physical risks the project is exposed to from a historical perspective. It therefore felt that the prospective approach was not sufficient to assess the project against the climate adaptation DNSH criteria. It decided to perform its own climate risk assessment, using its climate data provider, and based on information supplied by the borrower (notably, the GPS location of the assets). The assessment didn't unearth any major physical climate risk exposures (aside from moderate exposure to water stress, which is irrelevant for PV assets) and the FMP thus concluded that major risks were both assessed and managed.

Circular economy

The FMP obtained via the borrower a dismantling plan for the project, which was already budgeted for. It included a detailed plan as well as measures to restore the area used to its previous state. The FMP also collected data in the project's technical due diligence sheet to check that the modules used had a high recyclability rate.

Biodiversity

After studying the EIA conducted prior to its investment, the FMP checked that none of the plants were located close to protected areas (such as the Natura 2000 network). It also confirmed that the environmental monitoring and surveillance plans submitted had been verified by the local environmental agency. The environmental impact statements for the plants consider their impacts to be acceptable provided that a series of corrective measures are carried out, for example that sufficiently large trees are protected; fencing be permeable to the passage of small fauna, and habitat created for steppe birds.

According to the latest information provided, the compensatory measures project was submitted to the local environmental authorities and was awaiting approval at the time of the due diligence. The absence, at this stage, of the official approval of these submitted compensation measures prevented the FMP from considering the debt investment as aligned with the EU Taxonomy at that time. The situation had a high probability of being resolved promptly.

Minimum safeguards

The FMP found several sources (including news articles, NGO reports and documentation from the US State Department) indicating that the project's PV module supplier had benefited from forced labour. Given this accumulation of evidence, the FMP considered the supplier to be at high risk of exposure to forced labour and human rights violations.

The FMP did not receive additional information from the borrower regarding the origin of the modules, the conditions in which they were produced or additional controls on the supply chain by third parties to provide enough comfort that minimum safeguards were respected.

Example 3 – Infrastructure equity: investment in a project tasked with construction of a subsea electricity connector cable

This example focuses on an investment in a project tasked with the construction and ownership of a subsea electricity interconnector cable that transports electricity between separate systems. It assesses whether the subsea interconnector cable's electricity transmission activities meet the defined metrics and thresholds relating to the substantial contribution criteria as defined under section 4.9 of the Technical Annex of the EU Taxonomy regulation, 'transmission and distribution of electricity'.

It also illustrates how the DNSH criteria were assessed during the construction of the asset, for example DNSH (5) Pollution (adherence to the principles of the International Finance Corporation (IFC) General Environmental, Health and Safety (EHS) Guidelines) and (6) Ecosystems (collation of the environmental impact assessment), and how, using a propriety tool, physical measures were considered in the construction of the asset to address future climate risk impact as required under the DNSH (2) Adaptation.

The FMP developed a number of in-house tools to support its ESG due diligence.

It conducted a data gap analysis on its pre-existing ESG screening criteria, which predated the introduction of the Sustainable Finance Disclosure Regulation (SFDR) and EU Taxonomy reporting. It determined that several mandatory PAI indicators under SFDR are already covered. Nevertheless, for existing and new investments, all mandatory PAIs and optional PAIs are reported in a dedicated process. This included:

- Initial ESG screening, applying exclusion criteria, which includes companies on sanction lists, those that violate the UN Global Compact, and investment directly or indirectly (of more than a 20% stake) in coal-based business models.

- A reputational risk screening matrix, reviewing 13 sensitive business areas for each potential investment, and SFDR reporting.

- A GHG emissions review (with cross reference to PAI indicators 1, 2 and 3 relating to GHG emissions, the carbon footprint and the GHG intensity of investee companies, as well as the voluntary PAI indicators relating to carbon emission reduction initiatives). For new investments in high or medium GHG-emitting sectors, the company must illustrate its intention to decarbonise, setting time-specific targets that demonstrate a pathway to net zero GHG emissions by 2050. After entering into each investment, all such portfolio companies must: (i) report their Scope 1 and 2 GHG emissions; (ii) establish decarbonisation targets in the short term (by 2025 or a relevant five-year projected date from the investment date); (iii) establish a decarbonisation pathway to achieve net zero by 2050 in the long term; and (iv) identify new GHG emission reduction initiatives in order to meet commitments. High GHG-emitting assets are those with more 100 tCO2e per €1 million invested in the capital structure across equity plus debt. Medium GHG-emitting assets are those with 10-100 tCO2e per €1 million invested.

- An EU Taxonomy and sustainability review, screening potential investments to determine whether they are EU Taxonomy eligible and aligned and, if not covered under the EU Taxonomy list of qualifying sectors, whether they can be classified as sustainable under SFDR. The DNSH principle is applied using the FMP's own defined criteria within the scope of SFDR. However, where possible, these are linked closely to DNSH criteria under the EU Taxonomy.

- A climate risk and vulnerability assessment, using a proprietary method to determine the physical risk associated with climate change currently and projecting 30 years forward. The FMP's portfolio companies are required to use a proprietary tool to identify areas of unmitigated climate physical risk and implement action plans at board level to resolve these risks to the extent possible.

Substantial contribution of the project under the EU Taxonomy

The FMP also sought to assess whether the project made a substantial contribution to the EU's environmental objectives, in line with the EU Taxonomy.

The project is a subsea high-voltage direct current electricity interconnector that will connect the UK power grid to one on the European mainland. It will contribute to emissions reduction by facilitating the sharing of generation resources across UK and Continental Europe, helping to reduce the overall cost of achieving net zero. Excess renewable output in one region can be utilised in the other region, thus avoiding curtailment of excess renewable power. This ultimately reduces the renewable generation capacity needed to meet the entire demand across connected regions at all times.

The project falls under the NACE transmission of electricity category (NACE code D35.1.2), and section 4.9 of the Technical Annex of the EU Taxonomy regulation, in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Specifically, it meets the mitigation criteria by:

- supporting the integration of renewable energy into the power grid
- supporting the transition from carbon-intensive energy supply, via electrification and parallel development of low-carbon power generation capacity.

In terms of determining the asset's alignment with the EU Taxonomy, the transmission line was not dedicated to creating a direct connection, or expanding an existing direct connection, to a power production plant where the direct GHG emissions exceed the stated threshold, as defined in the substantial contribution criteria.

DNSH principles

The FMP assessed whether the project risked significant harm to the EU's other environmental objectives:

DNSH (3) Water – the project had commissioned several environmental impact-related studies, such as seabed and geotechnical surveys, with the results and follow-on recommendations subsequently incorporated into the design of the project, and forming part of the planning application. This ensured that routes with heavy impacts on marine and terrestrial ecosystems were avoided, particularly within Natura 2000 conservation areas. This enabled consents and permits for the project to be granted by governments in the UK and the EU.

DNSH (5) Pollution – Soil disposal and water drainage strategies are in place and a contamination risk assessment of sites receiving water or soil has been conducted.

For both DNSH (3) and (5), the IFC General EHS Guidelines for construction activities were adhered to. Specifically:

- Project safety procedures were set out in the project's safety, health, environmental and quality (SHEQ) management plan, certified to ISO 14001 for environmental management and ISO 45001 for occupational health and safety. Contractors were also required to develop project-specific EHS plans and other management plans required by country-specific regulations.
- Impacted communities were kept safe and informed. For example, construction hours and delivery times were timed to best avoid peak periods, ongoing public consultations were put in place, particularly regarding UK onshore works and with local fishermen regarding possible compensation for the disruption that construction works may cause.

DNSH (6) Ecosystems – an external advisor was engaged to assist in the preparation of an EIA, covering DNSH (3) and (5) criteria as well as DNSH (4) regarding end-of-life recycling, in line with circular economy principles. The EIA report was critical to the granting of permits and consents.

DNSH (2) Adaptation – the impact on the project from physical climate risks was taken into account during planning to ensure its stability. Assisted by an external consultant, vulnerabilities were identified, for example the effects of temperature rise on the efficiency and operation of the equipment, and impacts caused by flooding. Physical risks were assessed as low or medium across different timeframes and scenarios. The consultant's final recommendations covered the impacts of climate change in business continuity management plans as well as the inclusion of climate change analysis in supply chain assessments.

Due to increasing temperatures, risks to the performance of equipment are projected to increase. However, all equipment is being designed and manufactured to operate safely at higher maximum temperatures. Nevertheless, the frequency of deploying cooling equipment is likely to increase and its efficiency will be monitored to ensure it meets future requirements.

Flood risks are anticipated to increase due to rising sea levels and increases in precipitation, requiring mitigating design measures.

Data and methodology used to compile the market practice

Data and Methodology	• Public sources of information – such as the sellers' websites, particularly any health and safety or environmental sustainability reports and policies, statements or codes of conduct relating to social or governance risks • PAI data where possible • Physical climate risk assessment, using data from EU Copernicus, the G20 Climate Risk Atlas, KLIWAS and Science Direct • Data from the seller relating to authorisations and permits (particularly EIAs) • The IBAT to assess impacts on biodiversity. This uses data from the IUCN Red List and various GIS protected areas datasets • Borrower documentation for circular economy and biodiversity-related matters (dismantling plans, EIAs, environmental impact statements, etc.) • The Business and Human Rights Resource Center, news articles and NGO reports on the Uyghur controversy Methodologies • Internal taxonomy assessment procedures • Regarding the EU Taxonomy, the EU Taxonomy Compass regarding mitigation and adaptation stipulations, as well as application of DNSH and minimum safeguards criteria.
Use of Proxies	• In assessing DNSH for climate change adaptation, data was sourced from EU Copernicus, the G20 Climate Risk Atlas, KLIWAS, and Science Direct. In spite of these various data sources, the ESG consultant assessed the climate risk projection models currently available and noted that uncertainty in climate models at the asset level increased the overall uncertainty in long-term physical climate risk forecasting. This uncertainty was only relevant for the physical climate risk assessment. • Assumptions used by the investee and investment teams regarding energy mix changes in Europe as well as the timing of decarbonisation and cost of transition • For the solar project, no proxies were used
Internal resources	• Internal reputational risk matrix and ESG questionnaire to assess the investment's reputational and ESG risk • Climate change risk score tool to assess physical climate risk

External resources	• An ESG consultant was used to produce an ESG report, which included an EU Taxonomy analysis and PAI data collection. The consultant worked with the investment team to guide the direction of the scope of the report (e.g., requesting the consultant conduct a physical climate risk assessment) and to discuss the final criteria required for alignment. • The IBAT was used to assess the proximity of the potential investment to conservation areas, key biodiversity areas, or threatened species' habitats to inform engagement with the seller and the EIA. • Climate data provider report • Controversy data provider analytics report Technical due diligence report

Did you encounter any obstacles or gaps? If so, please describe.

Interpretation of the minimum safeguards

For FMPs, it is often difficult to interpret how far the obligation under the Taxonomy's minimum safeguards extends. Further, there is little standardisation in how companies report alignment with them. It can be difficult to assess minimum safeguards for smaller developers and contractors, who, while implementing many of the principles behind the minimum safeguards (e.g., supply chain due diligence, fair taxation etc.), may not undertake the same level of reporting as larger, listed firms.

Many human rights issues don't manifest themselves at the project or investee level and require a thorough assessment of second and third rank suppliers to ensure the absence of human rights infringement.

Assessing physical climate risk for individual projects

FMPs faced challenges associated with the long-term uncertainty in global climate model forecasting at asset-scale resolutions.

Solutions: How were the obstacles addressed?

To assess the minimum safeguards, one FMP raised questions with an external ESG consultant on how they should be interpreted, and drew on this engagement to deliver its assessment. Another FMP chose to address the issue conservatively; it considered the lack of data showing the projects' suppliers were not infringing human rights should lead to misalignment of the investment (until proven otherwise).

Benefits of applying the EU Taxonomy and the sustainable finance framework:

☐ Simplification
☐ Client engagement
☐ Credibility
☐ ESG risk management / mitigation
☐ Greenwashing mitigation
☐ Transparency
☐ Comparability
☒ Other – *please specify*

In all examples, the EU Taxonomy enabled the FMPs to focus their due diligence on technical aspects which might have been otherwise overlooked.

The EU Taxonomy provides overarching guidance on assessing ESG risk within a transaction, simplifying and standardising such analysis. Given that FMPs have become more engaged with ESG topics and are asking for more reporting on ESG and sustainable finance regulation, a benefit of applying the Taxonomy is being better prepared to address investor demands and interest.

The EU Taxonomy helped guide a more thorough examination of certain ESG topics. For example, for the offshore wind investment, the EU Taxonomy assessment prompted a separate engagement process regarding physical climate risk assessment, after the consortium realised it was not already included within the sell-side information. Without the Taxonomy, such an assessment may not have been as thoroughly investigated. Although the EU Taxonomy assessment was only one part of the ESG due diligence process, it provided a standardised focus for all consortium members. Using the EU Taxonomy to guide due diligence encouraged the seller to put greater effort into demonstrating its management of ESG risks than would otherwise have been the case.

In addition, one of the FMPs noted that the process of working through detailed EU Taxonomy documentation gives the user a clear understanding of the shortfalls to be addressed to achieve eligibility and increase percentage alignment.

3.3 Use of the Taxonomy to assess the sustainability performance of infrastructure fund-of-fund investments

The market practices combine information provided to the Platform on Sustainable Finance by an investor in infrastructure funds.

Objective of the market practice

The market practice presents an example of how the Taxonomy and related delegated acts can be used to assess the environmental sustainability of infrastructure investments within a fund of funds.

Please provide further description and details on the market practice

For its infrastructure fund investments, the FMP has specific procedures and internal criteria to ensure sustainability alignment and the positive environmental/climate impact of the investments, both on an aggregated funds level and on the level of final beneficiaries.

ESG principles and environmental and social standards

The FMP applies a set of environmental, social and governance (ESG) principles to all its investments. In addition, for infrastructure fund investments it takes into account the European Investment Bank (EIB) Environmental and Social (E&S) Standards during the appraisal of the investment fund and fund manager. The E&S Standards are applied on a case-by-case basis and, if they are considered applicable, the projects invested in must meet the standards throughout the project life cycle. These standards are considered as a proxy to the Taxonomy's do no significant harm (DNSH) and minimum safeguards criteria when it comes to project-specific investments, but they do not aim to meet every one of the Taxonomy's technical screening criteria (TSC), nor does the FMP require that project promoters are able to comply with all DNSH criteria. The E&S Standards are particularly relevant for investments outside the EU. The FMP's ESG principles and the EIB's E&S standards are updated based on regulatory reforms and on new Taxonomy delegated acts, in line with best banking practices. The main focus is on the Taxonomy's substantial contribution criteria. Additionally, an internally developed climate risk screening tool is applied to all investments.

Contractual E&S clauses

In addition to compliance with the FMP's ESG principles and the EIB's E&S Standards, funds in which the FMP invests are contractually obliged to comply with the FMP's environmental criteria and to abstain from investing in defined excluded activities. The FMP's environmental, climate and social (ECS) guidance to the fund manager requires the latter to implement an ECS policy, which must include a summary of the fund's ECS objectives.

The FMP's environmental criteria for eligible investments are based on the EU Taxonomy's six objectives, with extensive criteria outlined for the following sectors: energy, energy efficiency, transport, water and wastewater, digital infrastructure, social infrastructure, bioeconomy, circular economy, waste management and integrated urban development. Where no Taxonomy delegated act exists, its own criteria are used in line with the principles of the Taxonomy, developed by its own experts, who have been participating in the EU Platform on Sustainable Finance's previous work on the definition of new criteria for environmental objectives.

Where Taxonomy criteria exist for substantial contribution, the FMP's internally developed criteria have been revised to take Taxonomy criteria into account. The FMP estimates to what extent different funds contribute to the FMP's various climate action and environmental sustainability goals. This percentage is used internally for the FMP's own annual target calculation at a commitment level (not by disbursement). The DNSH criteria are assessed to the extent possible.

E&S questionnaire

Prior to investment, the FMP requires fund managers to fill out an E&S questionnaire, which includes assessments against DNSH and minimum safeguards criteria, and confirm compliance with the Taxonomy where relevant.

Questions regarding the OECD Guidelines for Multinational Enterprises and international human rights standards are also included, to assess whether the fund managers incorporate internationally recognised standards in their screening and investment processes.

The questionnaire also includes questions on:

- the fund's ESG policy and the alignment of the investment strategy with the Paris Agreement;
- internal procedures regarding the capacity of the fund to assess ESC risk, its procedures for environmental and social performance disclosure, which non-financial KPIs will be tracked, what standards the fund is compliant with, how non-compliance of final beneficiaries is to be handled, and other ECS documentation;
- structures regarding the responsibilities of employees, specifically regarding ECS matters;
- ECS sustainability in terms of which risks are taken into account, which laws, regulations, and standards are followed, and which KPIs are applied; and
- carbon footprint monitoring.

Sustainability reporting

After an investment is made, fund managers should provide a summary of the screening, identification, categorisation and management of the significant ECS risks and impacts and, on an annual basis, provide the FMP with an ECS report, including relevant documentation such as summaries of, among other things: the portfolio's exposure to physical climate risks; any grievances received at the fund level and how these were addressed; and actual values of the main impact indicators.

What is the outcome?

The outcome of the FMP's procedures is that investments are controlled and selected based on alignment with ECS criteria, building on the EU Taxonomy Regulation. Using the framework of the regulation, the FMP conducts a screening process prior to investment and requires continued reporting after investment, to ensure alignment with its environmental objectives.

Data and methodology used to compile the market practice	
Data and Methodology	Primary data provided by the FMP has been used. Data needed for the investments is collected directly from the fund managers or project promoters. Internal stakeholders have been consulted and internal and public documents have been reviewed.
Use of Proxies	No proxies are used, other than additional own climate action and environmental sustainability activities not yet listed in the Taxonomy delegated acts.
Internal resources	Documents and human capital.
External resources	No external resources other than KYC tools.

Did you encounter any obstacles or gaps? If so, please describe.

Challenges related to the use of the EU Taxonomy (incl. data availability, criteria interpretation, clarity on scope of application, other)**:**

Assessment and understanding of the DNSH criteria has been identified as the main challenge, such as, for example, in its circular economy and waste- and water-related criteria.

- Buildings, construction, real estate: it is very challenging to comply with the circular economy criteria regarding water use for toilets, hand basins, etc.; in the substantial contribution criteria, the additional requirements for construction of buildings larger than 5,000 m^2 are not implementable with legal certainty; the -10% nearly-zero emission buildings (NZEB) levels require assessment against eligible values each time, depending on the country and building type. This is very time consuming and requires dedicated experts.

- The criteria for rail specifies that investments must meet the following requirements: "new and existing trackside infrastructure and associated subsystems where there is a plan for electrification as regards line tracks, and, to the extent necessary for electric train operations, as regards sidings, or where the infrastructure will be fit for use by zero tailpipe CO_2 emission trains within 10 years from the beginning of the activity: infrastructure, energy, on-board control-command and signalling, and trackside control-command and signalling subsystems as defined in Annex II.2 to Directive (EU)2016/797". Such criteria could only be met by state-owned firms such as SNCF – not by private sector entities.

- Electricity generation circular economy criteria, notably that "The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability and that are easy to dismantle and refurbish", requires professional judgment and, depending on which expert is working on the investments, the understanding of the criteria varies between two extremes of the promoter being compliant or not.

Challenges in terms of coherence and consistency of the EU SF framework**:**

There are inconsistencies in sustainable investment criteria between the principal adverse impact (PAI) indicators of the Sustainable Finance Disclosure Regulation (SFDR) versus the Taxonomy substantial contribution and DNSH criteria.

3.4 Aggregation and reporting of Principal Adverse Impacts at investor entity-level

The market practice combines information provided to the Platform on Sustainable Finance by a financial services group. The main topics covered relate to reporting and data origination.

Objective of the market practice

The market practice presents an example of how financial market participants (FMPs) are taking differing approaches to reporting principal adverse impacts (PAI) under the Sustainable Finance Disclosure Regulation (SFDR), creating challenges for transparency and comparability of impacts.

The SFDR requires FMPs to describe the principal adverse impacts (PAI) of their investment decisions on sustainability factors, at the company level and on an aggregated basis for all their investments. This must be done annually and is mandatory for large FMPs with more than 500 employees, or is on a comply-or-explain basis for smaller firms. This information must be disclosed on the FMP's website, as a PAI website statement.

The objective of this case study is to describe how this is implemented in practice, and to discuss the need for standardisation of calculation methodologies and PAI category scoping to further compatibility between FMPs. In addition, it aims to demonstrate how the lack of transparency around preparing PAI disclosures and differing timelines on data provision across asset classes (e.g., in public versus private markets) could lead to misleading interpretations on the effectiveness of actions taken to mitigate PAIs, particularly when comparing reported impacts year on year.

Please provide further description and details on the market practice

Disclosure under the SFDR

The SFDR RTSs provide three PAI categories for reporting on PAI metrics in Annex I: investee companies; sovereigns and supranationals; and real estate assets. Each PAI category contains a dedicated set of adverse sustainability indicators with underlying metrics. The FMP systematically reviewed all asset classes to identify which PAI categories best match its investments in these asset classes. While mapping local authorities or sub-sovereign issuers to the sovereign/supranational PAI category might be rather uncontroversial, it became apparent in discussions with peers and industry groups that FMPs have taken divergent decisions on such mapping (particularly to the investee company bucket).

One often cited example is infrastructure investments. Within this asset class, investments can be differently structured, e.g., as project finance or investments in infrastructure companies which operate infrastructure projects. The FMP viewed only the latter as qualifying for potential mapping to the investee company PAI category. Although the FMP decided to exclude infrastructure assets from its PAI reporting scope, it provided details of the PAI consideration and actions taken on these investments in its PAI website disclosure.

Besides differences in PAI category scopes, the heterogeneity of asset mixes (e.g., value versus growth stocks, emerging versus developed markets) and asset classes within PAI categories – and especially within the PAI investee company category – result in starkly divergent timelines on data provision, data quality and different levels of investor influence, which bias reported PAI impacts. This is particularly relevant for year-on-year comparisons or comparisons across FMPs with different portfolio compositions. While some PAI metrics are largely easily available and straightforward in their calculation formula, other metrics require interpretation, and hence leave room for FMP-specific methodologies, which hinder comparability.

Further information on the general scope of the disclosure requirements under Art. 4 SFDR can be found in the Q&As published by the ESAs in November 2022: Q&As III.2, IV.23,24 and 25.

Please provide further description and details on the case from a quantitative perspective

Data example 1: The impact of increasing data coverage on reported PAI impacts

In the following example, the year-on-year PAI impact reporting on PAI metric 4, the share of investments in companies active in the fossil fuel sector, is compared with changing data coverage. As specified in Annex I SFDR RTS, "companies active in the fossil fuel sector' means companies that derive any revenues from exploration, mining, extraction, production, processing, storage, refining or distribution, including transportation, storage and trade, of fossil fuels as defined in Article 2, point (62), of Regulation (EU) 2018/1999 of the European Parliament and of the Council (3)". To calculate the adverse impact for PAI 4, no explicit formula is provided in Annex I SFDR RTS. This leads to diverging methodological interpretations, in particular regarding the denominator used. Three observed aggregation methods across FMPs were used in the 2023 PAI website statement to compare the magnitude of impact, depending on the aggregation methodology. As shown in the examples below, changing data coverage might lead to misleading interpretations on the year-on-year development of PAI impacts in all three aggregation methods.

Methodological interpretations in calculating PAI 4, share of investments in companies active in the fossil fuel sector (not conclusive)	
Option 1: Entire portfolio	In alignment with reporting requirements on Taxonomy alignment and sustainable investments, all investments of all asset classes are included in the denominator. This also includes cash and derivatives.
Option 2: Investee company scope	Irrespective of the data coverage, all investments classified under the "investee company" category are included in the denominator.
Option 3: Investee company scope with data	All investments classified under the "investee company" category for which data could be obtained on PAI 4 are included in the denominator.

Different methodological interpretations	**Portfolio Impact PAI 4 2022**	**Portfolio Impact PAI 4 2023**
Option 1: Entire portfolio	10%	25%
Option 2: Investee company scope	15%	38%
Option 3: Investee company scope with data coverage	50%	38%

	Average weight in portfolio 2022 and 2023 (Option 1)	**Average weight in portfolio 2022 and 2023 (Option 2)**	**Average weight in portfolio 2022 (Option 3)**	**PAI 4: Share of investments in companies active in the fossil fuel sector**	
				Impact 2022	**Impact 2023**
Listed company 1	10%	15%	50%	100	100
Listed company 2	20%	31%		n/a	0
Listed company 3	10%	15%	50%	0	0
Not-listed company 1	10%	15%		n/a	0
Middle-market lending fund (without look-through)	15%	23%		n/a	100

Sovereign issuers	20%			Not applicable	Not applicable
Infrastructure project, wind farms	5%			Not applicable	Not applicable
Infrastructure project, gas pipelines	10%			Not applicable	Not applicable

Data example 2: Impact of different PAI scope definitions on reported PAI impacts

A second FMP (FMP 2) has an identical portfolio as above, but considers infrastructure projects to be included in the PAI "investee company" scope. As a consequence, the reported PAI impact changes. When comparing the two PAI statements, the difference in the PAI scoping is, however, not apparent as causing the difference in reported PAI impact.

Different methodological interpretations	**Portfolio Impact 2022 PAI 4**		**Portfolio Impact 2023 PAI 4**	
	FMP 1	FMP 2	FMP 1	FMP 2
Option 1: Entire portfolio	10%	20%	25%	35%
Option 2: Investee company scope	15%	25%	38%	44%
Option 3: Investee company scope with data coverage	50%	66%	38%	44%

	Average weight in portfolio 2022 and 2023 (Option 1)	**Average weight in portfolio 2022 and 2023 (Option 2)**	**Average weight in portfolio 2022 (Option 3)**	**PAI 4: Share of investments in companies active in the fossil fuel sector**	
				Impact 2022	**Impact 2023**
Listed company 1	10%	12.5%	33%	100	100
Listed company 2	20%	25%		n/a	0
Listed company 3	10%	12.5%	33%	0	0
Not-listed company 1	10%	12.5%		n/a	0
Middle-market lending fund (without look-through)	15%	19%		n/a	100
Sovereign issuers	20%			Not applicable	Not applicable
Infrastructure project, wind farms	5%	6%		0	0
Infrastructure project, gas pipelines	10%	12.5%	33%	100	100

Data example 3: Impact of different methodologies on reported PAI impacts

Some PAI indicators are dependent on the interpretation by the FMP. An example is PAI metric 16, the number of investee countries "subject to social violations (absolute number and relative number divided by all investee countries), as referred to in international treaties and conventions, United Nations principles and, where applicable, national law". Here, aggregation of data deliveries is challenging without additional disclosure on, for example, the names of the countries reported under PAI 16 as "subject to social violations".

By aggregating data without further information on the methodologies used, the FMP could create inconsistent and potentially biased reporting. Likewise, the description of the calculation methodology in the Annex I table could potentially be very confusing to retail customers if several interpretations had to be outlined in the PAI website statement. As a consequence, the FMP does not plan to aggregate fund data for PAI 16 without ensuring the same methodology is applied. To illustrate the stark differences in possible interpretation, the following table shows differing PAI 16 impact from the 2023 PAI website statement of several insurance companies across Europe.

Insurance entity subject to Article 4 SFDR disclosure requirement, anonymised by country of domicile	PAI 16: the number of investee countries subject to social violations (absolute number), as referred to in international treaties and conventions, United Nations principles and, where applicable, national law
FMP 1 (Spain)	0
FMP 2 (Austria)	0
FMP 3 (France)	0
FMP 4 (Lithuania)	0
FMP 5 (Austria)	0
FMP 6 (Germany)	1
FMP 7 (Austria)	2
FMP 8 (Poland)	6
FMP 9 (Austria)	8
FMP 10 (Germany)	13
FMP 11 (Germany)	47

Data example 4: Differences in PAI indicator and PAI metric maturity

Some PAI indicators show very limited data coverage and high fluctuation in reported values. Based on first benchmarking analyses, these inconsistencies are driven by low data quality and coverage and divergent PAI calculation methodologies, rather than differences in the sustainability performance of the FMPs. The following tables show the differences in PAI indicator maturity for PAI metrics 2 and 8 and the potentially misleading interpretations which could be derived from comparing PAI metrics across FMPs (asset managers) – especially without further information such as PAI data coverage.

PAI 2: Carbon footprint (tonnes CO_2e per €1 million invested												
	FMP 1	**FMP 2**	**FMP 3**	**FMP 4**	**FMP 5**	**FMP 6**	**FMP 7**	**FMP 8**	**FMP 9**	**FMP 10**	**FMP 11**	**FMP 12**
Underlying AUM (€ billion) PAI 2	599	117	215	25	154	135	860	239	182	192	142	110
Data coverage PAI 2	39%	75%	53%	64%	86%	-	88%	-	-	-	-	-
Reported impact PAI 2	212	408	384	292	412	72	271	489	92	213	632	375

PAI metric 2, carbon footprint, shows relatively high data coverage compared with other PAI indicators. FMPs reporting the two lowest impacts in the above table (marked in grey) do not include estimated data on Scope 3 emissions and hence cannot be meaningfully compared with the other FMPs in the sample. Comparing the remaining PAI impacts, a relatively low fluctuation of reported PAI impacts can be seen, with the highest reported PAI impact (632) being roughly three times as high as the lowest value (212). Nevertheless, largely due to the differing methodologies regarding Scope 3 and the divergent data coverage, a high level of uncertainty surrounds comparisons of even this relatively mature PAI indicator. The same problems in comparability arise for PAI metric 1, total GHG emissions, and metric 3, GHG intensity of investee companies, which are likewise based on aggregated reporting of Scope 1-3 emissions.

PAI #8: Tonnes of emissions to water generated by investee companies per €1 million invested, expressed as a weighted average												
	FMP 1	**FMP 2**	**FMP 3**	**FMP 4**	**FMP 5**	**FMP 6**	**FMP 7**	**FMP 8**	**FMP 9**	**FMP 10**	**FMP 11**	**FMP 12**
Underlying AUM (€ billion) PAI 8	599	117	215	25	154	135	860	33	-	192	142	110
Data coverage PAI 8	1%	4%	7%	6%	3%	-	21%	-	-	-	-	-
Reported impact PAI 8	1	0.1	22	2	48	0.1	0	239	256	0.1	0.02	2

PAI indicator 8, emissions to water, shows relatively low data coverage. Excluding the lowest reported value ("0") in the above table due to possible data issues and no information on rounding practices, as well as the two highest reported PAI values ("239" and "256"), the different calculation methodologies used by the respective FMPs still result in a significant fluctuation of reported PAI values. The highest remaining reported PAI impact (48) is 2,400 times higher than the lowest PAI impact (0.02).

What is the outcome?

Generally, comparability between industry peers' PAI impacts is challenging, with different methodologies, data coverage, PAI scoping, asset allocation, portfolio size (e.g., owned emissions for large portfolios is inevitably higher than for smaller portfolios) and the number of PAI statements per entity (i.e., one consolidated statement or several individual statements). In addition, the lack of transparency across data coverage, methodologies, PAI scoping, the asset split in PAI categories and the asset base for Article 4 entity reporting aggravate the current incomparability.

- Increasing data coverage (due to, e.g., different data provision timelines from public and private markets) might lead to misleading conclusions on 'worsening' PAI metrics (such as owned emissions), which might send misleading or confusing signals about actions taken being not effective enough.
- For transparent disclosure on year-on-year developments, and to enable customers or other stakeholders to assess the effectiveness of actions taken on PAI metrics, more detailed disclosures would be critical. In a scenario with two portfolios of the same size, the portfolio with higher coverage might look 'worse' for indicators such as owned emissions, due to higher coverage. Disregarding coverage might penalise the FMP with higher coverage. PAI metrics might worsen year-on-year for different reasons, which may be not clear when comparing impacts over time. These could include:
    - worsening impact due to worsening of existing holdings' impacts;
    - worsening impact due to new investments; or
    - worsening impact due to coverage increase in existing holdings.
- Reporting on actions taken requires differentiation by asset classes in some cases, reducing easy comparability across FMPs.

Data and methodology used to compile the market practice	
Data and Methodology	**Data** The data in the case study was in part constructed for illustrative purposes (e.g., portfolio weights in data examples 1 and 2). Data for data examples 3 and 4 was collected directly from FMPs' PAI website disclosures, hence no assessment on the quality of the data can be provided. **Methodology** The case study aims to provide an overview across different methodologies observed to be used across FMPs, particularly with respect to the calculation of selected PAI metrics and estimation approaches regarding missing data.

Did you encounter any obstacles or gaps? If so, please describe.

The FMP in question faced specific challenges:

- Due to data availability, the first reporting on PAIs in 2023 was predominantly based on data sourced from data vendors for listed issuers in the PAI investee company category. For fund-of-fund investments or, more generally, investments with external asset managers in fund structures, a dedicated asset manager outreach process was initiated to deliver aggregated information at the fund level. It is important to note that, for existing investments, additional data provisions on PAI are subject to individual negotiations and level of influence, as PAI data provision was not agreed upon at the point of investment and there is no regulatory reporting requirement at the fund level (Article 7 of the SFDR). Data is not necessarily reported by private market investments nor those based outside the EU. As a consequence, data provision for existing investments (outside the EU) is a challenge and the FMP expects data provision to improve only slowly (as the result of engagement) over subsequent reporting periods.

- For data on listed issuers, the availability of mandatory PAI data differs significantly between the respective PAIs. However, data quality, time-lags in data provision and data coverage are challenges across all PAI metrics. This is partly because investee companies are only likely to gradually start reporting from 2024 onwards under the Corporate Social Responsibility Directive (CSRD). There will likely remain a data gap for companies that do not fall under CSRD, including those outside the EU. Likewise, FMPs have limited influence on time-lags. Sustainability data is usually reported annually by companies, and the timing can vary depending on their fiscal year. Depending on the data providers' data collection processes, sustainability data might have been published by the investee company anything from three to 19 months before it is used by the FMP. Despite continuously engaging with its data providers, the FMP had to include in its 2022 PAI website reporting partially outdated data (e.g., from 2019-20) for certain PAI indicators, such as hazardous waste and emissions to water.

- Even though calculation methodologies were defined by the Commission in the SFDR Delegated Regulation, and the European supervisory authorities provided further guidance via an FAQ, there are different approaches from market participants on how to address missing data in their PAI calculations. Some FMPs consider that it would be imprudent to estimate certain data, since the information available was largely incomplete or unclear, while others provided data on several calculation methodologies in their reporting. As a consequence of the regulatory leeway offered, three main approaches emerged: missing data could be accounted for as zero; the existing number could be extrapolated; or the FMP could disclose a coverage ratio in addition to the PAI indicator. For the calculation of weighted-average PAI indicators (e.g., PAI metric 5, the share of non-renewable energy consumption and production), the FMP only took into account those companies for which it could source data, to avoid assuming 'real zeros' for missing data, which would positively bias its reported PAI indicators.

- Similarly, smaller unlisted companies are often not required to report on sustainability. This means that information requests from FMP on PAI indicators represent entirely new data requirements. The FMP is actively engaging with its asset managers and data providers, as well as improving its own estimation methodologies, to fill long-term data gaps following the best effort principle. As a result, FMPs might derive different PAI metrics for the same investee company, rendering the comparison of PAI metrics across FMPs difficult. At present, the FMP only uses estimated data for reporting on carbon-related PAI metrics. Scope 1 and 2 emissions are based on an

emissions waterfall, combining several data sources, and reported as well as estimated data. In addition to the estimated data it sources from data providers, the FMP applies sector averages based on NACE sectors. It discloses details on its data enrichment processes as part of the explanatory notes to its group sustainability report and it provides a link to these notes in its PAI website statement. Scope 3 emissions data are sourced from data vendors and are limited to reported data. It does not source Scope 3 estimated data, due to methodological and data quality concerns, in contrast with other FMPs that, partially or totally, include Scope 3 estimated data in their calculations. The differing approaches to Scope 3 data across FMPs in particular hinder a meaningful comparison of carbon-related PAI indicators based on emission scopes.

- While some peers publish one consolidated entity-level PAI statement, the market standard is to publish several statements for all the company's entities that are FMPs. This shows that investments subject to the respective disclosure can vary in terms of size, asset allocation/mix and geographical exposure: one entity may provide broadly diversified products (e.g., exchange-trade funds), while another may focus on a specific region or asset class. This further hinders comparability across peers, as certain assets may be included in multiple entity reports and simple aggregation of several statements into one consolidated statement could result in double-counting.

There were also challenges in terms of coherence and consistency of the EU sustainable finance framework. In the Commission Delegated Regulation (EU) 2022/1288 of 6 April 2022 supplementing Regulation (EU) 2019/2088 of the European Parliament and of the Council (SFDR RTS), it is described how "[s]ustainability-related disclosures in the financial services sector should be sufficiently clear, concise and prominent to enable end investors to take informed decisions. To that end, end investors should have access to reliable data that they can use and analyse in a timely and efficient manner." Likewise it would be "[…] necessary to ensure that the information disclosed can be easily compared and that the indicators of principal adverse impacts of investment decisions on sustainability factors can be easily understood."

3.5 Origination of Taxonomy and PAI reporting data

The market practice combines information provided to the Platform on Sustainable Finance by an infrastructure fund manager. The main topics covered relate to reporting and data origination.

Objective of the market practice

The objective of this study is to show how monitoring and reporting of ESG data is undertaken and organised, including for principal adverse impact (PAI) indexes and alignment with the Taxonomy. This market practice considers the use of the Sustainable Finance Disclosure Regulation and of specific indicators.

Please provide further description and details on the market practice

The fund manager provides debt and equity to unlisted companies active in infrastructure. It focuses on companies that can deliver improvement in environmental, social and governance (ESG) performance alongside economic growth.

Sources of data used

Data is obtained by the fund manager through specific queries sent to the companies in its portfolio. Requests are sent in electronic format, forming what is called the reporting package. The reporting package is sent every year in January, and portfolio companies are asked to return it by the end of March. It captures a vast amount of environmental, social and governance (ESG) data compiled under the Global Reporting Initiative (GRI) standards. The data needed to compile PAI indexes is also collected through the reporting package.

The fund manager employs external advisors in the data collection effort. These advisors give online assistance to portfolio companies (particularly those recently acquired that are compiling the reporting package for the first time) and provide a consistency check of the data received.

The fund manager seeks to verify the data received in two ways. First, external advisors are required to check that the portfolio companies have indeed compiled the reporting package according to the GRI standards, while also investigating the reasons for changes in each KPI compared with the previous year. In addition, the fund manager has developed proprietary software which runs consistency checks on each KPI submitted, for each company, received through the reporting package.

Data origination

The fund manager publishes its integrated sustainability report on an annual basis. Over the years, the manager has modified its report to include the increasing number of KPIs it is monitoring. For the latest edition, covering the 2022 financial year, the report underwent a major overhaul.

As the fund manager voluntarily opted for the ‘comply’ approach to disclosure under the Sustainable Finance Disclosure Regulation (SFDR), its sustainability report now includes PAI indexes in addition to the ESG KPIs.

The fund manager believes, however, that PAI indicators calculated and published at an aggregated level, i.e., as the sum of all its funds under management, provide little useful information to investors. For this reason, the fund manager has decided – also on a voluntary basis – to calculate PAI indicators for each individual fund as, in all likelihood, this is what interests the fund manager’s limited partner (LPs) investors.

In fact, the fund manager's PAI statement, published on its website, does not allow for such disaggregation. However, the sustainability report is published on a voluntary basis, thus allowing for greater leeway as to its content. This allows the fund manager to take a PAI-by-fund approach, which it believes will increase transparency towards its LPs and other stakeholders.

The sustainability report also includes the calculation of alignment with the Taxonomy for those funds where such an obligation exists.

Data and methodology used to compile the market practice

Data and Methodology

Data was collected through the reporting package the fund manager sends to investee companies, typically in the fourth quarter. They return the complete dataset by the end of the first quarter of the following year. Data sent and received is checked by the manager using a proprietary model which checks for transcription or calculation errors. Data is aggregated to calculate the PAI KPIs.

Alignment with the Taxonomy is calculated at the investee level, typically with the use of external advisors. The fund manager ensures coordination in the way alignment is calculated, for example through the adoption of consistent climate scenarios (using the do no significant harm (DNSH) criteria) that are the same for each invested company.

Internal resources

The fund manager relies on its internal resources and, in particular, its dedicated ESG business unit

External resources

The fund manager uses external advisors to collect data from investee companies through the reporting package. External advisors also provide a number of quality/quantity checks on the data received by the investee companies in order to ensure robustness of the data published (PAI and Taxonomy).

Did you encounter any obstacles or gaps? If so, please describe.

Challenges relating to PAIs

- Calculation of PAIs has been a contentious issue for much of 2022 and 2023, as a number of KPIs were subject to interpretation by reporting companies. Thankfully, the situation has improved over time. The publication of FAQs has clarified many of the question marks, although some uncertainties remain.

- In many cases, the definitions used appear to relate to funds investing in liquid rather than illiquid assets (for example, see the reference to 'market capitalisation'). Transposing some of these concepts to the world of real, unlisted assets creates potential for errors or, at the very least, misinterpretation of the law.

- Based on the evidence of the 2022 numbers, certain PAIs require some refinement. For example, the calculation of the gender pay gap (PAI 12) can create a distorted representation. This is because aggregating the remuneration of two genders without accounting for seniority or the level of each employee does not lead to meaningful results. This is often the case in infrastructure, where male workers are typically deployed in maintenance and construction work (the vast majority of the employee base) while women are mostly employed at the headquarters. Because headquarter staff tend to be paid more, it would appear that there is no gender gap. However, at closer inspection and focusing just on the number of staff employees, gaps exist and are, or could be, meaningful.

- The calculation of Scope 3 emissions (PAIs 1,2,3) is another problematic area, on two fronts. First, most companies (and particularly small and medium-sized companies) are not yet able to monitor Scope 3 emissions, while some larger companies either monitor said emissions or have a plan to do so over the next 12 months. This potentially leads to very misleading information. All else being equal, the mere fact that the number of companies in a portfolio reporting Scope 3 emissions is growing over time will lead to overall growth in the carbon emissions and footprint of that portfolio, obscuring any actual reductions in emissions.

- Emissions to water (PAI 8) are also difficult to calculate. In the vast majority of cases, water is tested through samples taken by regulating agencies to ensure threshold levels are not exceeded. Few companies monitor all emissions discharged into water on a continuous basis. As sampling only reports the presence of certain substances in terms of 'intervals', the overall level of emissions reported in PAI 8 varies widely, depending on whether and what average values (within those intervals) are used. The overall measurement thus becomes very subjective.

- In addition, and across all those cases, where the fund manager only owns a minority stake in the company in question, it may not have access to the relevant data and/or the ability to retrieve it.

Challenges relating to the Taxonomy

- The calculation of alignment with the Taxonomy is very challenging for small and medium-sized companies, as their knowledge of the SFDR and the Taxonomy Regulation is often very low; nor they are internally equipped to tackle this. They therefore have to resort to the use of external consultants. The fund manager then needs to coordinate its portfolio companies and their consultants to ensure alignment is properly calculated and that the methodology is consistently applied throughout all companies and across different funds. For larger companies, this is less of a problem.

- Calculation of alignment is usually a very resource-intensive process, particularly for opex and capex. The calculation of certain items can be challenging even for sophisticated accounting systems. For example, renewable power supplied to parked aircraft is almost impossible to extract from most accounting systems, yet this could have an impact on the alignment of an investment. The result is that alignment could be greater than it appears, but is very hard to evidence.

- Consistency in the calculation of alignment within a portfolio or indeed among funds from the same fund manager cannot always be guaranteed. This is particularly the case when the fund manager has a minority stake in the investee company and therefore little influence: the ability to engage with the company or indeed encourage it to improve is very low.

Challenges relating to the Taxonomy – the case of debt funds

- In the fund manager's experience, calculation of PAIs and alignment to the Taxonomy is very challenging when it comes to debt funds. Particular problems arise when debt funds also lend money to prospective borrowers, i.e., in the case of debt/credit funds, as is the case for the fund manager. When arranging a loan, a bank, or a consortium of banks, usually originates the deal. However, banks have much less stringent criteria than an Article 8 fund, as is the case with this particalar fund manager (and many other private debt/credit funds). In their lending contracts, banks originating loans do not usually include provisions relating to PAIs (or requirements at least to making available the data needed to calculate PAIs) or the calculation of alignment with the Taxonomy.
- Large companies tend to be more able to help lenders on both fronts (regarding the PAI and the Taxonomy) and usually provide at least the data needed for calculating PAIs. (However, this does not tend to be the case for the Taxonomy: alignment is either provided or not, but lenders have no way to calculate it by themselves.)

Solutions: How were the obstacles addressed?

- With regards to PAIs, the fund manager engaged with external consultants and sector experts so to achieve a consensus on the interpretation of certain parameters.
- As for the Taxonomy, the fund manager ensured coordination among portfolio companies so as to achieve a homogeneous calculation of Taxonomy alignment throughout its portfolio.

3.6 Taxonomy reporting for an infrastructure fund-of-funds

The market practices combine information provided to the Platform on Sustainable Finance by an infrastructure fund of funds. The main topics covered relate to reporting and disclosure.

Objective of the market practice

The market practice provides an overview of the current status of EU Taxonomy reporting by infrastructure fund managers for an indirect fund-of-funds strategy. Considering the high profile of these fund managers, and the global nature of the fund-of-funds manager's portfolio, such an overview offers an approximation of the current status of the infrastructure funds market with regards to EU Taxonomy reporting.

The data collection process involved direct contact with the fund managers (the general partners, or GPs), a review of annual ESG reports, a review of the funds' quarterly reports, a review of co-investment reports, limited partners advisory committee (LPAC) meetings, and due diligence questionnaires produced during the investment process. The fund-of-funds team regularly engages with its GPs and fully endorses ESG requests from its main anchor institutional investor. Whenever possible, the fund-of-funds manager's team actively tries to steer its GPs towards more comprehensive ESG reporting, including in line with the EU Taxonomy.

Please provide further description and details on the market practice

The results show that 55% of funds in the portfolio currently report (or are expected to report when they issue their first report) on alignment of certain portfolio companies with the EU Taxonomy.

Whenever a portfolio company has been deemed EU Taxonomy-eligible (i.e., at least a part of its business activities are among those listed in the EU Taxonomy Regulation), then the alignment of its activities with the EU Taxonomy can be reported, in particular the percentage of revenues, capex and opex aligned with EU Taxonomy business activities. Funds classified as Article 8 or 9 under the Sustainable Finance Disclosure Regulation (SFDR), with environmental characteristics or objectives, have the obligation to report on alignment.

The information provided in the table above allows a further analysis which can help to guide the next steps to be taken by the fund-of-funds manager team to further steer its GPs towards a more comprehensive EU Taxonomy reporting. The table shows that:

- Around 76% of the funds reporting on alignment are managed by Europe-based GPs.
- All the funds that report on alignment are classified as Article 8 or 9 (13 funds as Article 8 and eight funds as Article 9), according to the SFDR.
- Around 33% (seven out of 21, i.e., all the energy transition funds in the portfolio) of the funds reporting on alignment are focused on the energy transition.
- Around 81% (17 out of 21) of the funds reporting on alignment show a commitment date of 2020 or later.

Only two funds have reported an EU Taxonomy alignment share greater than zero. Of the remaining funds, one fund committed to undertake best efforts to achieve EU Taxonomy alignment on a certain minimum share of its EU Taxonomy eligible investments, and three funds have stated an ambition to report an EU Taxonomy alignment share greater than zero. Of these three funds, one stated its ambition in its private placement memorandum – it has not reported on 2022 given it is a 2023 vintage fund – and two funds stated their ambition in their periodic SFDR reporting. These are both greenfield funds that stated that there was not sufficient documentation available for 2022 to fully substantiate alignment. One additional fund disclosed that its reported 0% alignment was based on a thorough analysis of EU Taxonomy-eligible companies.

Looking at the six funds that either already reported an EU Taxonomy alignment greater than zero or have the ambition or commitment to do so, the funds have the following characteristics:

- 83% of the funds that report (including ambition/commitment) an alignment greater than 0% are European-based GPs.
- 100% of these funds are classified as Article 8 or 9 (one fund is Article 8 and five are Article 9).
- 100% of these funds are focused on the energy transition.

All of them have a commitment date of 2021 or later.

Data and methodology used to compile the market practice

For this case study, the following documents were analysed: ESG annual reports, data provided by GPs on Excel templates and via emails, quarterly reports. The methodology used involved the review of the relevant reports and information and the subsequent classification in the different cluster provided.

Did you encounter any obstacles or gaps? If so, please describe.

The main challenge consisted of contacting all the GPs to encourage them to move towards EU Taxonomy reporting. Many GPs replied by noting that the regulation is new and that they needed more time to deliver against it. Their main concern was to report on something which is not yet clearly defined and hence risk a breach.

Finally, most non-European GPs have just started to look into this matter, even those who are more advanced in terms of ESG reporting and which have clear decarbonisation and sustainability goals. They also confirmed that they have received EU Taxonomy disclosure requests from several European institutional investors during their last fundraising processes. In some instances, their consultants stated that they have just completed the process to integrate principle adverse impact (PAI) indicators and other SFDR-related metrics into their reporting and communicated their need for additional time to set up an additional layer of analysis related to the EU Taxonomy.

Solutions: How were the obstacles addressed?

Having considered the current status of the industry regarding EU Taxonomy reporting, the fund-of-funds manager team believed that it was important to continue to push its GPs such that, within a year or two, they will report more consistently on such data and make the effort to achieve an EU Taxonomy alignment share greater than zero. This included, for example, negotiating a best-efforts commitment by one manager to achieve Taxonomy alignment on a certain minimum share of Taxonomy-eligible investments. In addition, the team offered to help shape Taxonomy reporting for GPs that are just starting to do so, especially for non-European GPs. A template including the EU Taxonomy metrics requested by the fund-of-fund's main investors has already been shared with all GPs. Moreover, the team is independently contacting data providers to systematise the requests for ESG information, including EU Taxonomy-related ones.

Benefits of applying the EU Taxonomy & Sustainable Finance Framework:

☐ Simplification
☐ Client engagement
☐ Credibility
☐ ESG risk management / mitigation
☐ Greenwashing mitigation
☐ Transparency
☐ Comparability
☒ Other – *please specify*

Contacting all the fund-of-funds manager's GPs and conveying to them the importance of the EU Taxonomy for such a prominent investor as the main LP benefits the entire infrastructure sector from an ESG perspective.

GPs have received the message and understand the importance of disclosing EU Taxonomy metrics for their future fund series. Some GPs were more advanced than others in this regard, and the fund-of-fund manager anticipates a period of one or two years before it sees tangible improvements in EU Taxonomy reporting. Considering the current starting point, it sees this timeline as acceptable and aligned with the process of global acceptance of SFDR-related metric reporting.

Other aspects you would like to mention?

In addition to the EU Taxonomy, the fund-of-funds manager considers, when investing in new funds, whether the fund managers adhere to or engage in other well-known ESG standards, associations and initiatives. For instance, it monitors participation in the GRESB real estate sustainability benchmark, and whether GRESB reporting is provided. On the climate impact side, it monitors engagement with the Science Based Targets initiative (SBTi) and tries to steer its GPs towards setting up decarbonisation plans for their portfolio companies that are in line with the SBTi's criteria, as well as possibly submitting those plans to the SBTi for approval (while recognising that the SBTi currently has certain capacity limitations). Another element that is considered during the manager's due diligence of new funds is whether GPs are signatories of the Net Zero Asset Management initiative, which requires a commitment to net zero greenhouse gas emissions by 2050 or sooner.

Regarding broader ESG issues, all of the fund-of-funds manager's GPs are signatories of the Principles for Responsible Investments (PRI), which demonstrates a public commitment to ESG and transparency and is an indicator of robust ESG standards. To practically evaluate and benchmark GPs, the manager uses the Institutional Limited Partners Association (ILPA) ESG Assessment Framework. This framework assesses and scores 21 topics with a ranking of 1 (not present/worst) to 4 (advanced/best). The average of the 21 scores (across six main categories: (i) policies and commitment to standards, (ii) governance, (iii) communication and reporting, (iv) investment process, (v) responsiveness to DEI, and (vi) responsiveness to climate risks and opportunities) provides an overall ranking. While this framework does not refer to specific sustainability risks, it considers the overall level of ESG integration into the fund manager's investment processes, including how it identifies and manages sustainability risks. In addition to such screening and monitoring activities, the fund-of-fund manager's second third-party fund is itself an SFDR Article 8 classified fund, with a minimum sustainable investment share and corresponding reporting obligations.

GPs must adhere to a number of ESG-related initiatives and complete a multitude of ESG questionnaires to provide their investors comfort that they have robust ESG standards and credible net zero commitments. A certain level of standardisation of such questionnaires could help to ensure consistency and reliability of the information provided, increasing efficiency for both GPs and LPs. Specifically for the EU Taxonomy and the SFDR, an addendum to an internationally recognised ESG benchmarking framework (such as the ILPA ESG Assessment Framework) focused on these two topics could be helpful for both GPs and LPs. The current format of the ILPA ESG

Assessment Framework is comprehensive and useful for understanding the overall ESG setup, but it does not specifically consider EU ESG regulations. The inclusion in such a framework of an addendum with both EU Taxonomy alignment information and PAI indicators could help drive standardisation.

3.7 Use of the Taxonomy to screen a global equity fund

This market practice is based on information provided to the Platform on Sustainable Finance by an institutional investor. It addresses data origination for financial products reporting under the EU Taxonomy and SFDR.

Objective of the market practice

The market practice presents an example of how a financial market participant (FMP) has used the EU Taxonomy and Sustainable Finance Disclosure Regulation (SFDR) to assess the sustainability performance of a global equity fund focused on climate solutions. A large majority of the fund is invested in companies based outside the EU. This made it particularly challenging for the FMP to collect Taxonomy-related data for those companies, as they are not subject to the Taxonomy Regulation or the Corporate Sustainability Reporting Directive (CSRD).

Please provide further description and details on the market practice

The fund invests in global equities with a dual objective of seeking long-term financial returns and delivering a positive and measurable impact on the environment. The strategy aims to contribute to the reduction of global greenhouse gas (GHG) emissions by investing in listed companies whose activities improve resource sustainability, support the energy transition or address issues around natural resources and food scarcity.

At this stage, and given its pre-existing investment process, the fund did not commit to alignment with the EU Taxonomy in its pre-contractual disclosure, due to lack of reliable data and as the EU Taxonomy was in early stages of implementation. It also faced other challenges in doing so, including international application.

The FMP analysed its 10 top portfolio holdings, made up of European, UK and US companies, in terms of their ESG score and with the objective of identifying barriers to committing to a level of Taxonomy-alignment. These holdings represent 19% of the fund's assets under management (AUM). Within this sample, five companies belong to the Utilities sector (representing 8.6% of fund AUM), two belong to the Materials sector (3.4% of AUM), and the other three companies operate in the consumer staples, industrials and information technology sectors. Those 10 companies address the themes targeted by the fund as they operate in renewable energy and food production.

International application of the EU Taxonomy:

As mentioned above, more than 50% of the fund's assets under management are invested in North American companies, which are not subject to EU regulation. In terms of environment-related indicators, those companies report on their GHG emissions, but it proved difficult to find any information or KPIs related to capex, opex or revenues aligned with the EU Taxonomy.

On the other hand, for EU-based companies, the FMP was able to find shares of revenues, capex and opex aligned with the EU Taxonomy. This was as expected, given the regulation has started to be implemented for the first two environmental objectives. However, that said, none of the analysed companies provided figures on climate change adaptation.

The FMP also wanted to check the accuracy of the data reported by the companies by comparing reported Taxonomy data of two companies operating in the same sector. However, while the FMP could verify the eligibility of their revenues, with reported information on absolute generation and compare it with revenues generated by those activities, it was difficult to assess the accuracy of the degree of alignment, due to limited transparency on the Taxonomy's do no significant harm (DNSH) and minimum safeguards criteria.

Investment strategy

The fund focuses on companies in high-stake sectors developing solutions or transforming their activities. Depending on the nature of their activities, the FMP found in its analysis that, while for some of the EU-based companies a significant amount of capex is aligned with the EU Taxonomy, in most cases those companies currently have limited alignment with the EU Taxonomy in terms of revenues, illustrating where they stand in their transformation journey.

Interaction with other sustainable finance regulations

For now, the strategy is classified as Article 9 under the SFDR. This categorisation relies on a sustainable investment methodology designed to identify companies and assets with sustainable economic activities contributing to environmental and/or social objectives, focused on an assessment at the entity rather than economic activity level. This is in line with the guidance issued by the Commission, including a Q&A published in April 2023. In this methodology, the SFDR DNSH criteria are considered, as are good governance practices.

In addition, the Q&A does not provide a precise level of Taxonomy-aligned turnover needed to consider an investment as sustainable. At the same time, Article 9 funds are deemed to comprise 100% sustainable investments.

Data challenges

Of the 10 companies the FMP analysed, seven are based in the EU. All seven companies disclose in their report either Taxonomy-aligned turnover, capex or opex. However, as of early June 2023, the FMP's data provider only provides Taxonomy-aligned revenue figures for one company. (It finds that 73% of its turnover is Taxonomy-aligned, representing 2.38% of the fund's total AUM as of end of May.)

Of the three non-EU companies within the sample, the FMP received Taxonomy-aligned turnover figures for just one company. (61% of its turnover is aligned with the Taxonomy, representing 2.7% of fund AUM as of end of May).

The Taxonomy-aligned turnover data shared by the data provider is not aligned with the data reported by the EU-based company in its annual report. The company reports 36.5% of aligned turnover, compared with the figure of 73.1% from the data provider. This reflects an issue in terms of the quality of data reported by data providers at this stage, and their ability to update their datasets in a timely manner, which are often still largely based on estimates rather than reported information, with significant discrepancies from one data provider to another.

What is the outcome?

Access to reliable and comparable quantitative data

The asset manager relies on an external data provider to implement the Taxonomy regulation. At this stage, the operational complexities linked with the implementation of the sustainable finance framework, and the relatively low level of maturity at the issuer level, have meant that a specific approach and governance has not yet been developed to replace the data from external data providers with more accurate quantitative data when the FMP has identified a mismatch. Such an approach will require an appropriate level of robustness to ensure those overrides are properly reviewed and validated, implemented and revised over time. The FMP recognises that data providers also face resource constraints and operational challenges, which result in a low level of Taxonomy alignment data provided to their clients.

While annual reports may mention a company's commitment to the EU Taxonomy objectives and its intention to comply with its criteria, they often do not provide specific data on eligible or aligned activities. This makes it challenging to accurately assess the company's contribution to Taxonomy objectives. However, it has to be noted that some companies are transparent regarding underlying non-eligible activities.

Regulatory requirements

The reliance on estimated data is an area of uncertainty at this stage in the EU sustainable finance framework. It has proved to be an issue for EU-based issuers, given the fact that the EU Taxonomy was recently implemented. This is therefore likely to improve over time, but this is an issue which needs to be addressed and clarified for non-EU issuers, to allow investment strategies such as this one to more formally apply the EU Taxonomy in their investment processes.

Interaction with the European sustainable finance framework

This fund was launched in 2018 and its investment process was designed at that time. As new regulations entered into force in France and the EU, and as part of compliance with the label rulebook, it has adjusted its approach over time. However, given the level of maturity of the EU Taxonomy, and the current challenges related to data availability and comparability, it may be too early for pre-existing products such as this to be able to onboard the EU Taxonomy in a binding manner at this stage.

Data and methodology used to compile the market practice

For this case study, the FMP combined qualitative analysis of portfolio companies' 2022 annual reports and quantitative data received from its external data provider.
It analysed the 2022 annual reports of the 10 companies with the highest ESG score in the portfolio to understand to what extent they report on EU Taxonomy-aligned and eligible activities. It compared this data to that from the external data provider.

Internal resources

The FMP used its data-platform tool where it stores all financial and extra-financial data. In addition, it conducted qualitative research on companies, relied on existing qualitative research performed by its internal ESG and impact analysis, and discussed with its investment teams to understand how they use Taxonomy-related information.

External resources

It used company annual reports. It aimed to perform this study with the data and information it had access to, without requiring additional information that is not publicly and widely available to other stakeholders.

Did you encounter any obstacles or gaps? If so, please describe.

Challenges included:

- The usability of the EU Taxonomy:
  - Data quality and reliability
  - Geographical barriers, given the fund was more than 60% invested in non-EU companies
  - Understanding the underlying data and methodology
  - The quality of data provided by external providers

- The coherence of the broader framework
  - Compatibility with the SFDR sustainable investment definitions, since the regulation does not provide a clear methodology and gives leeway to asset managers to develop their own methodology and DNSH approach.

3.8 Use of the Taxonomy and the SFDR to track and drive the sustainability performance of direct real estate investments

The market practice is based on information provided to the Platform on Sustainable Finance by an institutional investor.

Objective of the market practice

This market practice presents an example of how institutional investors apply the EU Taxonomy and the Sustainable Finance Disclosure Regulation (SFDR) to monitor and drive sustainability performance in direct real estate investments. It particularly focuses on the implementation of EU Taxonomy screening procedures in a diversified real estate investment portfolio, including how to assess the Taxonomy's substantial contribution and do no significant harm (DNSH) criteria, and how to comply with its minimum safeguards requirements.

Please provide further description and details on the market practice

In 2022, the financial market participant (FMP) implemented a portfolio-wide EU Taxonomy alignment screening process for all directly held real estate investments. It aimed to systematically track and subsequently drive sustainability performance and prepare for upcoming reporting requirements, including meeting assurance requirements.

The FMP's diversified real estate portfolio consists of hundreds of investments, located mainly across Europe. The main real estate sectors in which it invests are office, retail, logistics and residential.

Activity mapping

As the portfolio includes assets at various points in the investment lifecycle, a range of real estate-related activities defined in the delegated acts of the Taxonomy Regulation were potentially relevant. Hence, the process was started based on the full list of activities listed in Annex I and II of the Taxonomy Regulation. A materiality/likelihood assessment was performed to narrow down these to a shorter list that could be applicable to the portfolio. In addition, financial data was analysed to support the initial qualitative activity mapping.

The conclusion is that taxonomy-eligible Turnover is generated only from activity 7.7, Acquisition and ownership of buildings. Applying the 'output method' (also known as the 'essential approach') derived from frequently asked questions (FAQs) documents clarifying Article 8 of the EU Taxonomy Regulation, capex and opex that might otherwise be eligible under activities 7.2–7.6 are included in the assessment under the main turnover-carrying activity 7.7. The single purpose of this activity is to enable the FMP to generate rental turnover after completion.

EU Taxonomy alignment screening

Activity 7.7 refers to "buying real estate and exercising ownership of that real estate". The FMP decided to assess Taxonomy alignment of the activity exclusively against the climate change mitigation (CCM) criteria, because it is stricter than the climate change adaptation (CCA) criteria for this activity. For example, based on CCM substantial contribution criteria, an asset needs to have an energy performance certificate (EPC) rating of A or demonstrate top-15% performance: the corresponding CCM DNSH criteria only requires an EPC of C or above or top-30% performance. The main difference when it comes to CCA criteria – simplifying greatly – is that any adaptation measures required need to have been already implemented (CCA substantial contribution) and not just planned (CCA DNSH). Moreover, real estate, as a significant source of greenhouse gas emissions, plays an import role in climate change mitigation. In addition, there was more uncertainty around the application of CCA criteria (e.g., in the context of the evaluation of adaptation plans) at the time of implementation.

Due to the size of the portfolio and the fact that required information is often not readily available via central systems, the FMP decided to follow a three-step EU Taxonomy alignment screening approach.

(1) In the first step, all 500-plus assets were screened:
   - **a.** regarding their energy performance, based on the relevant technical screening criteria (e.g., EPC rating or top-15% performance for assets built before 31 December 2020) and
   - **b.** regarding potential physical climate risks, via two physical climate risk tools (including an in-house tool). The early performance of the physical climate risk analyses allowed the FMP to better evaluate the likelihood of DNSH compliance and/or required costs or efforts with regard to subsequent DNSH screening activities. Various perils, time horizons and climate scenarios were covered.

(2) Second, all assets which don't meet the pre-screening procedure above could already be excluded because they don't fulfil <u>all</u> technical screening criteria, and therefore they are not Taxonomy-aligned.

(3) Third, a full EU Taxonomy alignment screening process, covering all technical screening criteria, was conducted for the remaining assets, which were considered to be potentially Taxonomy-aligned.

For this latter full EU Taxonomy alignment screening process, the necessary information was often not readily available, or at least not in a structured way (e.g., via central data management systems). Hence, a detailed data collection template, covering all relevant substantial contribution and DNSH criteria was created and shared with the respective local asset or ESG manager which had performed the initial screening and collected the required evidence. To meet DNSH criteria, this step also involves a comprehensive climate risk and vulnerability assessment, based on the following steps: (1) risk relevance, (2) climate risk and vulnerability assessment and (3) adaptation solution assessment. The climate risk and vulnerability assessment involves the use of the aforementioned physical climate risk tools. However, certain potentially material perils (e.g., solid mass-related hazards) are usually not in scope for those physical climate risk tools. These had to be addressed using decentralised data sources and/or tools, and these were not necessarily fully in line with Appendix A (e.g., they were backward looking).

To comply with the Taxonomy's minimum safeguards, a due diligence process covering human rights, taxation, fair competition and anti-corruption aspects was initiated in parallel by central ESG managers. Human rights compliance was most challenging, as it needs to be ensured both for the FMP's own entities and for direct suppliers. Hence, the first part of the human rights assessment focused on the analysis of human rights risks in alignment with the minimum safeguards within the FMP's operating entity, and the second part on material direct suppliers. Direct suppliers were classified as low, medium or high risk, based on country, sector and volume risks. Relevant measures were identified to ensure compliance with minimum safeguards, based on the human rights risk level of the respective direct suppliers. This may include, for example, self-assessment questionnaires, the roll-out of supplier codes of conduct and/or media screening.

This alignment screening process ultimately informed the EU Taxonomy (alignment) quota at the asset level, which was subsequently stored and processed through the FMP's central investment data infrastructure.

<u>Control environment/auditor alignment:</u>

One of the objectives of the initiative was to ensure future reporting readiness (meeting "reasonable assurance" requirements). The alignment screening framework therefore also needed to be embedded in a comprehensive control environment, comprising ESG control activities at both the local asset management and central levels. Moreover, this also involved intense alignment activities with external consultants, including both technical advisors and Big Four audit firms.

<u>Asset management activities:</u>

The information generated allows for the sustainability performance of real estate assets to be systematically tracked (and subsequently improved) in a consistent way. The information can be used to inform portfolio analyses, asset strategy reviews or planning activities.

What is the outcome?

The FMP was able to consistently evaluate sustainability performance across its directly held real estate portfolio. This allowed it to, on the one hand, identify data gaps and data quality issues and, on the other, set a foundation for future asset management activities. It also helped increase internal sustainability capabilities across large parts of the real estate organisation, providing a new 'common language' that will help ensure efficiency and consistency in future discussions.

Data and methodology used to compile the market practice

The analysis relied on data that is unstructured by nature and that was not readily available. External data (e.g., provided by data providers) was not available in this unlisted alternative asset class. Hence, the data had to be collected by in-house experts. Data quality is expected to be improved in the coming years.

The data had to be collected using internal resources and will have to be reviewed and updated at least on an annual basis. The process was mainly manual. Since the data is unstructured and local, there is currently no dedicated technical solution available. Different local markets may involve different sources (e.g., publicly available top-15% benchmarks versus private data providers). In certain cases, data was simply not available.

Applying the 'essential approach', 100% of turnover, capex and opex could be mapped to activity 7.7, meaning that no further financial data was required. The screening is based on in-house resources and a dedicated questionnaire (covering both substantial contribution and DNSH criteria), leveraging insights from external and internal experts. The ultimate evaluation is reviewed or performed by the FMP's central ESG team. The minimum safeguards compliance activities were also coordinated by the central ESG team, supported by a Big Four audit firm.

Use of Proxies

Proxies were only used in rare cases, most notably in those situations where the local regulation does not provide the relevant information, such as an EPC rating. (In this case, a mapping was implemented based on the energy performance colour band, if available.)

Did you encounter any obstacles or gaps? If so, please describe.

<u>Data availability</u>

Data availability is a general challenge in the real estate industry. This is a function of the underlying investments, which are heterogeneous, and the characteristics of the real estate market, which lacks transparency. Key criteria are linked to very asset-specific technical information, unstructured data and documentation quality that, while typically very high upon completion, decreases over time. Moreover, official benchmark data (e.g., top-15% performance) is often not available.

<u>Criteria interpretation</u>

In many cases, current Taxonomy Technical Screening Criteria and/or local implementation or related regulation leaves significant room for interpretation. For example:

- The "built before 31 December 2020" criterion, which defines which substantial contribution criteria need to be applied, was only specified in December 2022. It was clarified that the date of (complete) building permit application should be considered, rather than the year of completion.
- Nearly-zero emission building (NZEB) requirements are often unclear or hard to implement (e.g., deep refurbishments, especially outside the EU) and should be ideally replaced by specific thresholds (e.g., as in France):
    - Certain assets that were deeply renovated must be considered newly built. Hence, substantial contribution criteria would, among other things, require energy performance that is at least 10% lower than NZEB requirements (with date of building permits after December 2020). However, in certain member states, such as France, NZEB requirements don't cover deep refurbishment activities. Respective assets cannot therefore be considered Taxonomy aligned.

    - Due to the heterogenous implementation of NZEB requirements across EU member states, it is very hard to implement equivalence approaches outside the EU. In addition, generic principles do not necessarily match local implementation.
- The "efficiently operated through energy performance monitoring and assessment" requirement needs to be clarified. The existence of a building management system (BMS) may meet this requirement. However, based on feedback provided by technical experts, not all BMSs allow for an efficient steering of technical building equipment. Only 'intelligent' BMS would allow for this.
- Clear criteria are available for newly built assets. However, for existing assets – including those that have been renovated – there are requirements for the renovation project itself (see 7.2 Renovation of existing buildings). However, assets that meet the TSC for the renovation project might not meet the TSC for the standing asset itself after completion (7.7 Acquisition and ownership of buildings). This may disincentivise certain refurbishment activities, most notably if the "essential approach" is followed for the activity mapping.

Consultant and auditor alignment

Very resource-intensive alignment activities were required to implement audit-proof screening and reporting procedures. Auditors in particular lack relevant know-how, both regulatory and technical. For example, they require using benchmark data that may not be in line with the EPC's energy performance or demand definition. Audit firms tend to have a strong home (country) bias, although the EU Taxonomy regulation, by definition, leverages different EU member state regulations. European-wide engagement is already a challenge for the firms. Different audit firms tend to have different views, further increasing complexity. Given significant room for interpretation, they still play a very important role in implementing the regulation. There should be a clear escalation process in the case of conflicting views.

Consistency between the EU Taxonomy regulation and the SFDR

The Taxonomy's DNSH criteria and the SFDR's principal adverse impact (PAI) indicators are not harmonised. Based on the SFDR's PAI indicators, an asset with a EPC rating of C is considered inefficient, that is, it causes a principal adverse impact, and therefore does significant harm. In contrast, based on the Taxonomy's Technical Screening Criteria, an EPC C rating meets the DNSH criteria. Moreover, the PAI indicator currently does not – at least explicitly – allow for the alternative top-30% criterion, in contrast with the Taxonomy regulation, which explicitly allows for this option as an alternative to the EPC rating.

Benefits of applying the EU Taxonomy and the sustainable finance framework:

☐ Simplification
☐ Client engagement
☒ Credibility
☒ ESG risk management / mitigation
☐ Greenwashing mitigation
☒ Transparency
☒ Comparability
☐ Other – please specify

Please elaborate below:

The Taxonomy provides a systematic, independent sustainable performance evaluation tool, allowing for credible communication regarding sustainability performance and comparison across different regions etc. It helped create a common language within the organisation, but most notably with external advisors (e.g., technical due diligence advisors). This helped inform a more substantive discussion.

3.9 Use of the Taxonomy and SFDR to assess client sustainability preferences in insurance-based investment products and investment funds

This market practice is based on information provided to the Platform on Sustainable Finance by a financial market participant.

Objective of the market practice

This market practice presents an example of how financial market participants (FMPs) are using the EU Taxonomy, sustainable investment share and PAI considerations to assess customers' sustainability preferences during the process of selling insurance-based investment products (IBIPs) and funds.

It explains how the assessment of sustainability preferences can be integrated into processes to advise on and sell insurance-based investment products and investment funds to institutional and retail investors. It summarises some of the key benefits, outcomes and challenges linked to the use of the Taxonomy and other EU metrics related to the EU sustainable finance framework.

Please provide further description and details on the market practice

<u>The regulatory requirement</u>

In accordance with Article 2 of Delegated Regulation 2021/1257, customers sustainability preferences need to be assessed as part of the suitability assessment during the sales process for an IBIP. Only a product that matches the customer's sustainability preferences can be recommended at the end of the sales process. As a first step in the advisory process, other investment objectives and individual circumstances should be assessed by the financial adviser, before asking for potential sustainability preferences.

<u>An online tool for IBIPs</u>

For the IBIP advisory process, an online tool is made available and is usually filled out by the financial adviser during the sales process. Throughout the process, the tool provides different layers of questions and information, incorporating boxes with more detailed information, web links to disclosure documents (e.g., entity-level principal adverse indicator (PAI) statements) or PDF files (e.g., fund fact sheets).

After the other investment objectives and individual circumstances have been assessed, the financial adviser has to enter the sustainability tool, which is part of the overall online tool for the suitability assessment. As an introduction to sustainability in financial products, the first screens describe the term "sustainability preferences" and explain how that concept can be broken down into three subcategories, namely minimum percentages of environmentally sustainable investments, minimum percentages of sustainable investments and/or PAI considerations. As the next step, financial advisers start the assessment of the customer's sustainability preferences, first asking whether the customer has any sustainability preferences at all (for a Y/N answer).

If the customer does have preferences regarding sustainability, the next slide explains that the following questions and options are displayed irrespective of the products at offer (meaning that the customer can choose options that may not be able to be matched to any products currently at offer). The customer can choose between three categories: PAI considerations; a minimum proportion of sustainable investments; and a minimum proportion of environmentally sustainable investments.

Once one or more of those three categories are selected, a second subcategory of selections can be made:

- For PAI considerations, the customer can choose to focus on one or more of the five PAI families (greenhouse gas (GHG) emissions, biodiversity, water, waste, and social and employee matters). Since there is no specific guidance on how information on customers' preferences regarding PAI considerations can be collected in a standardised way, the FMP has chosen the following approach:
    - It assessed which PAI indicator it deems (particularly) relevant in terms of a minimum requirement that should be met for the fund/IPIB to be matched, if the customer chooses the overarching PAI family as a focus.

- For the GHG PAI family, the PAI indicators GHG emissions, carbon footprint and GHG intensity of investee companies must at least be considered for the fund/IBIP to be matched to a customer choosing a focus on that family.
- This underlying approach is disclosed to the customer via textboxes during the selection of their preferences, to ensure an informed decision on the customer's side.

- For the minimum proportions categories, the customer can choose between four standardised minimum percentages:
  - As of now, the values for the environmentally sustainable investments are lower and more granular (the lowest for environmentally sustainable investments being a minimum proportion of 0.01 % and the highest a minimum proportion of 50%), which reflects the fact that this investment category is a sub-category of sustainable investments.
  - Considering the difficulties that committing to two different minimum proportions of environmentally sustainable investments (with and without sovereigns) would entail (the FMP would have to steer them separately to ensure that no breaches can occur during the whole lifecycle of the product), the company has decided to commit to only one minimum proportion of environmentally sustainable investments, which is calculated with sovereigns included in the denominator and therefore lower in proportion. Customers are shown a corresponding explanation in the tool next to the selection button for environmentally sustainable investments.
  - In addition to the minimum percentages, the customer can instead select "no specific preference", which would mean that the product must commit to a number greater than zero.

Once the financial adviser has filled out the corresponding boxes according to the individual preferences of the customer, the tool either shows a match between the individual preferences and the characteristics of the suitable product, or a mismatch. Since the sustainability preferences are only assessed as a second step during the sales process, there usually is only one IBIP – if any – that matches the other investment objectives and individual circumstances as well as the sustainability preferences of the customer.

If the result is a match, the financial adviser recommends that product as meeting the customer's needs and fills out an offer for an insurance contract.

If, however, the tool cannot match a product to the customer's preferences, they are asked if they want to exit the sales process or if they want to adapt their sustainability preferences to the characteristics of an otherwise suitable product. To do so, the customer is shown the sustainability characteristics of such a product (that is, one which is suitable considering the customer's other investment objectives, the financial situation, and their knowledge and experience). If they choose to adapt their sustainability preferences, the sale ends with a recommendation for that product. Since the customer was willing to adapt their sustainability preferences to the characteristics of the product, there now is a match between preferences and characteristics.

Since the sustainability preferences are only assessed as a second step, after the existing requirements of the Insurance Distribution Directive (IDD) have been assessed (namely the customer's demands and needs, other investment objectives, financial situation, and knowledge and experience), the number of suitable products is already narrowed down significantly even before the sustainability preferences of the customer have been collected. Asking neutrally, and via standardised percentages irrespective of the products at offer, and especially irrespective of the already identified otherwise suitable product(s), makes a match between the preferences of the customer and the characteristics of the few products left rather unlikely.

Finally, all information gathered by the financial adviser through the online tool is saved and documented. This includes:

- information on the selection of the minimum proportions of (environmentally) sustainable investments
- the selection of PAI families
- whether there is a match or a mismatch

- the decision of the customer in case of a mismatch, including the reason for the adaptation of their sustainability preferences (oftentimes prioritising other investment objectives).

Sale process for a multi-option product (MOP) (an IBIP with underlying investment options)

The introduction to the term "sustainability preferences", as well as the neutral collection of information from the customer, remains the same. The only difference is the process of matching the customer's preferences with the characteristics, if a MOP is deemed (otherwise) suitable.

Once the financial adviser has identified the sustainability preferences of the customer, they will be steered towards fund selection (as underlying investment options). The FMP has implemented a filter that only displays funds that meet the sustainability preferences of the customer and their risk profile. The customer can choose between those funds while different characteristics (in terms of risk category and sustainability characteristics) are shown as small boxes/icons on the screen next to the fund name and ISIN.

Once the customer has selected the funds, they are shown a summary of all the funds chosen, as well as other IBIP investment options, and a confirmation that their preferences have been matched. With this approach, the FMP has implemented one of the two options the European Insurance and Occupational Pensions Authority (EIOPA) included in its guidance on how to match preferences to the characteristics of MOPs (namely that "all the underlying options selected should match the minimum proportion determined by the customer at the time when the advice is provided").

If, however, no funds at offer can be matched to the sustainability preferences of the customer, the mismatch will be shown and the customer will be given the option to either end the sales process or adapt their preferences. In case of the latter, the customer has the same options as before: they can choose between the three subcategories (environmentally sustainable investments, sustainable investments or PAI consideration) with the same standardised minimum percentages and PAI families.

Online tool for investment funds

The FMP implemented a similar tool for the fund advisory process.

The first question asks the customer if they want sustainability preferences to be included in their investment (with a Y/N answer). Depending on the answer given, either only funds with a classification in accordance with Articles 8 or 9 of the SFDR can be selected, or all funds are available.

If sustainability is important to the customer, the screen is expanded to show different options, similarly to the IBIP online tool:

- Customers can further choose if they want to invest in a Taxonomy-aligned product, in a sustainable product in line with the SFDR, or a product that considers PAI (or any combination of these three) or opt for "no specific preference".
- On a sub-level, customers can select out of four different minimum percentages for environmentally sustainable investments and sustainable investments, or they can choose the option "no specific preference" (meaning that the fund would have to commit to a number greater than zero).
- For PAI consideration, the same systematic approach as described above is applied. Once the selection process has been completed, the tool either shows a match, in the form of suitable funds, or a mismatch.
- In the case of the latter, the customer is given the choice to adapt their preferences to the characteristics of funds suitable to the customer according to their other investment objectives, financial situation, knowledge and experience.

On the next screen, the customer is shown the same selection options as before (minimum percentages of (environmentally) sustainable investments and PAI families), the only difference being that options with no possible product-match are in grey. The underlying approach to include sustainability preferences in the advisory process is described to the customer via textboxes during the selection of their preferences, to ensure they can come to an informed decision. An additional document, providing a short introduction to "sustainability in the advisory process" is also provided.

All information gathered by the financial adviser through the online tool is saved and documented, as described above. This includes the customer's original sustainability preferences and any adaptation of those preferences.

Institutional investors in investment funds and insurance products

Institutional investors are advised that they may choose to include individualised sustainability preferences in their agreement with the investment manager and have those reflected within the respective guidelines.

The suitability assessment in accordance with Article 30 of the IDD is only mandatory for IBIPs as defined in point (2) of Article 4 of Regulation (EU) No 1286/2014 of the European Parliament and of the Council. Insurance products made available to a professional investor are, in principle, not in scope of the amendments to the IDD. If professional investors express an interest in sustainability, which is not uncommon in, for example, companies that want to offer occupational pensions and benefit schemes to their employees, the FMP usually provides more detailed information – for example, the PAI Statement on its website in accordance with Article 4 of the SFDR, pre-contractual templates for products on offer, its document on the methodology in accordance with Article 10 of the SFDR, and marketing material with background information on the regulatory framework.

Feedback from involved stakeholders:

Feedback from distributors:

- The process is well structured
- PAIs are easier to explain than minimum (environmentally) sustainable investment percentages.

Feedback from customers:

- It is difficult to understand the difference between sustainable and environmentally sustainable investments (based on the Taxonomy).

Data and methodology used to compile the market practice

To be able to match preferences to characteristics, the tool for IBIPs is stacked with data extracted from the European ESG Template (EET) for the IBIP's underlying funds as well as directly from the product/asset owner for general account-based products. For the online tool for investment funds, the FMP uses a separate (internal) process, stacked with internal data (for the distribution of its own funds).

A service provider collects EET data via Morningstar; However, the EET has no standardised date for updates, which depend on individual fund timelines.

A service provider also delivers daily EET data, which is checked for changes in relevant data (e.g., minimum percentages). A certain time lag between the EET change and the date of publication cannot be avoided.

If data has changed, it will be implemented in a second data basis, which provides the relevant data for its sale systems/ advisory process and pre-contractual customer documents.

Minimum proportions of (environmentally) sustainable investments and/or the selection of PAI families are archived in the financial services group's backend for each fund selected by the customer.

To avoid time lags in the online tool for investment funds, the FMP updates each adjustment at the fund level (e.g., the minimum proportion or classification) through its internal process.

Did you encounter any obstacles or gaps? If so, please describe.

Challenges related to the use of the Taxonomy (including data availability, criteria interpretation, clarity on scope of application, other)

Data coverage for environmentally sustainable investments was quite low in 2022, which led to many products not committing to a minimum percentage at all or only to a minimum share of under 1%.

Collecting information on sustainability preferences – especially regarding environmentally sustainable investments – within a product in a neutral way without indication of what the market can offer at that time can lead to customer expectations that cannot be fulfilled.

Challenges in terms of the coherence and consistency of the EU sustainable finance framework

Explaining the concept of sustainability preferences in a way the customer genuinely understands is very challenging. Taking into consideration the financial literacy of the average customer, financial advisers face difficulties when collecting information on the sustainability preferences of their retail investors. The technical language used in the sustainable finance framework is perceived as being very complex, detailed and therefore confusing. The FMP sees a risk in providing a detailed explanation at the beginning of the assessment of the customer's sustainability preferences, which might be perceived as off-putting. This could lead a customer who would otherwise indicate an interest in sustainability to choose an identified 'easy way out' by answering no when asked if they have any sustainability preferences.

Customers who indicate an interest in sustainability can also easily be frustrated by the advisory process, if no product can be offered because of a mismatch between preferences and characteristics. This difficulty is systematically inherent to the assessment of sustainability preferences.

For PAI considerations, the customer can choose to focus on one or more of the five PAI families (greenhouse gas (GHG) emissions, biodiversity, water, waste, and social and employee matters) as recommended by EIOPA in their guidance on the integration of sustainability preferences under the Insurance Distribution Directive. Since there seems to be diverging interpretations within the market whether the consideration of one PAI indicator is enough to display the whole PAI family as being considered, the FMP has chosen the following approach:

- It assessed which PAI indicator it deems (particularly) relevant in terms of a minimum requirement that should be met for the fund/IPIB to be matched, if the customer chooses the overarching PAI family as a focus.
- For the GHG PAI family, the PAI indicators GHG emissions, carbon footprint and GHG intensity of investee companies must at least be considered for the fund/IBIP to be matched to a customer choosing a focus on that family.
- This underlying approach is disclosed to the customer via textboxes during the selection of their preferences, to ensure an informed decision on the customer's side.

At the beginning of 2023, some financial market participants in the industry lowered their commitment for existing funds (regarding their minimum proportion of (environmentally) sustainable investments). Because funds can be underlying investment options within an IBIP, there was a direct impact on the commitment(s) within IBIPs and the recommendation of the financial adviser at the end of the suitability assessment to be considered. As a result, customers with an insurance contract dated after 2 August 2022 had to be contacted in writing to be made aware of the lowered commitments by the fund manager, and given the opportunity to change funds and/or be re-assessed by a financial adviser.

Differing definitions and calculations of sustainable investments make comparisons between the sustainability level of funds challenging. Letting customers choose between the three categories of investment type (environmentally sustainable investments, sustainable investments and PAI consideration) puts an emphasis on these categories as the main KPIs for product selection. This can incentivise FMPs to calculate sustainable investments at the company level in a bolder way, giving their products a slight advantage in direct comparison to products with a more conservative approach regarding the underlying calculation of sustainable investments. Even though providers should disclose their methodologies and calculation method on their website, in accordance with Article 10 of the SFDR, there is simply no room to incorporate into the advisory process these disclosures for every available fund.

The FMP generally welcomes the possibility for MOPs "to assess whether the weighted (per premiums) of minimum proportion of environmentally sustainable investments or sustainable investments in the selected underlying options of the MOP matches the minimum proportion expressed by the customer at the time when the advice is provided". However, depending on the product, it may be very difficult or even impossible to establish a meaningful average minimum proportion. The appointment of the premium between several investment options is not necessarily predetermined but may be subject to review and revision by the FMP depending, for example, on market developments during the product's life cycle. Specific guidance on how to calculate this "weighted average" that takes the aforementioned challenges into account would be appreciated.

Solutions: How were the obstacles addressed?

- To mitigate risks of overburdening customers with too much information, the FMP has chosen a layered approach to the introduction to the term "sustainability preferences", providing in-depth information on, for example, different PAI indicators to boxes displayed on the side of the screen that open upon a mouse-over. In this way, interested customers can access all the information available, while customers with less specific interest in the topic can be informed in more general terms without feeling overwhelmed. Icons and graphs can also help understand how the different investment types are interlinked and what they stand for.

- It has given extensive training to its sales staff, enabling them to explain the terminology to customers. In addition, the FMP provides detailed training material with in-depth information on the SFDR, the Taxonomy and IDD/MiFID-requirements.

Benefits of applying the Taxonomy and the sustainable finance framework:

☐ Simplification

☒ Client engagement
☐ Credibility
☐ ESG risk management / mitigation
☒ Greenwashing mitigation
☒ Transparency
☒ Comparability
☐ Other – *please specify*

Systematically integrating sustainability preferences into the advisory process can be a great opportunity to engage customers and educate the public on the fact that financial products can consider environmental/social characteristics and therefore “be sustainable” to varying degrees. In the FMP’s opinion, setting clear rules and standardising the advisory process reduces greenwashing risks, allows for a level playing field and also incentivises FMPs and financial advisers alike to incorporate sustainability into their business models.

4. Insurers

This annex compiles a stocktake and analysis of current practice. Considering the early stages of adoption of the EU sustainable finance framework, none of those market practices represent or should be interpreted as best practice or 'market standard'.

The market practices span three areas: 1) the use of the EU sustainable finance framework for business strategy, transition planning and target setting; 2) finance and transactions; and 3) reporting, monitoring and assurance. They are contributed by seven stakeholder groups of large corporates, credit institutions, investors, insurers, public institutions, auditors and consultants, and SMEs (small and medium-sized enterprises).

Disclaimers

This document is not an official European Commission document nor reflects an official European Commission position. Nothing in this document commits the European Commission nor does it preclude any policy outcomes.

This report represents the overall view of the members of the Platform on Sustainable Finance. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

The considerations below are compiled under the aegis of the Platform on Sustainable Finance and cannot be construed as official guidance by the European Supervisory Authorities (ESAs). As a result, the views and recommendations do not purport to represent or anticipate any future official guidance and views issued by the ESAs which may differ from the contents of this report. The inclusion of market practices in this report cannot be construed as their endorsement or validation, in particular for the purpose of assessing Taxonomy-alignement of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission. The market practices described in the Annex to this report shall not be deemed to be automatically compliant with the legal obligations under the Commission Delegated Regulation (EU) 2021/2178 or other relevant EU legislation or Commission guidance documents.

Introduction to insurance market practices

Introduction to the stakeholder group's context

The Insurers stakeholder group brings together representatives from insurance companies (by which we include reinsurers) within the platform, as well as other relevant institutions and platform members and observers. The group members share their expertise to further frame the current usage of the EU sustainable finance framework in the market. As risk managers, risk carriers and investors, the insurance industry has a vital interest and plays an important role in fostering sustainable economic and social development. It plays this role through both its underwriting and its investment activities.
Through their underwriting capabilities, insurers have an essential role to play in the transition, providing cover against climate-related losses and developing insurance solutions for the projects, products and services which are necessary for the transformation of the European economy (e.g., renewables, green innovation and electric vehicles), advising people and companies on actions they can take to minimise their environmental risks and their carbon footprint, and sharing with public authorities relevant data and knowledge on climate-related perils.

Underwriting activities
The EU Taxonomy is currently the primary framework for defining products and activities as 'green'. At this stage, for insurers, the Taxonomy only acknowledges climate change adaptation as a substantial contribution for (non-life) insurance activities (Annex 2, Economic Activities 10.1 for Insurance and 10.2 for Reinsurance). Concretely, this means that insurers' efforts to support climate mitigation are not currently Taxonomy eligible.
From the beginning of 2024, insurers will report for the first time the level of alignment of their non-life insurance activities, covering FY 2023, through the 'underwriting ratio', as set out in the EU Taxonomy's Article 8 Delegated Act.

Investment activities
Complementary to their underwriting activities, insurers are large investors, and they have been integrating climate change considerations into their investment strategies and processes for a number of years, in some cases prompted by regulation (e.g., Article 173 in France). Covering those activities, at the beginning of 2024 insurers will report for the first time the level of alignment of their investment activities, covering FY 2023, through the 'investment ratio'.
Within this Compendium and the EU Platform on Sustainable Finance work, considerations related to investment activities are addressed by the Investors stakeholder group, while the Insurers stakeholder group focuses on underwriting activities.

Introduction to the market observations
The market practices showcase information that was collected thanks to the efforts of members of the stakeholder group; they reflect the information that was provided in this context. They rely on a detailed review of the market practices of an insurance company in relation with reporting preparation and green insurance product development, as well as on a survey conducted in June/July 2023 with the support of Insurance Europe to confirm that the observations were shared by other insurers, with most respondents based in Western Europe. These are just some of the observed practices, and there may be additional approaches in the market.
We have looked at how insurers are fulfilling their regulatory obligations in relation to the EU Taxonomy, focusing on the underwriting ratio and related challenges. At the time of the preparation of the compendium of market practices, insurers had only reported on eligibility and, as such, it has been possible to highlight anticipated challenges related to alignment reporting, but not to review existing practice.

We also looked at how insurers are taking concrete and accelerating actions to develop sustainability strategies and sustainable offerings, such as green products and more sustainable claim management practices, aimed at tackling challenges related to climate adaptation, as well as climate mitigation, the circular economy and biodiversity loss. We

assessed the extent to which the Taxonomy in its current form could be used to measure progress on those efforts over time, which is limited at this stage, beyond climate adaptation.

Key opportunities identified

- **Strategy definition and product development**:
    - Use of the EU Taxonomy to support green product development: A review of insurers' contributions beyond climate adaptation would improve articulation of the EU sustainable finance framework with insurers' voluntary initiatives, which could provide a more comparable framework to support product development, therefore reducing greenwashing risks. Indeed, without a common standard or definitions for these green products, the development of such products is at risk, given fear of greenwashing, added complexity for development, and a lack of trust among customers in companies' green claims. A more standardised and industry-wide framework for defining sustainable non-life insurance products would have a positive impact on customers (in terms of transparency and comparability) and the insurance industry (improving credibility and clarity for product development and reducing the potential for greenwashing).

    - Net zero target setting: In addition to the Taxonomy, insurers may consider frameworks and definitions provided by industry-convened bodies which have considered this subject. As an example, the Principles for Sustainable Insurance (PSI) and the Net-Zero Insurance Alliance (NZIA) are two industry-convened efforts that explore and further develop climate, biodiversity, nature, and social and human rights products, services and underwriting practices. The NZIA's Target Setting Protocol v1 has a specific target category of 'Insuring the Transition', which is aimed at developing climate mitigation products and services. The PSI has provided thought leadership on the relevance of ESG issues to the life and health insurance businesses as well, extending beyond only property and casualty lines of business. At this stage, the parallels with the EU Taxonomy framework are, again, limited to climate adaptation.

- **Reporting preparation:**
    - Significant interest is seen within the industry as insurers are preparing their first alignment reporting, going beyond 'regulatory compliance'. Current technical screening criteria can provide useful incentives for insurers as they progressively transform their activities to deal with challenges around climate adaptation, including by encouraging policyholders to develop preventive actions, or by offering risk management support to their clients.

Challenges and shortcomings

Two key challenges were identified within the market practices when considering how the EU sustainable finance framework can be used by insurers as part of the greening of their underwriting activities:

- **Strategy definition and product development**:
    - Use of the EU Taxonomy: In the current state of the Taxonomy, the contribution of insurers to the transition to a more sustainable economy is narrow, as it focuses on their role in relation to the insurance of climate-related perils as part of climate adaptation. The broader transformation of the insurance business – for example with the development of green insurance solutions to support innovation and projects which are essential to the transition, engagement with policyholders to encourage them to manage adverse risks related to climate change, and the greening of claim management practices – is not recognised. While insurers are starting to evolve their practices to address the challenges around climate adaptation, it has been difficult to draw more parallels between the transition strategies developed by insurers within their underwriting activities and the EU sustainable finance framework as it currently exists.

- **Reporting preparation:**

- Preparation for reporting is still at an early stage, as no disclosures on alignment have yet been made at the time of publication of the Compendium. However, the market observations highlight a number of challenges in relation to the interpretation of the rules for eligibility reporting (including whether policies within a line of business should be included with an explicit or implicit approach). They also anticipated a number of interpretation challenges in relation to alignment reporting (including treatment of premiums, reporting on the do no significant harm (DNSH) and minimum social safeguards criteria). Clarifications on those points will be necessary to ensure comparability.
- There are challenges around data collection and verification, mainly because insurers have not necessarily been monitoring their activities and product development in line with the 10.1 and 10.2 criteria. Automatisation also poses challenges.

Peer-to-peer recommendations

- develop additional market guidance to support the comparability and usefulness of qualitative voluntary disclosures related to the EU Taxonomy underwriting KPIs;
- refer to the EU Taxonomy framework for product development purposes to improve comparability and reduce greenwashing concerns; and
- enhance the integration and uptake of the EU sustainable finance framework within market-led initiatives.

Conclusion

To sum up, current market practices shows that the insurance sector is still at an early stage in terms of its ability to use the EU Taxonomy to support the transformation of its underwriting activities in line with the EU's environmental objectives. As insurers prepare for future implementation of the Corporate Sustainability Reporting Directive and the Corporate Sustainability Due Diligence Directive, and continue to implement their voluntary commitments in terms of sustainability and decarbonisation, ways to further leverage the EU Taxonomy could be considered, noting also key challenges in terms of data and the sector's current state of play.

Industry survey on Taxonomy reporting for insurers: An overview of the main challenges

The Insurers stakeholder group conducted a survey via Insurance Europe about Taxonomy reporting, in July 2023. Eleven replies were received, with the key highlights presented below (with country and insurer type representation presented at the bottom).

Highlights for insurance underwriting activity:

- **Reporting preparation, assurance and use**
  - Teams in charge:
    - Eligibility reporting involves a broad range of stakeholders within organisations, with existing financial/accounting frameworks (namely, Solvency II) leveraged.
    - Nearly half of the respondents described an approach that relies on the investment, underwriting and finance teams, with few citing involvements of only one department.
  - Many respondents mentioned obtaining either limited or reasonable assurance for their non-financial Taxonomy reporting.
  - Most stated they did not receive questions from shareholders on Taxonomy eligibility.

- **Eligibility reporting and interpretation of the requirements:**

- Eligibility is primarily determined by respondents by the eight eligible lines of business listed in the Delegated Act. There was one mention of the analysis done by France Assureurs. Most respondents relied on the eligible business explicitly mentioning climate-related coverage as a covered peril. Most applied gross premium values. There was one mention of the use of claims experience to identify the share of premiums for climate-related risks.
- Interpretation challenges: most respondents highlighted interpretation challenges in their responses, including Interpreting "direct" versus "indirect", the definition of eligibility, the definition of risk and the interpretation of eligible lines of business.

- **Eligibility reporting and operational challenges:**
  - Respondents noted that Eligibility ratio preparation highlighted challenges in relation with internal systems, data, and staff understanding.
  - Internal data was compiled by leveraging existing reporting frameworks (e.g., Solvency II) up to group level, after necessary exercises were first performed with underwriting, pricing, etc. to define the business to be included. Data challenges varied and included internal information system constraints, as well as difficulty interpreting the legal requirements.

- **Alignment reporting and considerations regarding challenges for the first reporting exercise:**
  - Key challenges primarily centred on interpretation of the rules, with some concerns about the availability of data at the granularity that may be required (depending on interpretation).
  - As many companies were still working on the internal processes for alignment reporting at the time of the survey, there was acknowledgement that not all challenges or difficulties may yet have been identified. Such challenges could include:
    - Requirement of explicit communication to customers on preventive actions and possible rewards for their actions
    - Internal coordination and clear understanding of the requirements for compliance by necessary departments
    - Pricing and modelling expertise necessary for climate risks and innovative insurance solutions
    - Data needed for, notably, the DNSH criteria, especially for large global operators with business outside the EU.

- **Other considerations related to the EU Taxonomy for underwriting activities included the following:**
  - To date there has been little use of the Taxonomy-alignment criteria for product development purposes. However, some respondents were in favour of a supervisor definition of green insurance products.
  - Additionally, most respondents did not believe that, in the context of greenwashing, current Taxonomy revenues from non-life underwriting activities are a reasonable indication of how an insurance company may offer insurance protection or advisory for climate-related perils to enable climate change adaptation for its customers.

<u>Survey respondent composition</u>

- Number of insurers completing the survey: 11
- Commercial and retail insurers represented.
- Countries represented: France, Germany, Italy, Spain and Switzerland

4.1 Reporting: 2022 Taxonomy report with a focus on the Underwriting KPI (eligibility)

The market practices combine information provided to the Platform on Sustainable Finance by an insurance company. The main topics covered relate to data disclosure, the greening of business models, and for reduction of the risk of greenwashing.

Objective of the market practice
The market practice presents an example of use of the Taxonomy rules in preparing the annual disclosure of the proportion of Taxonomy-eligible non-life insurance economic activities.
EU Framework or EU Taxonomy?
This market practice considers eligibility alignment with the Taxonomy.
Please provide further description and details on the market practice
For insurers, the Taxonomy Regulation considers that non-life insurance and reinsurance activities consisting of underwriting climate-related perils have the potential to provide adaptation solutions that contribute substantially to preventing or reducing the risk of the adverse impact of the current climate and the expected future climate on people, nature, or assets, without increasing the risk of an adverse impact (see recital 46 of Delegated Act 2021/2139). At this stage, the delegated acts supplementing the Taxonomy Regulation do not consider that insurance and reinsurance activities can substantially contribute to the five other environmental objectives. Hence, focusing on the direct contribution of insurance activities, the Taxonomy does not consider what or who is covered, but how the insurance company and, more specifically, its products and services are helping policyholders to adapt to climate change risks, in particular to prevent or protect against climate-related perils. The Taxonomy introduces an emphasis on providing adaptation solutions against climate-related perils, which requires insurers to screen their non-life insurance portfolios for products and services that explicitly include the coverage of climate-related events in the policy terms and, consequently, are eligible under the EU Taxonomy. Eligibility reporting preparation Beyond the explicit exclusion of four lines of business defined in the Solvency II Directive (ie. general liability insurance, credit and suretyship insurance, legal expenses insurance and miscellaneous financial loss), the EU Taxonomy regulation Annex 2 10.1 provides limited guidance on how to determine the eligibility of an insurance product. The Taxonomy puts an emphasis on the role of insurers in providing adaptation solutions against climate-related perils. Bearing this in mind, when preparing eligibility reporting, an assessment at the level of granularity introduced by the regulation, i.e. the lines of business defined in the Solvency II Directive, appeared insufficient to determine eligibility. <u>The interpretations and methodological choices the insurer made when preparing its FY2022 disclosure are as follows:</u> **A) Analysis performed by line of business** Starting from the interpretation challenge described above, due to a lack of detailed guidance on how to determine the eligibility of an insurance product, the insurer has identified, among the remaining eight non-life insurance and reinsurance Solvency II lines of business, three lines of business composed of insurance or reinsurance products which generally include coverage of risks related to climate-related perils: Motor insurance (first-party damages rather than mandatory third-party liability insurance);Marine, aviation and transport insurance; andFire and other property damage insurance.
Please provide further description and details on the case from a quantitative perspective
The gross written premiums reported in those three lines of business have been recognised as eligible for the Taxonomy by the insurer in preparing eligibility reporting, except the premiums of products for which climate-related perils are explicitly excluded from the insurance policy terms or for which climate-related perils cannot trigger any claims (i.e., taking an 'indirect' approach to eligibility).

For other potentially eligible lines of business according to Annex 2 10.1 (i.e., medical expense insurance, income protection insurance, workers' compensation insurance, motor vehicle liability insurance and assistance), only gross written premiums related to products for which climate-related perils cover is explicitly mentioned in the insurance policy terms have been considered as eligible (i.e., a 'direct' approach to eligibility).

The analysis has been done on direct lines of business, and reinsurance assumed.

B) Treatment of premium

While the underwriting of climate-related perils may only represent a portion of the coverage provided by an insurance product or service and, consequently, the premiums include the underwriting of other risks, the insurer assumes that the product as a whole provides protection that will be effective in the event of a climatic hazard ('risk pooling'). For this reason, and without ignoring the fact that it is technically complicated to segregate premiums relating to climate-related events, the full premiums and fees associated to the product and services, respectively, have been considered as eligible.

Where a reinsurance product includes different types of underlying products, only the part of the premium relative to climate-related perils coverage has been considered as eligible, using a calculation based on a pricing tool or claim database.

What is the outcome?

Based on the methodological choices highlighted above, the non-life insurance and reinsurance activities eligible under the Taxonomy represent 35% of total non-life premiums. There is, however, a gap between this eligibility figure and the steps taken by the insurance group to mitigate the impact of its insurance activities on the environment, as described above.

Data and methodology used to compile the market practice

Data and Methodology	The eligibility assessment is based on the premium amounts that are disclosed for Solvency II Pillar 3 purposes
Internal resources	• The definition of the methodological approach, the preparation of the reporting instructions and the coordination of the overall process were carried out by the central team in charge of sustainability reporting • The eligibility assessment was conducted at local level with the support of underwriting experts. • The consolidation tool used for IFRS and Solvency II reporting has been used to collect and consolidate the data from entities

Did you encounter any obstacles or gaps? If so, please describe.

There were challenges in interpreting the criteria.

Solutions: How were the obstacles addressed?

Interpretation choices made by the insurance company aimed at analysing the regulation in a careful manner, providing details on the approach taken in the public disclosure. In addition, the insurer has continued to work with peers and as part of industry groups to share and help align interpretation choices, to ultimately help to increase comparability from one insurance company to another.

Other aspects you would like to mention?

Stakeholder feedback included comments as follows:

- Limitations imposed by the taxonomy rules for insurers, property and casualty (P&C) insurance products only and climate adaptation only, do not recognise the insurance industry's other positive environmental and sustainable impacts
- There is a lack of clarity as to whether the absence of an exclusion on climate-related coverage is sufficient for inclusion or, again, should there be evidence of the client availing itself of the solution.
- Insurers face complexity when trying to recognise coverage and solutions for green assets and green clients/activities, as many insured clients are too small to have publicly disclosed information about their Taxonomy alignment, and insurers sometimes only provide coverage for specific assets or operations of an insured; Taxonomy-aligned data may not be available at that granular a level.
- The P&C taxonomy rules, which only cover climate adaptation, are of limited use for encouraging product development.

Observations on the preparation of alignment reporting

The preparatory work underway for classifying aligned premiums already shows that rigorous application of the 11 technical criteria determining the significant contribution of non-life insurance and reinsurance activities will result in a significantly lower proportion of premiums being aligned with the EU Taxonomy.

Non-life insurance portfolios do not meet all the conditions required for alignment, or do so only to a very limited extent, despite the adaptation solutions they already offer their policyholders.

4.2 Product: State of use of Taxonomy in the development of non-life green insurance products

The market practices combine information provided to the Platform on Sustainable Finance by an insurance company. The main topics covered relate to [high-level topics].

Objective of the market practice

The market practice presents an example of how the EU taxonomy rules can be used for the purpose of green non-life insurance product development and consumer transparency.

EU Framework or EU Taxonomy?

This market practice considers use of the EU Taxonomy framework for reporting and data origination, for the reduction of the risk of greenwashing and for greening of business models/activities.

Please provide further description and details on the market practice

In 2021, the insurance company strengthened its climate and ESG strategy with the addition of a green business programme.

The programme includes property and casualty (P&C) insurance coverage and services which contribute to at least one of the following four environmental objectives: climate change mitigation, climate change adaptation, the transition to a circular economy, or limitation of biodiversity loss and pollution. (These are derived from the six environmental objectives set out in the EU Taxonomy Regulation.)

To help its business units develop their green business offers, the insurance company built a tailor-made green business framework to assess the extent to which products or services may have a positive impact on the environment.

Illustrating its strategic dimension, the insurer complemented this framework with the setting of a target for generating 'green premium' income. This public target is intended to measure progress at the group level and promote product innovation.

The insurer's green business programme uses a definition of a green offer and the concept of shades of green, both developed by the insurance company, to help assess the materiality of the environmental benefits of a particular green business product or service, and a tailor-made framework to support entities in developing green business offers.

Green business is defined as a P&C insurance coverage or service (in line with the EU Taxonomy Regulation that only considers non-life insurance solutions as in scope), that contributes to at least one of the following four objectives:

- Mitigation of climate change by reducing greenhouse gas (GHG) emissions (such as insuring low-emission energy infrastructure or vehicles)
- Adaptation to the consequences of climate change (such as insuring resilient buildings or providing natural catastrophe insurance)
- The transition to a circular economy, such as by extending the lifetime of devices, and thus limiting the use of new raw materials (for example, by promoting the use of second-hand spare parts)
- The limitation of biodiversity loss and pollution (such as through pollution prevention or mangrove or coral reef conservation), helping to protect nature and its ability to store carbon.

Within these objectives, the insurer defined three shades of green. The aim is to differentiate between types of activities, namely client incentives, claims treatment and the insured asset. These shades provide guidance and transparency to assess the materiality of a green business offer:

- Shade 1 is for offers that encourage environmentally sustainable behaviour (e.g., through rewards or information sharing)
- Shade 2 is for actions that encourage environmentally sustainable claims management (e.g., replacement of accidentally damaged goods with more energy efficient or reconditioned devices)

- Shade 3 is for offers that provide insurance for environmentally sustainable assets or activities (e.g., low-emission vehicles or solar panels) or environmentally friendly clients and/or activities.

To monitor its green business strategy, the insurer developed three KPIs, namely: Premiums, Fees, Claims.

The insurer's 2023 target focused on premium income from green business offers. In 2020, it generated €1.1bn in green business premiums, and used this figure as the baseline for its 2023 target of €1.3bn (i.e., an increase of 13%). In 2022, the insurer collected €1.7bn of green gross written premium (GWP). Based on this strong performance, the insurer decided to increase its ambition, and set a floor of €1.7bn for 2023.

The progress of this KPI will be monitored and audited on an annual basis. The two other KPIs (fees and claims) are under development.

What is the outcome?

The green business programme leveraged the EU Taxonomy framework to define the four objectives which are at the core of the programme. This has helped facilitate understanding among internal and external stakeholders.

At this stage, however, for the purpose of calculating its Taxonomy-aligned underwriting ratio, only the provision of non-life insurance and reinsurance services related to the underwriting of climate-related perils contributing to climate change adaptation are defined as in-scope. Other underwriting activities are currently not covered by the EU Taxonomy. The green business programme is therefore a voluntary programme and, for now, the metric used to set a public goal is GWP, rather than the ratio of green relative to non-green business.

Data and methodology used to compile the market practice

Data and Methodology	Data • Gross written premiums • Data on types of activities insured (low-carbon vehicles, buildings that meet environmental standards, etc.) • NACE codes to identify environmental activities in line with the EU Taxonomy Methodologies • GWP, claims values and fees submitted by entities
Use of Proxies	There is no regulatory requirement, so the application of the four applied taxonomy definitions for green business eligibility was a proxy exercise.
Internal resources	Internal resources at group level: • In the group sustainability team (0.3 full-time equivalent), • in group risk management (0.3 full-time equivalent), • in group finance (full-time equivalent to be determined) And resources at local level • Entity sustainability teams • Entity underwriting support

Did you encounter any obstacles or gaps? If so, please describe.

Challenges in criteria interpretation:

- The interpretation of existing criteria for Insurers (Climate Adaptation, 10.1) has proven challenging for the computation of eligibility and alignment
- (Re)Insurers' role is for the moment only recognised through the climate adaptation objectives, while it contributes to the transition more broadly including via climate mitigation, circular economy and biodiversity.

Solutions: How were the obstacles addressed?

The contribution of insurers to the transition to a more sustainable economy is recognised by the Taxonomy only through the provision of non-life insurance and reinsurance services related to the underwriting of climate-related perils (i.e., through the climate change adaptation objective). The insurer therefore opted for an approach based on shades of green to recognise the various levels of impact its initiatives may have on environmental and climate objectives. This gives greater recognition to a broader range of actions, to encourage innovation, while acknowledging the extent of tangible benefit(s).

Other aspects you would like to mention?

Stakeholder feedback included comments as follows:

Recognition of the role of Insurers in the transition:

- Limitations imposed by the Taxonomy rules for insurers – namely including only P&C insurance products and climate adaptation – means it does not recognise other positive environmental and sustainable impacts that the insurance industry has. The EU Taxonomy currently does not incentivise Insurers to develop non-life insurance solutions addressing other environmental challenges which are part of the EU Taxonomy, such as climate mitigation, circular economy or biodiversity loss.
- It is challenging for insurers to recognise coverage and solutions for green assets and green clients/activities, as many insured clients are too small to have publicly disclosed information about their Taxonomy alignment. In addition, insurers sometimes only provide coverage for specific assets or operations, and Taxonomy-aligned data may not be available at that granular a level.

Additional considerations

Below, we outline initial considerations with regards to how other elements of the insurance operations and value chain -- e.g. operations, investments, claims, risk consulting, etc. – could be considered for the classification. Insurers recognise the challenges in a value chain approach, including determination of appropriate KPIs that accurately reflect the contribution and enable a holistic view of insurer alignment with a more broadly defined Taxonomy. Those considerations also acknowledge work which is starting as part of the preparation for initial CSRD reporting, which will require Insurers to review more holistically how they address sustainability-related challenges and opportunities, going well beyond climate adaptation.

So far, the EU Taxonomy only acknowledges climate change adaptation as a potential substantial contribution. However, the impact of insurance products can go beyond this scope.

Insuring the transition

- Transition Technologies – By offering insurance cover for transition technologies, the insurance industry plays a key role in enabling and supporting the transition. In contrast to established technologies, insurers lack risk-related data for new and unknown technologies, which are sometimes not mature. The development of such markets is therefore associated with additional risk (e.g., volatility, inability to determine appropriate risk premiums). If insurance companies are offering coverage for such technologies, it could be classified as a substantial contribution to the respective environmental (or social) objectives.
- Enablers of the Transition – The application of circular economy principles is necessary to reduce emissions associated with producing new items, as well as reducing waste and the needed energy to dispose of used items. Historically, however, recyclers and recycling services pose a difficult underwriting risk. The lack of affordable and sufficient insurance coverage for recyclers inhibits manufacturers from deploying this strategy as part of their emission reduction efforts. Retailer IKEA is working with two (re)insurers to address this problem, initially through a white paper which addresses the key issues and challenges.

- Green technologies – even when mature – are sometimes associated with more volatility. Take renewables. Whereas the yield of energy in fossil-based electricity generation is quite stable, the yield of energy from renewables fluctuates due to natural conditions. The insurance industry can play an important role in organising the risk transfer and thereby provide more reliability and certainty to customers.

Incentivising climate mitigation

- Role of client and customer incentives – Can insurance products support or incentivise customers to, for example, produce less emissions (by moving into transition technologies)? Challenges currently exist in encouraging and incentivising clients and customers to make climate adaptation improvements, and the role of specific policy conditions and/or pricing modifications. Climate mitigation considerations may face a specific issue of using ESG rating factors.

Insuring biodiversity and nature

- Protecting biodiversity and nature – Efforts to sustain and restore natural habitats are an important dimension in the climate transition. Insurance industry products devoted to the environment, like environmental impairment liability, have supported efforts here for a number of years. Newer developments include the EU Environmental Liability Directive (ELD) 35, which broadened liabilities to include indirect damage to the local environment in the case of pollution or industrial accident – if a factory fire destroys nearby protected woodland, for example, or a business obstructs local access to water.
- Marine protection and restoration – Parametric insurance solutions are some of the first products focused on conserving ocean habitats. Blue finance, AXA Climate and Howden partnered to protect marine ecosystems with a specially designed solution for a marine reserve in Belize and marine protected areas (MPAs) in the Philippines. AXA Climate's proposed parametric insurance model operates based on meteorological information provided by government agencies. The model triggers compensation within a few days of a cyclone passing within a 50 km radius, enabling Blue finance to immediately regenerate weakened marine environments (cleaning up debris, taking care of damaged corals, etc.), repair MPA equipment (ships, guard posts, etc.), and reimburse operating losses (ecotourism, artisanal aquaculture, etc.).
- Nature as a solution – More recent developments include nature-based solutions for traditional climate and weather-related exposures, like the introduction or protection of mangroves to help defend coastal communities from storm surges and flooding.

Sustainability insurance claims practices

- Circular economy – Rounding out the insurer value chain, insurers' claims processes are another key means to promote sustainability efforts. Insurers have been working to reduce emissions associated with repairs, with a concrete example in retail motor claims. Many insurers are now offering recycled as an alternative to new parts, and the option to repair versus replace for eligible damage claims. ClimateWise explored this subject in a 2010 report.
- Build back better – Within the claims area, insurers may also offer sustainable choices so clients can improve operations or assets through the claims process. These include rebuilding with higher energy efficiency materials or equipment and implementing stronger climate resilience design in rebuilding. Possible coverage or additional riders include the ability to upgrade damaged home equipment and appliances with more energy efficient models, or building back with a more energy efficient design.

5. Auditors and consultants

This annex compiles a stocktake and analysis of current practice. Considering the early stages of adoption of the EU sustainable finance framework, none of those market practices represent or should be interpreted as best practice or 'market standard'.

The market practices span three areas: 1) the use of the EU sustainable finance framework for business strategy, transition planning and target setting; 2) finance and transactions; and 3) reporting, monitoring and assurance. They are contributed by seven stakeholder groups of large corporates, credit institutions, investors, insurers, public institutions, auditors and consultants, and SMEs (small and medium-sized enterprises).

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Introduction to auditor and consultant market practices

Introduction to the stakeholder group's context

Advisors and auditors are two groups of stakeholders at the forefront of the EU Taxonomy implementation and related reporting practices, as they consult on and review their clients' approaches. Since new regulations typically come with questions of interpretation and areas of uncertainty before best practice emerges, companies often seek guidance from consultants and assurance providers on how best to proceed. Establishing a unified approach and interpretation of the regulation in question is essential, but this only emerges over time as the market consolidates learnings and provides thought leadership and guidance to preparers. Consultants and auditors tend to have a good overview of what is happening in companies across the market. Their insights can help inform good practice for sustainability reporting in line with the EU sustainable finance framework.

Introduction to the market observations

The market practices analysed by this stakeholder group identify several significant observations:

- Companies have managed to prepare for eligibility reporting, but they struggle with Taxonomy alignment, especially with the do no significant harm (DNSH) and minimum safeguard criteria.
- Many companies, together with their advisors or following requests from assurance providers, have found it necessary to obtain additional evidence and information from suppliers; these are not always well versed in the EU Taxonomy, as they may be smaller companies not directly subject to the Taxonomy.
- Global companies face a challenge of aligning EU-based criteria with approaches used in non-EU countries. The most significant aspect is related to energy efficiency levels and respective certificates, where energy efficiency indicators may not be directly comparable with EU ones.
- Companies also face a challenge of assessing their climate risk, setting the level of granularity of such assessments and identifying relevant sources for climate risk scenarios and their interrelation with the company's operations.
- To overcome hurdles in obtaining information (in particular for companies with portfolios of multiple companies or investments), external data providers are used. However, there can be significant data quality issues, caused by a lack of transparency about the methodologies that data providers use, the source of their data, availability of data and the use of estimates, which is not allowed under the EU Taxonomy rules.
- Reporting companies and their advisors and auditors argue that it pays to engage consultants at an early stage of Taxonomy assessment, to enable alignment with evolving interpretations and avoid major mistakes that may emerge later in the process.
- Since sustainability reporting requirements will increase over the coming years, with more datapoints to be disclosed, it will likely be sensible for reporting companies to invest in robust processes and tools, rather than pursue minimalist solutions.
- Initial training across reporting companies and the development of standardised working papers for assessment of eligibility and, later, of alignment can help in engaging employees and obtaining high quality information. Ensuring that all processes are clearly traceable can help to obtain assurance for subsequent reporting.
- Companies are concerned about the administrative and financial burden of Taxonomy alignment and reporting. However, this burden might be reduced through early engagement of advisors and auditors and internal training and support within the company.
- Sustainability reporting is more than a compliance exercise. The costs to initially set up new data processes could potentially be recovered by future savings when the market reacts to differences in the level of sustainability in different companies. Frontrunners may find themselves in an advantageous position compared with companies that start late with implementing sustainability reporting requirements.
- A robust implementation of the Corporate Sustainability Reporting Directive (CSRD) and the EU Taxonomy, with solid internal controls, traceability and clarity over the quality and completeness of data, will facilitate obtaining assurance and, importantly, reduce the costs involved. Without internal controls in place, the risk for assurance providers will be higher, requiring more manual work and more hours, increasing the cost of the service.

- Observations have noted correlations between applying the same internal control structures, ownership and techniques from financial reporting to sustainable finance disclosures and a higher degree of efficiency. Companies with such set-ups seem to have made more progress in implementation, saving time, resources and costs. In addition, they will be more prepared to obtain assurance, reducing the effort and time involved.

Key opportunities and challenges

The biggest challenges are related to the collection of information, which may not be held within the company itself. Companies may ask their suppliers, use external data providers or conduct their own assessment, but it is not sufficiently clear which approach is better and more reliable and what evidence is sufficient for reliability of information.
The lack of alignment between EU and non-EU systems related to Taxonomy application is another major challenge.

As for opportunities, the market is beginning to respond, with companies aiming to improve their Taxonomy KPIs, targets being implemented to meet certain minimum thresholds, and stakeholders adding the Taxonomy as an additional factor to consider when making business decisions. However, the Taxonomy requires interpretation and companies are developing accounting policies to make up for missing guidance or practice. KPIs are therefore not always comparable across companies.

Timely, systemic implementation of the requirements in cooperation with experts (e.g., advisors) have the potential to reduce costs related to Taxonomy implementation.

Peer-to-peer recommendations

- support their clients to use the EU sustainable finance framework for business strategy development, target-setting and transition finance purposes, in addition to compliance with their reporting obligations and/or for assurance purposes;
- ensure training and guidance for auditors and consultants on EU Taxonomy and CSRD ESRS assessments and on the integration of sustainability preferences by financial advisors;
- ensure that all advice is in line with appropriate European Commission interpretative and technical guidance;
- ensure homogeneity of interpretations among auditing and consulting firms on advice provided about the EU sustainable finance framework; and
- support clients with improving internal controls and governance for sustainability performance.

Assurance providers specifically should:

- initiate discussions with clients on the levels proposed for accuracy and completeness of reported information in the ISSA 5000 standard, including on how to enhance and adapt it to the EU sustainable finance framework; and
- increase the level and frequency of internal training to improve quality and clarity for assuring the EU sustainable finance framework.

Conclusions

Based on the stakeholder group's observations and practical experience, the market (in particular, larger enterprises) is already quite well informed that it needs to apply the relevant sustainable finance framework and the EU Taxonomy to its accounting and reporting practices. However, companies struggle with practical application of the regulation when their operations extend beyond EU borders, or when they are operating in multiple sectors, or have extensive investment portfolios. For that reason, the recommendations noted above are significant and need to be implemented, to support the market and encourage it to use the Taxonomy not only for compliance but also for strategic development purposes.

5.1 From a limited assurance to reasonable assurance in a phased approach

The market practices combine information provided to the Platform on Sustainable Finance by an insurance company. The main topics covered relate to reporting and data origination.

Objective of the market practice

This market practice explores how a European listed insurance company prepares for and goes beyond upcoming regulatory requirements by applying reasonable assurance on data under the Taxonomy Regulation and Corporate Sustainability Reporting Directive (CSRD), in a phased approach.

Please provide further description and details on the market practice

The insurance company has conducted "reasonable assurance" on its Non-Financial Reporting Directive (NFRD) non-financial statement. While the NFRD required a check and the Corporate Sustainability Reporting Directive (CSRD) initially introduces limited assurance requirements, there is a plan for the CSRD to require reasonable assurance in few years.

Reasonable assurance requires the same quality of data, traceability and internal controls for sustainability disclosures in a management report as for financial filings. By introducing reasonable assurance early, the insurance company now has a head start. Assessing the benefits and learnings from moving to reasonable assurance as soon as possible help increased quality of the company's reporting, and thus accountability and trust in its published disclosures and data.

The company has conducted reasonable assurance on its NFRD non-financial statement. The non-financial statement covers a set of KPIs tied to board renumeration, hence the need for reasonable assurance. The KPIs included mostly track environmental targets, for example those related to greenhouse gas (GHG) emissions reduction (scope 1 and 2) per employee, renewable energy use, Taxonomy data on eligibility and alignment (with the latter on track to be included in the 2023 financial year).

The company's remaining sustainability reporting, its Global Reporting Initiative (GRI) report, is subject to limited assurance. The GRI report is a stand-alone report which includes Scope 3 emissions and reporting against the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

In starting to adapt to the requirements of the CSRD, the company will add relevant human resources and environmental disclosures (such as the first elements of a climate transition plan) to its sustainability statement, and subject those to reasonable assurance. Such a step-by-step approach to phase additional disclosures into the sustainability statement in the management report ensures that the company progresses and develops its reporting in an organised way.

Undertaking reasonable assurance has significant implications for the company. These include the need for updates to IT systems and controls testing; anticipating these, the company paid attention to its data collection system from the beginning of the process.

The process led to two major observations:

1. Automatisation of data collection is an essential pre-condition for reasonable assurance. Where manual processes for data collection are in place, reasonable assurance is close to impossible. It is therefore important for companies to start early to see where risks and gaps exist and where data collection tools need to be improved.
2. Finance-level governance needs to be applied beyond the finance function. Controls and datasets outside of the finance function need to be overseen and governed with the same diligence that companies apply to financial data. This is a change in governance and in mindset. The process is as follows:

- The company begin with a finance 'community' approach, with finance staff supporting sustainability staff in their management of sustainability reporting. After three to four years of such an approach, the CFO took over accountability and formal sign-offs of sustainability data and is responsible for its accuracy. Signing off the IFRS package (already since years) so statement of accountability will also include the sustainability package from the Group from FY2023. The CFO was considered to be the most efficient 'owner' of sustainability data, if it is to be treated the same way as financial data.
- The CFO supported the need to treat sustainability data the same as financial data. The company's supervisory board was very clear in setting the tone from the top, adopting a so-called 'north star approach' (in treating sustainability data the same as financial data).
- The company copied finance processes to sustainability processes and controls for financial reporting to set up similarly robust processes for sustainability reporting. This helped with communication with other internal functions, such as risk, legal etc. During the work, the first question consequently was "how do we do it in finance?".
- There is the potential for friction regarding different stakeholder perspectives. For example, the sustainability function will seek to address a wider group of stakeholders, using different narratives, compared with those the group finance function is seeking to address with its reporting. This is a natural part of the journey.
- The new approach to sustainability reporting flipped the logic around, using the KPIs as the starting point for the narrative, rather than the other way round. This is a result of making the CFO accountable for sustainability reporting.
- The sustainability function has ownership of the sustainability strategy, and whether the strategy is reflected properly in goals and targets, whether the right measures are in place to deliver the strategy and is the company properly communicating the strategy.
- The finance function is focused on quality, internal sign-off meetings and orchestrating sign-offs, controls, completeness, correctness and being in compliance. Sustainability data needs to undergo the same formal sign-off processes (getting signed off by the Board).

The insurance company decided to take a step-by-step transitional approach to treating sustainability data the same as financial data, moving from limited assurance of board remuneration and oversight, as the data is assured with reasonable assurance. Quantitative sustainability information is of equal quality to financial information.

What is the outcome?

- Reasonable assurance was conducted for more than three years of the company's non-financial statements.
- The insurance company mitigated downside risk, and no news is good news (It did not receive positive feedback and did not expect a higher share price as a result).

Data and methodology used to compile the market practice

Data and Methodology	New IT system for environmental reporting and data collection for the FMP's own operations. Helped with controls over external data sets (Moody's)
Use of Proxies	Fast close and extrapolation on own operations which required internal controls. A driver for company to improve automation to obtain more data and remove proxies.
External resources	The FMP did not mobilise external resources, although it had some support from an external agency, mostly for layout. For the non-financial statement, it mainly used internal resources. There is no plan to make use of external resources.

Did you encounter any obstacles or gaps? If so, please describe.

There were challenges related to the use of the EU Taxonomy (incl. data availability, criteria interpretation, clarity on scope of application, other) and in terms of coherence and consistency of the EU SF framework.

Solutions: How were the obstacles addressed?

There is a need for a global baseline for users of sustainability data. The CSRD will be helpful, but a global baseline will be key, as will one for data within and outside of EU. Company, and data users being reporters, is dependent on data from external sources. Highlight the point that the company get clear data, for example non-material topics will be reported as qualified zero so the company can use the zero as qualified datapoint in own reporting for obtaining reasonable assurance.

Other aspects you would like to mention?

External stakeholders are new to the differences between limited assurance and reasonable assurance.

As for internal stakeholders, they understand our “north star” and that reasonable assurance helps the company work on its underlying quality. Internal stakeholders clearly see that this is a major effort but agree with the overall objective.

The insurance company has been preparing for and transitioning to reasonable assurance in a step-by step approach over the last four years. Other companies can learn from its experience, first for the CSRD’s limited assurance requirement and then with the reasonable assurance requirement in few years. Establishing a community and embedding more and more KPIs into the non-financial statement, subject to reasonable assurance, has been a valuable experience, leading to strengthened governance.

5.2 From a 'NFRD-check' to reasonable assurance

The market practices combine information provided to the Platform on Sustainable Finance by a global real estate investment manager. The main topics covered relate to reporting and data origination.

Objective of the market practice

The market practice presents an example of how a real estate investment company, which is subject to the Non-Financial Reporting Directive (NFRD), went directly from the NFRD check to reasonable assurance on Taxonomy capex, opex and turnover disclosures.

Please provide further description and details on the market practice

Under the EU's sustainable finance framework, companies are moving from no or limited disclosure of sustainability information to, eventually, disclosure of such data with the same levels of rigour as that applied to financial reporting.

The company in question is reporting in line with the NFRD. The most common next step is to then seek limited assurance of its sustainability information. However, it decided to move directly to reasonable assurance on its Taxonomy-related disclosures and data (capex, opex and turnover).

Obtaining reasonable assurance represents external validation that the quality of that data is the same as for financial filings. It shows that reporting processes, internal controls and traceability, among other things, have been reviewed and assured, increasing trust in the quality of sustainability information. Reasonable assurance will facilitate oversight and sign-off by the Board of Directors, as it would mean equal assurance as for financial filings at the back end of the annual report.
The case study offers lessons and tips for other companies wanting to switch to reasonable assurance regardless of their current level of assurance, if any.

What is the outcome?

The company moved along a steep learning curve in a short period of time to obtain reasonable assurance of its Taxonomy and sustainability disclosures.

Data and methodology used to compile the market practice

Data and Methodology	In 2021, the company began to set up reporting processes for Taxonomy eligibility and, in 2022, successfully met reasonable assurance on Taxonomy alignment. The results will be published in 2024, but the groundwork was done in collaboration with a global consultancy and assurance company, and the company is now in dialogue with two other global consultancy and assurance companies. The company decided early in the process to seek to obtain reasonable assurance, partly due to ownership requirements (from its investors) but also partly due to seeing sustainability data as equally important as traditional financial filings and data. The process faced some challenges and lessons were learnt that could be useful for other companies on a similar journey towards reasonable assurance. Obtaining reasonable assurance on sustainability and Taxonomy data and disclosures is fairly rare, meaning there are few best-practice examples to follow. That meant the parties involved needed to fill gaps in ways of working and interpretation. This was the case for the company, the assurance company acting as consultant, and the assurance company providing the assurance itself. Given the novelty of the EU Taxonomy, it was the first time that the company had internally calculated Taxonomy alignment and had the data assured. In summary, the process was as follows:

	○ The company first established a process, and identified its energy performance standards as a priority, as getting this right represented approximately 50% of the effort; ○ the assurance firm, supporting as consultants, helped to set up controls and a control environment; ○ work revealed data gaps which made it somewhat challenging to obtain reasonable assurance, but this was overcome by finding ways to approach non-heterogenous technical equipment. For example, where clear evidence was missing, records were checked as to whether an external service provider had been engaged to provide certification. Key takeaways were: ○ a genuine intention to find way on how to improve the process going forward; ○ where the company and the assurance provider did not occasionally share the same view on the interpretation of data, or on how to fill gaps in available data, it was important to have processes in place for how to resolve differences; ○ where the company faced regulations across more than one country, subject to national implementation, it was important that the assurance provider covers each jurisdiction; ○ in obtaining reasonable assurance ahead of publication, the company sought 'reasonable assurance readiness', accepting a lower level of assurance to get experience; ○ the company experienced some 'lingo' communication difficulties with its assurance provider, which were resolved by recruiting a former auditor to navigate the terminology. This may not be necessary in all situations but, given the company's leading position and owner and investor's, this approach facilitated the process; and ○ the company assigned the ESG team to lead the reasonable assurance process but, in retrospect, the finance function should have done so. While such a process is new for most ESG professionals, financial reporting is already subject to reasonable assurance, and the finance function has experience in managing internal controls.
Use of Proxies	When data was missing, certificates were used to show evidence that third-party support had been obtained.
Internal resources	The ESG team.
External resources	Consultants and auditors.
Did you encounter any obstacles or gaps? If so, please describe.	
Challenges related to the use of the EU Taxonomy (including data availability, criteria interpretation, clarity on scope of application).	
Solutions: How were the obstacles addressed?	
The company applied creativity and alternated between consultant and audit firms to leverage their different strengths and capacity.	
Other aspects you would like to mention?	
Moving to reasonable assurance is a journey and it will take time to obtain the same quality of internal controls and same level of evidence as for financial assurance. An auditor is necessary to consider the specificities of information subject to assurance.	

5.3 Assurance: multi-sectoral and energy

The market practices combine information provided to the Platform on Sustainable Finance by a Germany-based multinational renewable energy company. The main topics covered relate to reporting and data origination and capital markets.

Objective of the market practice

The company is a multi-sector global firm which needs to undertake Taxonomy reporting across multiple subsidiaries. It has dealt with the EU Taxonomy in stages, focusing on providing training and practical guidance to its subsidiaries on how to identify eligible activities, the development of practical working papers supporting the alignment assessment, and starting to work with its auditors early to ensure proper methodological implementation. Its experience with assurance has shown what needs to be fulfilled and improved to achieve the desired level of Taxonomy disclosure, which is subject to a positive assurance statement.

What is the outcome?

- The company was able to provide very structured Taxonomy reporting and obtain a positive assurance statement due to very thorough preparation of its people and methodology.
- The auditors note that early cooperation with the entity and the availability of solid evidence for any disclosure are key to successful Taxonomy implementation and a pathway to reasonable assurance in the future.

Data and methodology used to compile the market practice

Data and Methodology	For the calculation of the Taxonomy KPIs, the company used internal data. It used external data for the following: • Supplier/third-party information – for evidence • Climate change-related data – for climate risk analysis. The company applied processes aligned with its financial reporting (timing, an evidence-based process, etc.).
Internal resources	Internal human resources
External resources	Consultants

Did you encounter any obstacles or gaps? If so, please describe.

Challenges related to the use of the EU Taxonomy (incl. data availability, criteria interpretation, clarity on scope of application).

Solutions: How were the obstacles addressed?

The main challenge was the company's reliance on external data from suppliers who could not always provide the required information – even if it was clear that the requirement had been fulfilled. The need for solid evidence is a challenge that many reporting entities will need to face in the coming years. At the same time, this may encourage smaller companies and suppliers outside the EU to transition to more sustainable production approaches and become more conscious about their sustainability, thus contributing to the overall goal.

Benefits of applying the EU Taxonomy & Sustainable Finance Framework:

☒ Simplification
☒ Client engagement
☒ Credibility
☐ ESG risk management / mitigation
☐ Greenwashing mitigation

☒ Transparency
☐ Comparability
☐ Other – *please specify*

For multinational companies, it is essential to ensure an equal level of understanding and engagement across its subsidiaries, and engagement of and collaboration with external suppliers, to ensure proper Taxonomy disclosures are made.

Other aspects you would like to mention?

Feedback from stakeholders:

The main stakeholders involved were the company's suppliers. They were asked to provide additional information and evidence to prove Taxonomy-alignment of certain activities. In the company's case, its suppliers had been contacted by several other companies to whom they also supplied goods or services, so they were quite well informed on the nature of these requests, and were mostly able to provide the necessary documentation in a timely manner. However, in other sectors with more diverse supply chains, it could be more difficult and may require additional supplier education before they are in a position to easily deliver the necessary data and documentation.

Other aspects:

The FAQs published by the European Commission during the company's reporting process helped. Some processes were revised and changed based on information included in the FAQ materials. Prior to that, the auditors and consultants had developed their own interpretations and explanations to help their clients navigate the Taxonomy and its elements. However, those explanations did not always correspond to each other and to the views of other consultants. The FAQ materials thus proved very really helpful. (In relation to this case study, for example, they emphasised the need for specific evidence to prove fulfilment of certain criteria.)

Similarly, additional clarification on requirements and criteria are welcome from the Commission (and would likely also be the case with other types of ESG reporting, such as CSRD implementation in practice, etc.).

5.4 Set up of processes for assurance of activities classification and reporting

The market practices combine information provided to the Platform on Sustainable Finance by an internationally active infrastructure company. The main topics covered relate to reporting and data origination.

Objective of the market practice

The market practice provides a methodological example of how a company systematised the task of classifying activities according to the EU Taxonomy to obtain external verification. The company agreed on procedures, criteria and a way of working with the external assurer, which saved time and made the process efficient.

The Taxonomy was used to create an inventory of evidence for each category to meet the audit requirements for the substantial contribution, do no significate harm (DNSH), and minimum safeguards criteria.

Please provide further description and details on the market practice

The case study refers to the creation of a repository of evidence used in the verification exercises for the alignment of the company's activities with the EU Taxonomy of sustainable activities. The qualitative information collected describes compliance with the requirements of the substantial contribution, DNSH and minimum safeguards criteria for each identified activity.

The methodology developed makes it possible to systematise and streamline the process of collecting evidence and verifying Taxonomy alignment for various activities.

The process starts with the monthly identification and classification of all the company's new activities, according to the eligibility criteria.
Then, on a quarterly basis, consolidation and evaluation exercises are carried out to assess the alignment of these activities in terms of revenue, capex and opex. This task is carried out by a team of corporate sustainability experts (both corporate and business).

The exercises are verified by an external entity and, to speed up this process, the company has a template and a document standardising the necessary evidence, as agreed with the auditing company.

The document compiling the evidence for each financial year becomes part of the company’s inventory of evidence, facilitating this task from year to year and making the process comparable.

Additionally, and in a previous step, the company has developed a methodology in which any new business opportunity is analysed to determine (1) if it is suitable for the company to invest resources in it; and (2) if the opportunity meets Taxonomy-related criteria set by the company.
The criteria include if the new activity meets the eligibility criteria and the alignment requirements set by the European Taxonomy.

What is the outcome?

The result of systematising and standardising the process of collecting and reviewing the alignment of the company’s activities to create an inventory of evidence for each category has three benefits:

1. It facilitates the collection of evidence and simplifies the data that needs to be reviewed annually.
2. It makes it possible to assess in advance whether the asset will be Taxonomy-aligned or not, which can influence the investment decision.
3. It facilitates the identification of equivalent standards in other jurisdictions and provides evidence to the auditor.

In the case presented, although there is no ad hoc measurement, it is assumed that the time previously required to gather and present evidence is significantly reduced.

Data and methodology used to compile the market practice

Data and Methodology	• The company has a corporate procedure for the consolidation of economic figures under the European Taxonomy of environmentally sustainable activities document, which allows the standardisation of the process, supports the alignment and cooperation between the financial and sustainability teams, and provides security regarding the data obtained. • The data evaluated covers monthly sales, capex and opex figures, broken down for each of the facilities, provided by the financial team, and which have been identified as eligible. • The consolidated accounts and concepts in the sales, capex and opex categories comply with the definitions set out in Delegated Regulation 2021/2178, Annex I, which are part of the corporate procedure for assessing alignment with the Taxonomy.
Use of Proxies	No other documents are used except the official documents that develop the Taxonomy and additional documents referred to by those.
Internal resources	Human capital: the team involved is around 15 people. Tools: the following accounting and financial consolidation databases were used: SEO, SAP and OLS. Resources: technical documentation, procedures, and compliance documentation available at the project level for the verification of selection criteria were used.
External resources	On a biannual basis, the company verifies the information through an independent external auditor.
Did you encounter any obstacles or gaps? If so, please describe.	
There were some uncertainties relating to the description of some categories for the determination of their eligibility.	
Solutions: How were the obstacles addressed?	
The solution implemented by the company has focused on joint planning and determination between the company and the auditing firm for the standardisation of evidence.	
Other aspects you would like to mention?	
<u>Feedback from stakeholders</u> If we restrict the feedback from stakeholders to those involved in consolidating the figures aligned with Taxonomy, the feedback is positive both from the side of employees, who find a perfectly defined process for carrying out the work, and auditors, who receive the evidence they request in a timely and orderly manner. If we extend the group of stakeholders to those whose decisions could be influenced by the Taxonomy results obtained by the company, in the specific case of investors, the company's efforts are well received, as shown by the fact that 74% of the company's debt is in instruments that refer to compliance with certain alignment values.	

5.5 Overcome hurdles with the help of consultants: climate risk assessment

The market practices combine information provided to the Platform on Sustainable Finance by a real estate investment manager. The main topics covered relate to reporting and data origination.

Objective of the market practice

The market practice presents an example of a real estate investment company seeking to understand the financial impact of climate change on its real estate assets while simultaneously preparing for the EU Taxonomy. The flooding of a city in Sweden in summer 2021 acted as a wake-up call for the company's board of directors, who initiated the request for a climate change assessment. However, neither climate risk assessments nor a methodology for climate risk assessments were available for the Taxonomy's do no significant harm (DNSH) criteria regarding climate change adaptation (CCA) so these had to be developed.

The company is working towards aligning with the EU's climate change mitigation (CCM) objectives. However, because the EU's CCA objectives reference the same Appendix A to the Annex to the EU Taxonomy Regulation, the same steps and criteria are needed in preparedness for alignment with either CCM or CCA objectives. The starting point for initiating the work was to review risks related to climate change and to be able to make a plan for adaptation within five years to protect company assets. The trigger was the EU Taxonomy, which represented the first initiative of its kind to clarify activities that can substantially contribute to environmental objectives.

To develop a climate risk assessment methodology, the company approached a number of consultancies, asking them how to approach Appendix A. Since none of them had an off-the-shelf solution, the company proposed to jointly develop a methodology. The winning consultancy agreed to that approach and was prepared to be transparent with the company on the task, given the innovative nature of the project. The consultancy set up a team across different specialist areas, and produced a solid climate risk assessment methodology which can be replicated (if publicly shared) and which generated new knowledge for the company, its board of directors and the consultancy.

Please provide further description and details on the market practice

In August 2021, the Swedish city of Gävle was flooded after twice its monthly average rainfall fell overnight. Large parts of the city were submerged and many private and commercial buildings were damaged. The company did not have any real estate investments in the city, but the event prompted work to undertake climate risk assessments of its existing buildings.

This is an important point to make: it was a devastating climate-related event that started the company's work on climate risk reduction, not the requirements of the Taxonomy. Climate risk reduction is still the main reason for engaging in this work – that the company complies with the Taxonomy's DNSH criteria is a bonus.

The chairman of the board, in one of the real estate companies of the company, asked the management to start assessing the company's climate risk exposure of the portfolio – and the task was assigned to one of the Sustainability Managers (SM) of Company. Since the SM followed the development of the Taxonomy and had read the Technical Report and Appendix A: Generic criteria for DNSH to climate change adaptation, he decided to conduct an initial climate risk screening of the entire portfolio according to (a) in Appendix.

During the autumn of 2021, three technical real estate consultants were contacted and asked to present their approaches to conducting climate risk assessments of existing buildings according to Appendix A. After meeting with them, it became clear that their general knowledge regarding the Taxonomy and climate risk assessment for real estate was low. This was to be expected, since the Taxonomy was not yet completed. However, one of the consultancies demonstrated a good understanding of the Taxonomy and presented a solid method to conduct climate risk assessments of existing buildings and was thus contracted for the job.

The initial climate risk screening was conducted in spring 2022 and, from the results, a climate risk index for the portfolio was developed. The index ranked the properties in the portfolio by risk level and identified which properties should be subject to a climate risk and vulnerability assessment, according to criteria (b) in Appendix A.

Climate risk and vulnerability assessments were then carried out for four properties in the top tier of the climate risk index and with high market value, and adaptation plans according to criteria (c) in the Appendix A were developed. Working with the consultancy, the company produced a climate risk 'certificate' or 'declaration'. The single-page certificates aim to summarise the results of the climate risk and vulnerability assessment, much like an energy performance certificate. They include:

- general property-related information (name, owner, type of property, residential, commercial, industrial etc.)
- the method used for the assessment (always referring to the EU Taxonomy)
- data sources for assessing risk and vulnerability (open-source data, risk maps, public reports, on-site analyses, surveys etc.)
- the date of the assessment and by whom it was conducted (the name of the consultant)
- the aggregated risk level for the property (low, medium or high)
- the risk level for each climate risk, as shown in Section II of Appendix A
- a gross list of adaptation measures
- the estimated costs of adaptation measures.

The company is now continuing to conduct climate risk and vulnerability assessments for the portfolio, following the order in the index, and has set a target to have conducted assessments for 50% of the portfolio by 2030.

In parallel, and during autumn 2023, the company is working to understand the materiality of a particular climate-related event or risk to a property. Currently, the company assesses vulnerability as low, medium or high for each climate risk and property, but it wants to shift to a more specific quantitative value. The company wants to understand the costs related to the impact of each climate risk and thus understand what risks are most material and should therefore be addressed in its adaptation plans.

Finally, the method for climate risk and vulnerability assessments and climate risk certificates or declarations has been co-developed by the company and the consultancy. When they did this work, there was no standard practice in Sweden for climate risk assessment nor for the presentation of results in 2022. That meant that the company and consultancy had to work together to develop methods for the assessment, the index and the format of the resulting declarations. In the spring of 2023 the Swedish property owners' sector organisation, released its recommendations and guidelines to conduct climate risk and vulnerability assessment for buildings according to the EU Taxonomy – much in line with the company's method. The company will now incorporate these in future assessments.

The initial climate risk screening of the portfolio in 2022 was of around 100 properties across more than 15 municipalities in Sweden. The result was presented in an index, from 0-100, were 0 is low risk and 100 high risk. The index was developed by assessing each property according to three factors: whether the property is in a nationally identified risk area; the number of climate risks to which the property is exposed; and its position in Sweden's municipal climate adaption index.

The aggregated climate risk resulting from the assessment is presented on a scale of 1-3, corresponding to low, medium and high, as is each climate risk and hazard, as per Section II in Appendix A.

The company had, as of August 2023, conducted seven climate risk and vulnerability assessments. The actual adaptation activities are to be followed and executed, and capex aligned with the Taxonomy will be calculated. The company intends to identify the material risks for each asset and prepare capex plans that are intended to make the entire portfolio aligned with the Taxonomy's CCM objectives.

The board of directors has been kept informed during the whole process. The leadership team has showed great interest in the initiative, and is working with the property managers to develop prevention plans. The company's investors in the Board have also been closely involved. The company has received positive feedback for taking steps to

develop a methodology to mitigate climate risk, rather than waiting and seeing. Banks have shown appreciation through sustainability-linked loans (SLL). A research institute has been supportive of the work.

Timeline started with the request from the Board of Directors in 2021 and the company screened for consultants in January 2022 until March 2022. The company undertook an assessment of one facility, including a site visit and collecting responses from property managers, which took approximately two or three months. This was followed by an initial adaptation plan, but with the caveat that a materiality assessment is expected to take approximately three months. In total, the two activities provide a good overview for deciding where more detailed work will be needed. Detailed assessments take longer. In general, the methodology is applied on a 'copy paste' basis, but the remedies required are site-specific.

It is also worth noting that different parties are accountable for different risks. For example, the local municipality is responsible for managing overall flood risk but, within the property, it is the company's responsibility to protect the tenant.

Overall, the company is very pleased with the development of its approach. The work has raised awareness and increased internal competence, both within the process itself and on the preparation of physical and nonphysical remedies before, during and after a climate event. Non-physical remedies include the development of prevention plans, while physical remedies include cleaning gutters, ensuring windows can be tightly closed, providing sand bags, and taking photos of exposed areas in case of an insurance claim.

What is the outcome?

- The initial climate risk screening led to an index where all properties are assigned a value related to their exposure to climate risks.
- The climate risk and vulnerability assessment led to analysis of the vulnerability of properties to climate hazards, specific vulnerable areas, risk levels for each climate risk and hazard under different climate scenarios, and the publication of a climate risk certificate or declaration.

Data and methodology used to compile the market practice

Data and Methodology	The data to conduct the initial climate risk screening and the following climate risk vulnerability assessment comprised: • Open-source data, e.g., national, regional, local and municipal reports and assessments, risk maps, scientific reports etc. • Qualitative data, e.g., on-site visits to properties, surveys with property managers and dialogue with other relevant stakeholders (neighboring property owners, for example). The basis for the different assessments conducted was always Appendix A: Generic criteria for DNSH to climate change adaptation. The steps and the method described in the different paragraphs were then subject to discussion between the company and the consultancy, since there were no precedents or guidelines from the EU or nationally for conducting such assessments at the time. The methodologies for the climate risk index and the climate risk and vulnerability assessments were therefore developed by the consultancy and the company.
Internal resources	The work was led by a sustainability manager at the investment company. Property and some portfolio managers were mobilised when it came to specific questions.
External resources	Consultants

Did you encounter any obstacles or gaps? If so, please describe.

The main obstacle was the need to interpret and apply Appendix A and develop an efficient methodology. This was to be expected, since the company started this work before the Taxonomy was fully completed and no precedent or market practice existed. Rather than considering this a negative, the company considered that it was making a positive contribution by helping to develop a new market practice. Neither data availability nor the scope of application were obstacles.
Solutions: How were the obstacles addressed?
Discussions between the consultants and the company's sustainability manager, and iterations of methods, results and the presentation of material, enabled challenges to be overcome.
Other aspects you would like to mention?
Feedback from stakeholders Every stakeholder the company has spoken with or shown the results to has been impressed, especially those in property companies that want to start conducting these assessments. Many of these expressed interest in how the company applied the Taxonomy documents to practical assessments.

5.6 Reasonable assurance of gradual alignment of green bonds with the EUGBS

The market practices combine information provided to the Platform on Sustainable Finance by a supranational institution. The main topics covered relate to reporting and data origination and the role of the Taxonomy in transition finance and transition plans.

Objective of the market practice

The issuer has set an objective to gradually align its externally assured green bonds with the EU Taxonomy and the upcoming EU Green Bond Standard (GBS) in its 2021-25 operational plan, and to reflect this in the documentation of its green bonds.

Please provide further description and details on the market practice

Since 2019, and with a gradually increasing degree of precision in line with evolving EU legislation on sustainable finance, the issuer's annual green bond frameworks have detailed:

1. the framework's objective ("accountability in the future disbursements" and "precise definition of the projects to be included", to which the use of the EU Taxonomy has been instrumental since 2018);
2. the gradual Taxonomy/GBS-alignment strategy;
3. the activities to which green bond proceeds have been allocated in the periods of observation;
4. the technical screening criteria (TSC) for substantial contribution used for determining eligibility in the period of observation;
5. a comparison of the green bond TCS for substantial contribution (TSCSC) applied to the green bond allocations in the period of observation, with the TCS for substantial contribution of the Taxonomy, or of proxies of the Taxonomy (Taxonomy TSCSC);
6. a comparison of the existing environmental and social principles and standards applied by the issuer with the do no significant harm (DNSH)/minimum safeguard provisions of the EU Taxonomy Regulation.

Included Taxonomy-based allocation and impact reports for the activities to which green bond proceeds are allocated in the periods under observation have been audited with reasonable assurance (ISAE 3000) by an independent supervised auditor.*

This case study aims to clarify the modalities and relevance of the reasonable assurance exercise for:

- the factual identification of Taxonomy-alignment gaps in the use of proceeds and thereby the steering and the factual description of the Taxonomy-alignment progress, while the Taxonomy is still under development and usability issues are being addressed; and therefore
- the enhancement of the issuers' protection from reputational and legal risk, notably in a phase of transition.

The CCM green bond programme is the subject of this case. The same Taxonomy-alignment strategy also applies, however, to the sustainability bond programme. The two programmes apply different degrees of Taxonomy-use, reflecting the different phases of Taxonomy-development in the three distinct areas of eligibility for allocation of the bond proceeds (CCM, other environmental and social).

The issuer has used the Taxonomy to substantiate its original commitment to "accountability in the future disbursements" and "precise definition of the types of projects to be included", which was at the basis of its existing green bond programme. The approach was market-driven and forward-looking rather than compliance-driven and backward-looking. This explains:

1. the early adoption of the Taxonomy-alignment strategy – in 2018, just after the original European Commission Taxonomy Regulation Proposal; and
2. the continuity of the audit/assurance of the Taxonomy-alignment process with the preceding audit/assurance of the alignment with the Green Bond principles (reasonable assurance as defined in ISAE 3000 since 2016).

The issuer took a non-holistic approach to the assurance of Taxonomy-alignment, including separate reporting on the three aspects (substantial contribution/DNSH/minimum safeguards) to clarify with precision and timeliness the modalities of the gradual Taxonomy-implementation. This includes both:

- non-financial disclosures (mapping of eligible activities and the gradual extension of green bond eligibilities) and
- use of proceeds (exclusion of activities without substantial contribution/improvement of DNSH/minimum safeguards practice).

In addition to the Taxonomy-alignment component of the EU GBS, the issuer's green bond framework and the related reasonable assurance exercise also consider the non-Taxonomy related components of the EU GBS. As a result, the reasonable assurance exercise has been structured to separately assess the gradual alignment of the issuer's green bonds with both:
a) the Taxonomy and b) the EU GBS (or proxies of the Taxonomy and the EU GBS prior to the entry into force of the related EU legislation, such as the Technical Expert Group's reports on EU Taxonomy and EU GBS. See below in "Use of proxies" for more information).

*As per CSRD's recital 60, the assurance profession distinguishes between limited assurance engagements and reasonable assurance engagements. The conclusion of a limited assurance engagement is usually provided in a negative form of expression by stating that no matter has been identified by the practitioner to conclude that the subject matter is materially misstated. In a limited assurance engagement, the auditor performs fewer tests than in a reasonable assurance engagement. The amount of work for a limited assurance engagement is therefore less than for a reasonable assurance engagement. The amount of work in a reasonable assurance engagement entails extensive procedures, including consideration of internal controls of the reporting undertaking and substantive testing, and is therefore significantly greater than in a limited assurance engagement. The conclusion of a reasonable assurance engagement is usually provided in a positive form of expression and results in providing an opinion on the measurement of the subject matter against previously defined criteria. Reasonable assurance is the higher level of assurance in the market.

Please provide further description and details on the case from a qualitative perspective

The issuer's strategy of "gradual alignment" of its green bonds with the Taxonomy relies on three pillars:

1) alignment of the bond eligibility criteria with the "logic of the taxonomy", with the goal of making them directly and more easily comparable with the Taxonomy criteria as these are progressively established by the regulator;

2) gradual alignment of the issuer's green bond technical screening criteria for substantial contribution (GB-TSCSC) with the EU Taxonomy's technical screening criteria for substantial contribution (Taxonomy-TSCSC) – with the goal of gradually excluding from the use of proceeds the issuer's activities that do not meet the Taxonomy-TSCSC;

3) clarification of the issuer's existing environmental and social principles and standards – with the goal of aligning them gradually with the DNSH/minimum safeguard criteria of the Taxonomy as the usability of such criteria is improved over time.

The issuer has engaged the external supervised auditor to reasonably assure its statements (using ISAE 3000) with regard to each of these pillars.

This case analyses:

- the multi-period nature of the reasonable assurance exercise, which has established a transparent and coherent reference for the market's monitoring of the gradual alignment process since just after publication of the first EC Taxonomy Regulation Proposal in 2018; and
- the concrete arrangements that have been used to enable the reasonable assurance exercise (ISAE 3000).

What is the outcome?

In the context of the issuer's 2021 green bond framework, the auditor has assured with reasonable assurance (ISAE 3000) that:

1. the green bond eligibility criteria are aligned with the logic of the EU Taxonomy[16]
2. the green bond technical screening criteria for substantial contribution (GB-TSCSC) to climate change mitigation are:
   - for all green bond-eligible activities, aligned with the logic of the TSCSC of the Taxonomy;17
   - for all green bond-eligible activities that are in the scope of the TEG Taxonomy Proposal, aligned with the TSCSC of the TEG Taxonomy Proposal;
   - for bond-eligible activities that are in scope of the Delegated Act, aligned with the TSCSC of the Delegated Act, as detailed in the green bond framework.

An excerpt of this detailed description is entailed in item 2 of the previous section in this questionnaire. The issuer estimates that 99.7% of its 2021 allocations were Taxonomy-eligible and around 85% of these were already aligned with the TSCSC of the CDA.

3. the Environmental and Social Principles and Standards (ESPS) for 2011-2021, which are also relevant for the 2021 bond allocations, are aligned with the logic of the EU Taxonomy, as:
   - With regard to the DNSH principles in the Article 17 of the Taxonomy Regulation, these ESPS:
     - address a selection of principles as described in the framework;
     - establish transparent and accountable guidelines for the assessment of a selection of principles in line with EU legislation in force at the time of appraisal as described in the framework;
     - require that adequate evidence thereon is collected systematically during the project appraisals as described in the framework.

   - With regard to the minimum safeguards principles in the Article 18 of the Taxonomy Regulation, these ESPS:
     - address and establish transparent and accountable guidelines for assessment, in line with EU legislation in force at the time of appraisal, for a selection of principles as described in the framework;
     - require that adequate evidence thereon is collected systematically during the project appraisals for each principle as described in the framework.

Data and methodology used to compile the market practice

Data and Methodology	Publicly available data from the issuer's green bond frameworks, on which colour has been provided by the issuer itself in bilateral dialogue with the chair of the SG1 working group on assurance. Systematic analysis of the sequence of steps undertaken by the issuer in its 2019-2021 frameworks and of the accompanying solutions adopted in cooperation with the auditor to permit reasonable assurance of the results of the gradual Taxonomy-alignment strategy.
Use of Proxies	a. For the EU Taxonomy Use of the Technical Expert Group's taxonomy proposal as per the TEG Taxonomy Report of June 2019 and the TEG Final Taxonomy Report of March 2020 as an initial touchstone for the assurance of the gradual Taxonomy-alignment of the GB-TSCSC, in the absence of an official Taxonomy.

[16] "Aligned with the logic of the EU Taxonomy" is defined as "structured to include criteria or processes for the assessment of "substantial contribution", "no significant harm", "minimum safeguards", in line with Article 3 of the Taxonomy Regulation.

[17] "Aligned with the logic of the TSCSC of the Taxonomy" is defined as "structured to incorporate principles, metrics and thresholds where possible and otherwise include qualitative criteria or processes for the assessment of substantial contribution", in line with the TEG GBS Usability Guideline of March 2020.

	b. For the EU Green Bond Standard Use of the TEG EU Green Bond Standard Proposal of June 2019 and TEG EU Green Bond Standard Usability Guide of March 2020 as an initial touchstone for the assurance of the EUGBS-alignment of the non-Taxonomy related components of the EUGBS, in absence of an official EUGBS. c. **For DNSH/minimum safeguard criteria** Comparison of the issuer's ESPS with the provisions of Articles 17 and 18 of the Taxonomy Regulation.
Internal resources	Proprietary IT tool for the automated allocation of bond proceeds and freeze of allocations to enable their auditability. Human resources for coordination of the reporting and audit process in the context of the yearly green bond frameworks: three dedicated headcounts in the finance area and two coordinating headcounts in the projects area of the issuer.
External resources	External supervised auditor (headcount of 2-3)

Did you encounter any obstacles or gaps? If so, please describe.

Challenges related to the use of the EU Taxonomy (incl. data availability, criteria interpretation, clarity on scope of application, other):

1. Assurance of a Taxonomy-alignment strategy and implementation before an official EU Taxonomy and Green Bond Standards are established.
2. Unitary assurance approach to a) activities covered by the Taxonomy and b) activities not covered by the Taxonomy.
3. Non-acceptance by ISAE 3000 of undefined expressions regarding Taxonomy-alignment (e.g., "aligned with the Taxonomy").
4. Lack of DNSH/minimum safeguard data for activities approved before development of the EU Taxonomy and adoption of the Taxonomy Regulation.
5. Conflict of interest if the auditor is asked to assess DNSH/ minimum safeguards aspects outside the assurance exercise for pre-assessment purposes.
6. Usability issues linked to the operationalisation of new DNSH/minimum safeguards criteria

Solutions: How were the obstacles addressed?

1. Use of the TEG Taxonomy Proposal as proxy for the Taxonomy until the official Taxonomy is established;
2. Overarching application of the following two concepts to the description of the TSCSC:
   a. "aligned with logic of the Taxonomy"
   b. "aligned with logic of the Taxonomy TSC"
3. These two concepts were defined as follows:
   a. "aligned with the logic of the EU Taxonomy" as "structured to include criteria or processes for the assessment of "substantial contribution", "no significant harm", "minimum safeguards", in line with Article 3 of the Taxonomy Regulation;
   b. "aligned with logic of the Taxonomy TSC" as "structured to incorporate principles, metrics and thresholds where possible and otherwise include qualitative criteria or processes for the assessment of substantial contribution", in line with the TEG EUGBS Usability Guideline of March 2020.
4. Comparison of applied DNSH/ minimum safeguards guidelines of the issuer with the provisions of Article 17 and 18 of the Taxonomy Regulation;
5. Instruction of a preparatory assurance engagement as separate assurance exercise with reasonable assurance ISAE 3000;
6. Recognition of proxies and definition of principle-based assurance procedures while the usability issues are identified, fed into the EU Platform on Sustainable Finance and solved.

An important obstacle to the continuity of action in the green bond market is the treatment of legacy allocations, i.e., of allocations to activities approved prior to the entry into force of the Taxonomy. These past allocations, to which either different criteria applied or no information can be retroactively collected on some or all of the Taxonomy-components, may not be changed. This will prevent alignment with the EUGBS of existing lines of green bonds, substantially limiting its use in the initial phase.

Grandfathering of the stock of legacy allocations would avoid this. It could be made conditional on two requirements:

a. the legacy allocations took place in line with EU legislation in force at the time of allocation; and
b. new flows of activity are allocated in conformity with the new Taxonomy criteria, with both conditions to be audited and assured with reasonable assurance.

Benefits of applying the EU Taxonomy & Sustainable Finance Framework:

☒ Client engagement
☒ Credibility
☒ ESG risk management / mitigation
☒ Greenwashing mitigation
☒ Transparency
☒ Comparability
☒ Other – *please specify*

The assurance approach developed by the issuer in collaboration with its external auditor has permitted the issuer to provide the capital markets with an accountable and reliable description of the progress of its gradual alignment with the EU Taxonomy along the three core dimensions: substantial contribution, DNSH and minimum safeguards. Reasonable assurance not only endows the information provided in the green bond framework with a high level of factuality and reliability, it also deters internal statements for which no evidence can be produced and turns gradual Taxonomy-alignment into a reliable discovery process for ascertaining facts and monitoring progress on the path to convergence with regulatory requirements.

Other aspects you would like to mention?

External stakeholders (e.g., investors and capital market practitioners in the first place) appreciate the issuer's early adoption of a strategic approach to gradually aligning with the EU Taxonomy and EU Green Bond Standards from even before their entry into force and specifically the high degree of factuality and accountability provided by the audit of the issuer's frameworks with independent reasonable assurance (ISAE 3000).

Reasonable assurance is a powerful instrument for knowledge development and change management within organisations, and not only for validation *ex post* of a course of action. It needs to be tailormade to the specific needs of the issuer, with a view to clarifying the objective up-front and how its assurance can be best delivered going forward.
The Taxonomy Regulation and the arrangements associated with the upcoming EUGBS offer a useful reference and a powerful narrative for the structuring of such processes. The focus of these is not legal compliance with the regulatory framework *per se* but rather the definition of an accountable action strategy in that direction as well as the establishment of the conditions for the reliable monitoring of progress in its making.
This approach requires a focus on what can be delivered rather that what cannot be achieved, and the capacity to bootstrap solutions that help document the transition in a way that can be assured, i.e., with objectivity, precision and clarity. This process contributes effectively to the development of strategic knowledge within the organisation, and is an important contribution of Taxonomy-based use-of-proceeds green bonds.

6. SMEs

This annex compiles a stocktake and analysis of current practice. Considering the early stages of adoption of the EU sustainable finance framework, none of those market practices represent or should be interpreted as best practice or 'market standard'.

The market practices span three areas: 1) the use of the EU sustainable finance framework for business strategy, transition planning and target setting; 2) finance and transactions; and 3) reporting, monitoring and assurance. They are contributed by seven stakeholder groups of large corporates, credit institutions, investors, insurers, public institutions, auditors and consultants, and SMEs (small and medium-sized enterprises).

Disclaimers

This document is not an official European Commission document nor reflects an official European Commission position. Nothing in this document commits the European Commission nor does it preclude any policy outcomes.

This report represents the overall view of the members of the Platform on Sustainable Finance. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

The considerations below are compiled under the aegis of the Platform on Sustainable Finance and cannot be construed as official guidance by the European Supervisory Authorities (ESAs). As a result, the views and recommendations do not purport to represent or anticipate any future official guidance and views issued by the ESAs which may differ from the contents of this report. The inclusion of market practices in this report cannot be construed as their endorsement or validation, in particular for the purpose of assessing Taxonomy-alignement of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission. The market practices described in the Annex to this report shall not be deemed to be automatically compliant with the legal obligations under the Commission Delegated Regulation (EU) 2021/2178 or other relevant EU legislation or Commission guidance documents.

Introduction to SMEs Market Practices

Introduction to the stakeholder group's context

The small- and medium-sized enterprises (SMEs) stakeholder group of the PSF consists of two representatives from European associations primarily focused on SMEs (SME United, Eurochambres), representatives from the EIF, and UNEP FI.

Since the existing sustainable finance framework primarily targets large, capital market-oriented companies and deliberately excludes SMEs from direct application (e.g., EU taxonomy regulation, CSRD), creating market practices in the form of case studies, like the other stakeholder groups, was not feasible. Therefore, it was decided to conduct a survey among SMEs. The central question revolved around the sustainability investments that SMEs are already making and their financing. Regarding financing, the focus was on the extent to which financing instruments align with or leverage the EU sustainable finance framework, their characteristics, and how they are granted.

Introduction to the market observations

SMEs are already investing significantly in sustainability. However, they are unable to fully capitalize on the array of external funding opportunities which indicates a need for improving access to sustainable finance. Currently, the sustainable finance framework for SMEs is mainly applied for SMEs when included in grant schemes or programs of promotional banks.

Key opportunities identified

SMEs want to invest in sustainability, and the transformation of their business models is already underway. Focusing on sustainable financing tailored to SMEs can further support and enhance these efforts.

Challenges and shortcomings

1. Even though SMEs are not directly subject to sustainable finance regulations, reporting requirements for large enterprises and financial institutions indirectly affect SMEs through various channels (trickle-down effect). This effect is expected to increase with the implementation of the CSRD in the coming months.
2. The current sustainable finance framework is not suitable for SME loans, which are the primary source of external funding for SMEs. The current framework's design caters to the capital market, which is not as easily accessible to SMEs due to complexity and cost. As such, the framework does not cater to the specific features of SMEs in accessing funding. At the same time, banks need to avoid allegations of greenwashing and assess ESG risks.
3. The credible and science-based transition plans and targets outlined in the European Commission's Transition Finance documents (June 2023) are challenging for SMEs to implement, while the need for transition finance is substantial.

Peer-to-peer Recommendations

4. start making the necessary efforts to report on a voluntary basis, starting with the key indicators relevant to business models, activities and clients´ requests.[15] Even if SMEs are not directly in scope of the CSRD (except for listed SMEs), some of the reporting requirements for large enterprises and financial institutions may be passed on to SMEs through various channels (the trickle-down effect); and
5. make use of the EU sustainable finance framework to support and inform their own transition and greening activities. By preparing sustainability data to meet requests from clients or financiers, SMEs can facilitate and accelerate their access to sustainable finance.

Conclusion

SMEs account for approximately 50% of economic output in Europe. The transformation cannot succeed without this sector of the economy. Therefore, the sustainable finance framework should be adapted for SMEs to improve their access to financing.

6.1 SMEs Survey Results

Data set

The questionnaire, which was published using the EUSurvey tool, received 2,142 responses from 25 EU countries. The translations of the questionnaire into the respective languages were done by the artificial intelligence integrated within the survey tool.
Despite the extensive coverage across countries, the distribution is not representative. Most responses came from Germany (approximately 60%) and Romania (approximately 25%), which means these countries are overrepresented. The following size categories have been used:

- **Microenterprise**: Up to nine employees, up to €0.7m in turnover, up to €0.35m in balance sheet total.
- **Small company**: Up to 49 employees, up to €8m in turnover, up to €4m in balance sheet total.
- **Medium-sized company**: Up to 250 employees, up to €40m in turnover, up to €20m in balance sheet total.

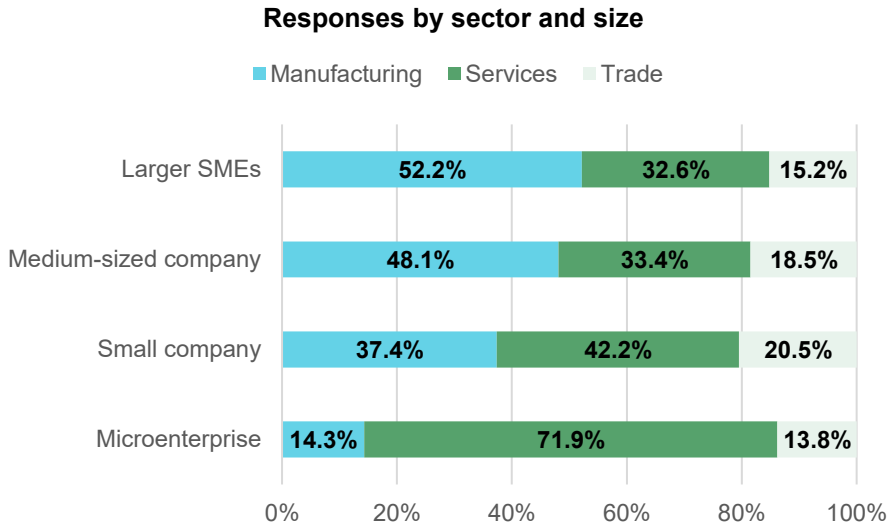
The size categories follow official EU definitions. Given that these categorisations might appear dated (with no updates since 2013), we also reached out to SMEs that exceed these limits. These larger SMEs fall directly under the reporting obligations of the sustainable finance-regulation (namely the EU Taxonomy, and the Corporate Sustainability Reporting Directive, or CSRD):

- **Larger SME**: Over 250 employees, over €40m in turnover, over €20 million in balance sheet total.

The size of the participating SMEs is distributed as follows:

- 803 Microenterprises (c. 37%)
- 626 Small Companies (c. 29%)
- 437 Medium-sized Companies (c. 20%)
- 276 Larger SMEs (c. 13%).

As expected, the larger the SME, the greater its representation in the manufacturing sector. Service industries are dominant among smaller SMEs. The proportion of trading companies ranges between 13% and 21%.



There is a potential bias in the responses due to self-selection. Companies that are open to the topic might be more likely to respond. Based on self-disclosure, the responses came from company management in about 63% of the cases, as follows:

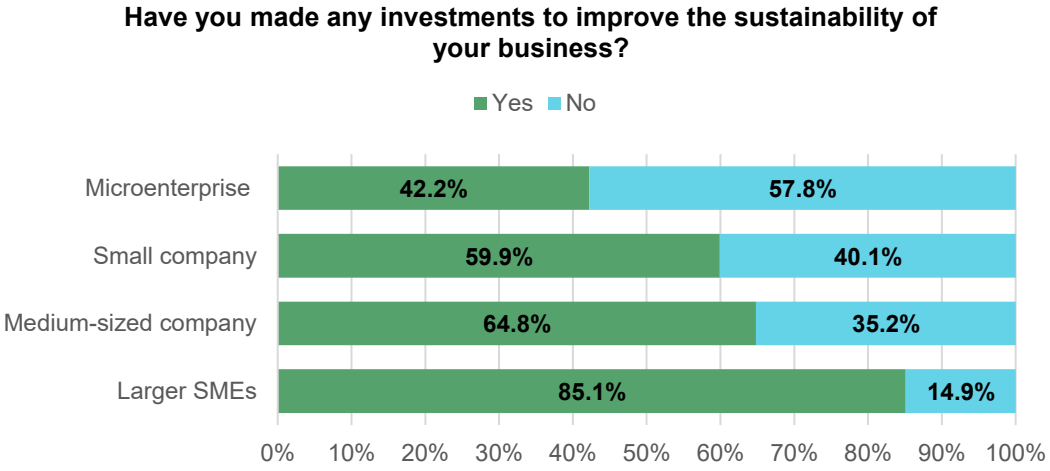
Feedback by position of the responder		
Managing director	1,348	62.9%

Head of finance / controller	334	15.6%
Sustainability management	60	2.8%
Other	400	18.7%
Total	2,142	

Survey results

Investments in sustainable projects by SMEs

A significant majority of 58% (or 1,232 out of 2,142 respondents) of the surveyed companies have already invested in sustainable projects, with variations across sectors: 69% of manufacturing companies, 51% of services firm and 54% of trading companies have done so. There is a clear trend where the larger the company, the greater its investment activity in this area. According to the European Commission, 35% of European SMEs invested in sustainability in 2021. This survey reflects a similar trend, with larger companies and those in the manufacturing sector leading the charge. While direct comparisons might not be entirely accurate, there appears to be a significant increase in investment activity in sustainable projects since 2022. The substantial rise in energy costs, following Russia's invasion of Ukraine, is likely to be a contributing factor.

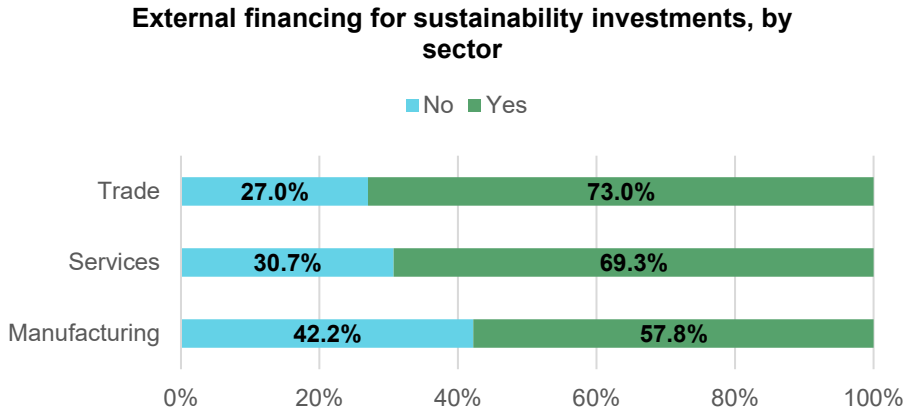


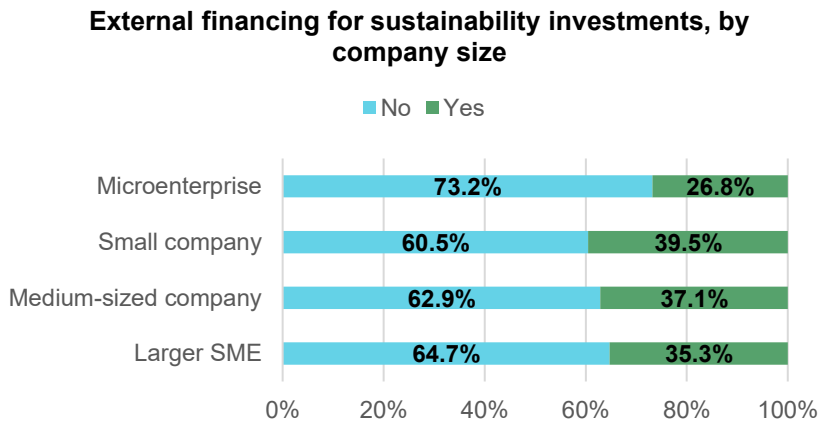
Companies were asked which EU Taxonomy sustainability goal they pursued, with more than one nomination possible. As expected, climate protection and climate adaptation were the most cited, by almost 40% of companies. Prevention and reduction of environmental pollution were the second most important environmental objectives, pursued by 16% firms.

Which sustainability goal did you pursue with these investments?		
	As a percentage of total answers	Cited by companies
Climate protection	27.3%	39.5%
Adaptation to climate change	11.3%	16.3%
Pollution prevention and control	16.1%	23.3%
Transition to a circular economy	7.2%	10.4%
Sustainable use and protection of water and marine resources	5.1%	7.4%
Protection and restoration of biodiversity and ecosystems	4.5%	6.4%
Social goals	11.6%	16.8%
Good corporate governance goals	17.0%	24.6%

External financing for sustainability investments

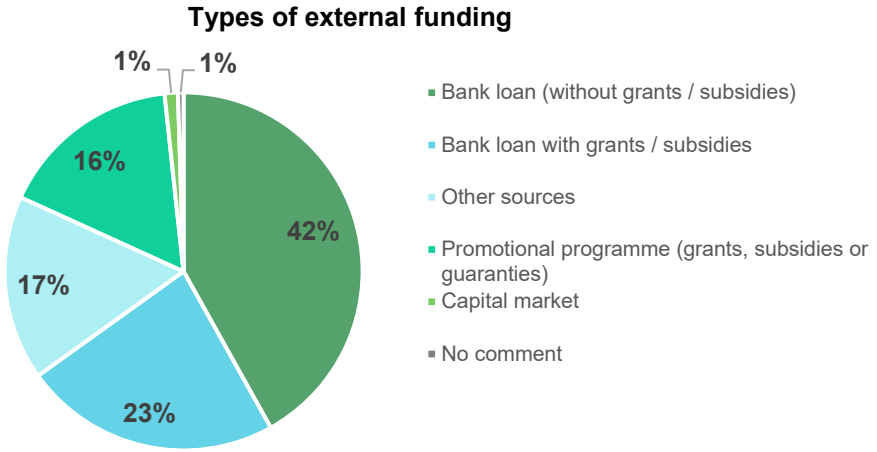
Of the 1,232 companies that have made sustainability investments, 427 (35%) have made use of external financing. Out of these 427 companies, 413 answered the question on the use of ESG criteria. Microenterprises used significantly less external financing. There are also differences across industries. In the manufacturing sector, the rate of external financing is higher than in services. The use of external financing is even lower in the trade sector.



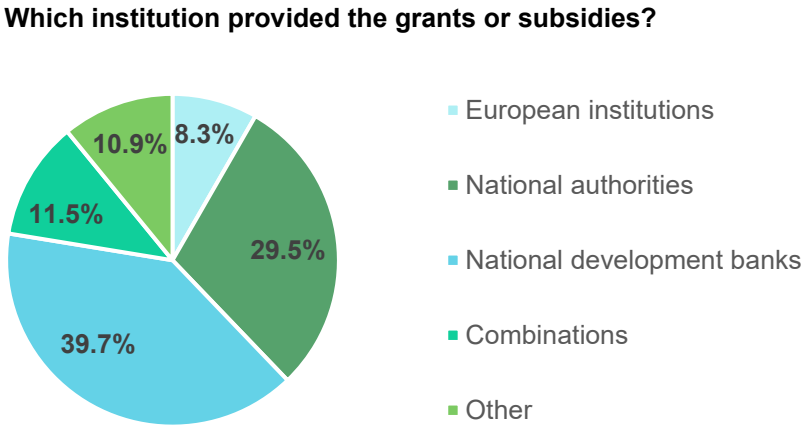


Financing instruments

Out of the 413 companies that made use of external financing, two-thirds got a loan from their bank. Of these 413, 42% obtained a loan without any associated grant or subsidy programme, while 23% integrated a promotional element. All other forms of financing are significantly less common. Only 16% of the 413 companies made use of a grant or subsidy programme without the involvement of a bank. The use of capital market financing is minimal. The remaining 17% used other financing tools, with equity instruments -- primarily family funds – being the dominant choice.



In a study from 2016, the European Banking Authority (EBA) highlighted that, among all SMEs in Europe, bank financing is by far the dominant external source of financing. Capital market financing plays an almost negligible role, an assessment that was echoed by the European Central Bank. In total, 156 companies specified the institutions from which they procured grants, subsidies, or guarantees. National authorities made up 40%, followed by national promotional banks at 30%. A further 12% was derived from a mix of various institutions, some of which integrated European programmes.



Access to funding programmes is easier for larger companies. The smaller the company, the more they tend to rely on other or mixed forms of funding. From the perspective of different sectors, the differences in grant/subsidy programmes are less significant.

WHICH INSTITUTIONS PROVIDED GRANTS OR SUBSIDIES (PER SIZE)?			
LARGER SME	European institutions	5	13.5%
	National authorities	12	32.4%
	National development banks	15	40.5%
	Combinations	3	8.1%
	Other	2	5.4%
	Total	37	
MEDIUM-SIZED COMPANY	European institutions	1	2.4%
	National authorities	14	34.2%
	National development banks	17	41.5%
	Combinations	5	12.2%
	Other	4	9.8%
	Total	41	
SMALL COMPANY	European institutions	5	9.3%
	National authorities	15	27.8%
	National development banks	21	38.9%
	Combinations	9	16.7%
	Other	4	7.4%
	Total	54	
MICROENTERPRISE	European institutions	2	8.3%
	National authorities	5	20.8%
	National development banks	9	37.5%
	Combinations	1	4.2%
	Other	7	29.2%
	Total	24	

Which institution provided the grants or subsidies (per sector)?			
Manufacturing	European institutions	7	9.0%
	National authorities	24	30.8%
	National development banks	26	33.3%
	Combinations	12	15.4%
	Other	9	11.5%
	Total	78	

Services	European institutions	4	6.8%
	National authorities	15	25.4%
	National development banks	28	47.5%
	Combinations	5	8.5%
	Other	7	11.9%
	Total	59	
Trade	European institutions	2	10.5%
	National authorities	7	36.8%
	National development banks	8	42.1%
	Combinations	1	5.3%
	Other	1	5.3%
	Total	19	

To date, based on the sample of SMEs surveyed,they have predominantly financed sustainable projects through bank loans, without reference to sustainable finance regulations or grant/subsidy programmes. Considering the substantial investment needed to realise the objectives of the EU Green Deal, the proportion of finance going to SMEs to date is not sufficient to meet these goals. Given the paramount role of bank financing, coupled with its inherent limitations to fund at requisite volumes and the marginal role of capital market financing, it is imperative to recognise the specificities of SMEs and the need for proportionality with regards to the EU sustainable finance framework relevant for SME.

Sustainable finance for SMEs

The primary objective of this survey is to explore the extent to which financing instruments exist for SMEs that align with the EU sustainable finance framework. What characterises these sustainable finance instruments? What defines their sustainability?

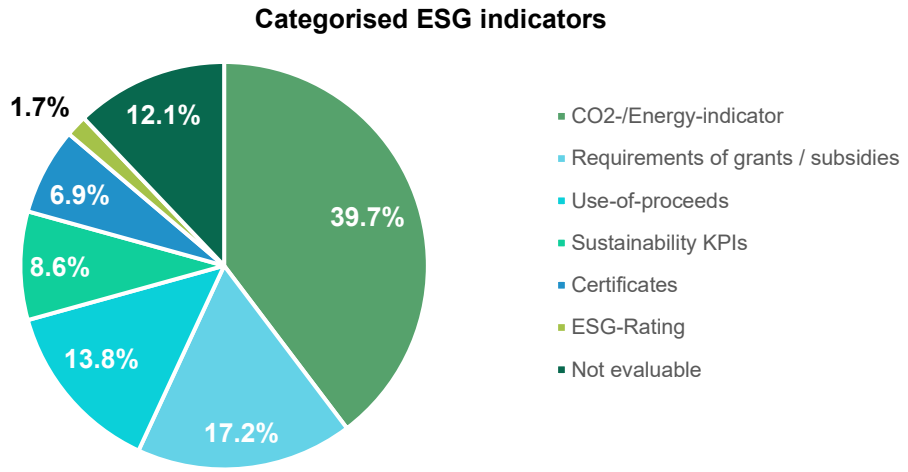
To explore this further, companies that reported procuring external financing were queried about the inclusion of sustainability indicators in their contracts. Out of the 413 firms that made use of external financing, 68 confirmed that they linked their financing to some kind of sustainability indicators. Meanwhile, 343 did not, and 16 chose not to answer. These statistics remain relatively consistent across different sizes and sectors.

Were the sustainability goals linked to grants? (by size)				
	No		Yes	
Larger SMEs	68	86.1%	11	14.0%
Medium-sized company	84	83.2%	17	16.8%
Small company	115	81.0%	27	19.0%
Microenterprise	76	85.4%	13	14.7%
Total	343		68	

Were the sustainability goals linked to grants? (by sector)		
	No	Yes

Manufacturing	160	80.8%	38	19.2%
Services	140	85.9%	23	14.1%
Trade	43	86.0%	7	14.0%
Total	343		68	

Of the 68 companies that linked financing to sustainability indicators, 58 provided specific indicators through open-ended responses. When categorised, the breakdown is as follows:



Only 14% of instances of sustainable financing were based on criteria directly related to the investment object itself (i.e., use-of-proceeds financing). In 17% of instances, the indicators were prescribed by the requirements of the respective grant/subsidy programmes. Although 40% of the financing was linked to CO_2/energy indicators, in-depth interviews indicate that these criteria often stemmed from grant and subsidy initiatives. External certificates or ratings factored into a mere 8% of instances. This observation aligns when allocating the specified ESG criteria across various financing modalities or programmes.

ESG criteria grouped across the forms of financing

Cluster	Form of financing	Answers
CO_2-/energy Indicator	Bank loan	3
	Bank loan with grant/subsidy	9
	Grants/subsidies	7
	Others	5
	Total	24
	Bank loan	2

Grants/subsidies	Bank loan with grant/subsidy	3
	Grants/subsidies	1
	Others	3
	Total	9
Use-of-proceeds	Bank loan	1
	Bank loan with grant/subsidy	1
	Grants/subsidies	5
	Others	1
	Total	8
Sustainability KPI	Bank loan	1
	Bank loan with grant/subsidy	1
	Grants/subsidies	2
	Others	1
	Total	5
Certificates	Bank loan	2
	Bank loan with grant/subsidy	3
	Total	5

Out of the 24 companies that are obliged to meet CO_2/energy indicators for their sustainable financing, 16 indicated that their financing is linked to a grant/subsidy programme. A similar pattern emerges with the 'others' and use-of-proceeds indicators. In total, 70% of those companies used grant or subsidy programmes to underpin their sustainable financing.

Of the 15 financings that are not tied to grant or subsidy programmes, only two are related to use-of-proceeds finance, while the other 13 represent general purpose financing at the company level. Certificates could potentially become a more prominent mechanism for banks in structuring sustainable loans.

SMEs and the EU Taxonomy

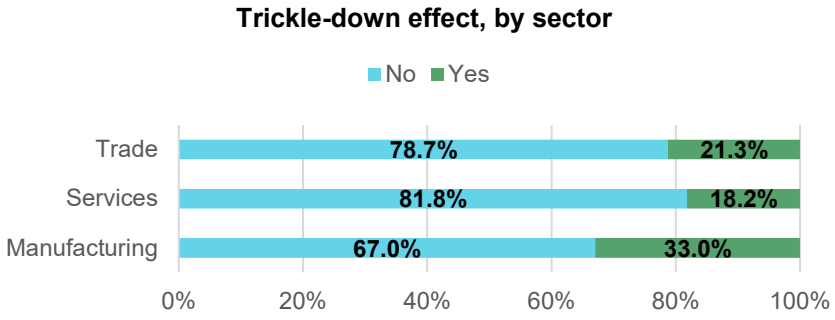
35% of green investments are financed with external funds. Of this 35%, only 16% have some ESG-criteria included.. The definition of sustainability varies considerably. In most cases (70%), criteria are set by the corresponding grant or subsidy programmes, with a predominant focus on programmes targeting energy or CO_2 reduction. Participants to the survey didn't mention the EU Taxonomy as a reference framework to support their sustainability strategy or as a mean to access finance.
Moreover, it is evident that, beyond grant/subsidy programmes, facilitating access of SMEs to sustainable use-of-proceeds financing will be insufficient. A broader corporate-level approach to sustainable finance is essential for SMEs. Currently, sustainable funding opportunities for SMEs are primarily confined to grant and subsidy programmes.

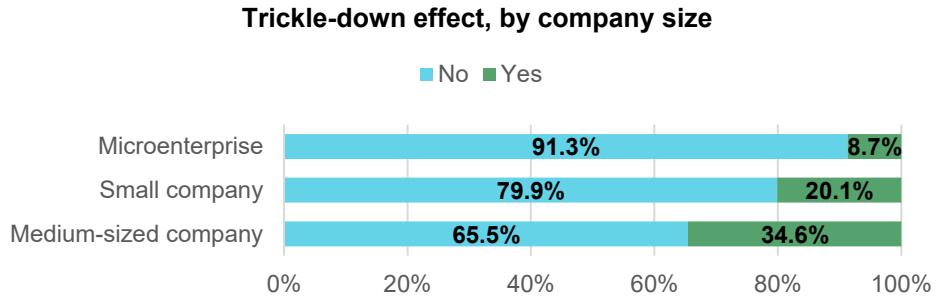
Trickle-down-reporting effect on SMEs

The trickle-down effect refers to the phenomenon where entities find themselves subject to indirect reporting obligations. Specifically, larger companies and banks with direct reporting requirements relay these duties to smaller enterprises, even though the latter are not directly obliged to report. This obligation transfer arises either from the value chain disclosures of larger enterprises or through financial service providers. Of the SMEs without a direct reporting obligation, 19% (or 347 out of 1,866) indicate they are

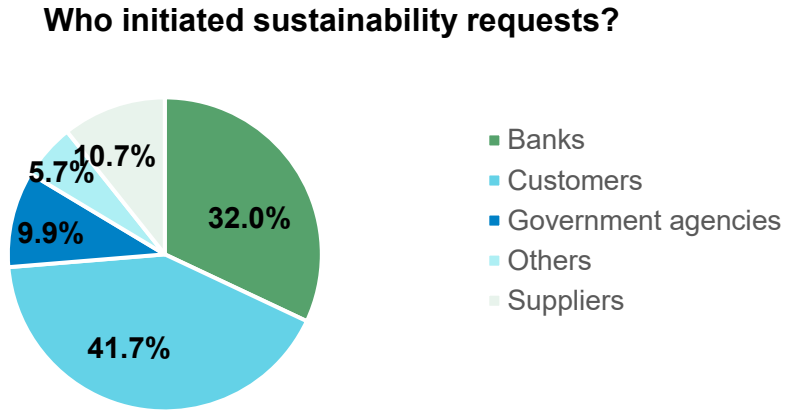
subject to these indirect reporting demands. This impact differs considerably based on company size. One-third (35%) of medium-sized enterprises are subject to indirect reporting, whereas the figure dwindles to just 9% for microenterprises. It is noteworthy that these percentages are expected to shift once reporting under the Corporate Sustainability Reporting Directive (CSRD) amplifies the trickle-down effect.

Among the SMEs with a direct reporting obligation, 57% (or 158 out of 276) say they also face extra indirect reporting requirements. Sectoral disparities are evident too. The manufacturing sector experiences a more pronounced trickle-down effect, reported by 33% of companies, while only 18% of service providers are affected.





Of the 505 companies that the institution that requested information from them, 42% said that the primary source of information requests came from their own customers. Banks were the next most significant group, accounting for 32% of such requests.



7. Public Sector

This annex compiles a stocktake and analysis of current practice. Considering the early stages of adoption of the EU sustainable finance framework, none of those market practices represent or should be interpreted as best practice or 'market standard'.

The market practices span three areas: 1) the use of the EU sustainable finance framework for business strategy, transition planning and target setting; 2) finance and transactions; and 3) reporting, monitoring and assurance. They are contributed by seven stakeholder groups of large corporates, credit institutions, investors, insurers, public institutions, auditors and consultants, and SMEs (small and medium-sized enterprises).

Disclaimers

This document is not an official European Commission document nor reflects an official European Commission position. Nothing in this document commits the European Commission nor does it preclude any policy outcomes.

This report represents the overall view of the members of the Platform on Sustainable Finance. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

The considerations below are compiled under the aegis of the Platform on Sustainable Finance and cannot be construed as official guidance by the European Supervisory Authorities (ESAs). As a result, the views and recommendations do not purport to represent or anticipate any future official guidance and views issued by the ESAs which may differ from the contents of this report. The inclusion of market practices in this report cannot be construed as their endorsement or validation, in particular for the purpose of assessing Taxonomy-alignement of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission. The market practices described in the Annex to this report shall not be deemed to be automatically compliant with the legal obligations under the Commission Delegated Regulation (EU) 2021/2178 or other relevant EU legislation or Commission guidance documents.

Introduction to public sector market practices

Summary of outreach results:

Most EU public sector entities[18] are not subject to regulatory non-financial disclosures. EU public sector issuers representing over 90% of green use-of-proceeds bonds with external assurance in their sector (or over 40% of such bonds across all EU sectors) are gradually aligning the classification and reporting (in some cases even the eligibility and selection) of their bond allocations with the Taxonomy on a voluntary basis. This is mainly driven by best practice considerations and increasing numbers of investor requests for Taxonomy-based reporting on use-of-proceeds holdings, in light of investors' own classification and reporting needs; that is, by market-driven factors.

The prevalent Taxonomy alignment observed at this stage is a combination of substantial contribution assessment of the use of proceeds, with a gradual approach to DNSH and minimum safeguards criteria. The implementation of the latter is largely deemed to require more time, because of usability issues with the Taxonomy criteria, as well as a lack of data and data quality. In these two fields, the acceptance of auditable proxies could be a meaningful intermediate step, as it helps issuers to "implement and then improve" rather than "freeze on fear of being caught" on still uncertain aspects, notably as assurance standards are still under development. Regulatory and supervisory authorities may therefore have an interest in seeing gradual alignment strategies being applied by the market on a voluntary basis. This approach can facilitate more timely disclosure of the already available data and facilitate the definition of plans for the collection of data that is not yet available, to allow for 'full alignment' in due course.

Better market scrutiny of the transition and more efficient pricing of alternative investment opportunities will create an incentive for issuers to apply at least the logic of the Taxonomy to move forward faster. This approach, which recognises Taxonomy alignment as a business opportunity rather than mere regulatory compliance, encourages issuers' proactive operationalisation of the Taxonomy and takes into account their feedback based on their experiences so far (e.g., on how to improve or replace existing criteria for DNSH/minimum safeguards criteria, in line with Article 26 of the EU Taxonomy Regulation).

Foreword

Bond markets are forward-looking and typically react more quickly to new official investment guidelines, with valuable knock-on effects in less-responsive product segments, such as loans. By using the Taxonomy to classify how the proceeds of green bonds are used, issuers can help investors more efficiently analyse how their capital is used; this is thus a core instrument of EU sustainable finance policy. This gives issuers an incentive to report progress in their Taxonomy alignment as soon as it materialises – green bond frameworks can therefore be assumed to provide a good snapshot of the issuers' *status quo*.

Public sector issuers play an important role in this context, given their scale and specific role. Over 40% of all green bonds with assurance in the EU are issued by the public sector and around 90% of these public sector issuers already include, to varying degrees, references to the Taxonomy in their frameworks or other relevant documents. Furthermore, exposures to public sector issuers represent an important part of the assets held by banks, insurance companies, pension funds and asset managers.

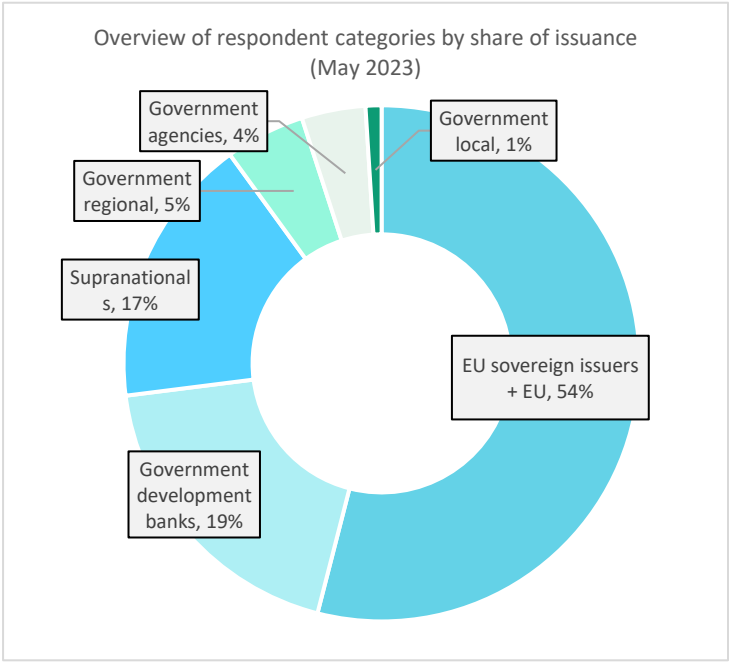
The Platform's public sector group analysed the green bond frameworks of public sector issuers and other related reports with the help of publicly available information and an outreach questionnaire, collecting first-hand information on EU Taxonomy classification and reporting practices on: a) the activities that are eligible for allocation from the issuer's green bonds; and b) the totality of the issuer's activities.

[18] For the purpose of this document, the public sector is defined as including the following Bloomberg categories: Supranationals, Sovereigns, Government Regional, Government Local, Government Development Banks and Government Agencies.

Rationale of the outreach

In the outreach, the group was looking for a wide spectrum of cases rather than best practice cases, in order to highlight areas of broader relevance that could be improved to facilitate the general use of the Taxonomy and the application of the wider sustainable finance framework. To avoid biases, a systematic approach to the collection of information was followed. After searching Bloomberg for all European public sector issuers of green bonds with external assurance[19] (63), the group sent a detailed questionnaire to 34 issuers[20] that mention the EU Taxonomy or the EU Green Bond Standard (GBS) in their green bond framework and/or other relevant documents (external assurance, sustainability/financial/non-financial/management reports). Based on 32 replies (94% of the outreach targets), the group then calculated statistics to support conclusions for each category as well as overall. Eight anonymised case studies were then selected to illustrate aspects of overarching relevance with tangible examples. These case studies are based on public information validated by the respondents and include detailed feedback.

Neither the conclusions nor the case studies incorporate views from outside this perimeter of research. Debt management offices, or other issuers who are not currently issuing green bonds,[21] may of course equally have tried to work with the EU Taxonomy and developed their thoughts. It may still be worth, in due course, also reaching out to these issuers to broaden the analysis. Nonetheless, the wide variety of issuers already considered and the systematic collection and elaboration of information make this analysis and its conclusions representative of points widely shared by public sector market participants.



Core results of the outreach

1. In the EU public sector, green bond issuers recognise the market value of the Taxonomy as **best practice** for classification and reporting, with its use increasingly expected and requested by investors, and not only those who are subject to EU regulatory sustainability disclosures.

2. In the majority of cases, given the absence of legal reporting obligations, **Taxonomy-based sustainability disclosures on the totality of the issuers' activities is, by and large, still under discussion**, with no definitive decision in sight. There are exceptions, such as 'pure play' entities, which are more advanced in implementation; and sovereigns, which are not considering implementation.

[19] Bloomberg uses "assurance" as a generic term for any kind of third-party validation, be it in the form of second-party opinions from ESG rating providers or assurance by auditors. In either case, with different degrees of factuality, an external assurance confers higher reliability to the collected data.
[20] As per the following Bloomberg categories: supranationals (4), sovereigns (10), government regional (6), government local (2); government development banks (7), government agencies (5).
[21] This may be for a variety of reasons unrelated to the EU Taxonomy, e.g., in case of low funding needs or those issuers finding it a challenge to keep regular bonds sufficiently liquid.

3. **Green bonds therefore remain the most reliable indicator of the state of Taxonomy alignment at this stage**, providing issuers with a stable platform for dialogue with their stakeholders during the transition to the new regulatory regime, which many respondents approach from the point of view of best practice. In this way, green bonds play an important instrumental role in promoting EU sustainable finance policy.

4. In the EU, **many public issuers are reorganising the collection and dissemination of information on the use of green bond proceeds, in line with the logic of the EU Taxonomy at least,** with different degrees of progress. This is happening despite the disincentive provided by Article 8 of the Delegated Act, which excludes public sector exposures, including green use-of-proceeds bonds linked to the EU Taxonomy, from the green asset ratio (GAR).[22]

5. Those **Taxonomy-alignment practices that are already established provide food for thought in the broader discussion** on the classification and reporting on total activities, not only within the public sector. If these practices were supported and generalised by regulatory and supervisory authorities, **their dissemination in the economy could and should be facilitated by the proactive involvement of public sector intermediaries**, notably supranationals, sovereigns and government development banks, which account for the largest share of the public sector green bond market, **in advisory services they provide to the final recipient of the funds.[23]**

6. A common pattern frequently observed in public sector voluntary approaches is the **combination of an assessment of the contribution of proceeds to the EU Taxonomy's substantial contribution criteria, with a more gradual approach to the DNSH and minimum safeguards criteria**. The implementation is largely deemed to require more time on the grounds of the usability of the related Taxonomy criteria, a lack of data, and poor quality of that data. The **use of auditable proxies**, some of which are proposed in the syntheses summarising the results of the outreach, can be an important instrument to encourage the voluntary use of the Taxonomy . In the words of one respondent, "implement and then improve" should be the name of the game, rather than "freeze on fear of being caught" because of still unclear or uncertain aspects of the Taxonomy. This would encourage Taxonomy usage and allow for data quality to improve over time, as processes mature and evolve (i.e., a formalisation of the gradual alignment approach). This approach could also bear fruit in developing economies beyond European borders, many of which are taking the EU as reference for the development of their own sustainable finance legislation, with the explicit objective of attracting more capital from the EU.

7. Similarly, **issuers relying on public expenditures could benefit from the addition of further expenditure-based substantial contribution criteria, as well as some limited adjustments to the overall approach in relation to the DNSH/minimum safeguards criteria**. Such issuers face specific impediments as they use green bond proceeds to indirectly finance economic activities that are already (or are intended to be rendered) aligned with Taxonomy requirements via tax expenditure programmes or transfer programmes, including subsidies. The majority of sovereign respondents, for example, indicated difficulty in reconciling the logic of public expenditures (e.g., tax incentives and subsidies) with the logic of economic activities and the granularity required by the Taxonomy Regulation. Respondents noted that the absence of a methodology and information made it difficult to demonstrate compliance with DNSH requirements for certain expenditures. In some cases, the difference between DNSH requirements and national legislation, coupled with the absence of regulatory reporting requirements for end users, made it very challenging to demonstrate compliance (e.g., for subsidies related to electric vehicles). To make the Taxonomy more suitable for public sector use, a review of such criteria, with a view to both structure and scope (i.e., the list of covered economic activities in the Delegated Acts) might therefore be worthwhile in order to enlarge the subset of public expenditure items and help such issuers to use the Taxonomy to a fuller extent, on a voluntary basis.

[22] Given the importance of the EU public sector's green bonds with a link to the EU Taxonomy (around 50% of total EU green bond issuance), the exclusion of these bonds from the GAR affects their distribution in important investor segments, notably banks, diminishing their role as a policy instrument. This observation is shared by the outreach coordinators and voiced explicitly by several of the outreach respondents.

[23] This potential advisory role on the investment side is equally penalised by the current structure of the GAR, depriving public sector intermediaries of a market-driven incentive that could go well beyond the application of best practice reporting on the balance sheets of public sector intermediaries. This structure is therefore a hindrance to EU sustainable finance policy. The public sector exclusions currently affecting the GAR should be removed to maximise EU policy impact.

8. **Credibility, transparency and comparability**, i.e., a better use of the market for the identification and promotion of best-in-class practices, **are clearly the main benefits the respondents associate** with a timely, though partial and gradual, operationalisation of the Taxonomy in classification, reporting and, for those that are aiming for EU GBS compliance over time, exclusion of non-Taxonomy aligned activities from the use of proceeds.

Peer-to-peer recommendations:

- accelerate the issuance of green use-of-proceeds bond directed at economic activities that are EU Taxonomy-aligned, in the process of aligning or transitional;
- accelerate gradual uptake of the EU Taxonomy for green use-of-proceeds bonds and alignment with the EU GBS. Elements of the Taxonomy can be applied gradually, starting with substantial contribution criteria, for example, and considering relevant proxies for the do no significant harm (DNSH) criteria and minimum safeguards. This approach is possible when no claim of full EU GBS or Taxonomy alignment is made;
- encourage and advise final recipients of the funds to use the EU Taxonomy to plan and monitor their transition strategies. Encourage them to make voluntary use of Taxonomy-based reporting and KPIs, irrespective of whether the activity is fully aligned with the Taxonomy, and/or whether the Article 8 Disclosures Delegated Act allows for mandatory reporting of such exposures;
- consider the use of Taxonomy-based reporting and KPIs for early and progressive monitoring of business transition strategies in a way that can be monitored by markets, even when entities are only making use of partial elements of the EU Taxonomy framework (e.g., for substantial contribution, DNSH or minimum social safeguards criteria);
- consider using/integrating the EU Taxonomy to tax expenditure programmes, green procurement policies and transfer programmes, including subsidies, where relevant; and
- increase awareness across all levels of public administration, within and across ministries and/or departments, to accelerate the uptake of the EU Taxonomy by market actors.

The full quantitative results and methodology of the outreach developed by the Platform public sector group, are available in a separate standalone document available here.

7.1 General synthesis of questionnaire feedback for all public sector categories

1. What are the core reasons for your consideration of the EU Taxonomy Regulation (2020/852) in the classification/reporting of your activities? (Multiple selections possible)

Answer	Supranationals	EU sovereign issuers plus EU	Government regional	Government local	Government development banks	Government agencies	Question respondents/total questionnaire respondents	Average of values provided by question respondents
Alignment of own institutional objectives with Taxonomy policy	33% (3/3)	45% (11/11)	40% (5/5)	0% (2/2)	14% (7/7)	75% (4/4)	32/32	37%
Best practice considerations	**100% (3/3)**	**82% (11/11)**	**80% (5/5)**	**100% (2/2)**	**57% (7/7)**	**75% (4/4)**	**32/32**	**78%**
Reduction of uncertainty and reputational risks e.g., in the design of transition strategies, monitoring progress over time, and communication	67% (3/3)	9% (11/11)	20% (5/5)	50% (2/2)	29% (7/7)	50% (4/4)	32/32	28%
Alignment with investors' classification/reporting needs in response to their Taxonomy-related regulatory requirements and associated requests (e.g., for Taxonomy-relevant reports on the allocation of your green bonds)	**100% (3/3)**	**73% (11/11)**	**80% (5/5)**	**100% (2/2)**	**43% (7/7)**	**75% (4/4)**	**32/32**	**72%**
Alignment with classification/reporting needs of counterparties on the asset side and associated requests (e.g., for concession of green loans)	67% (3/3)	9% (11/11)	0% (5/5)	50% (2/2)	0% (7/7)	0% (4/4)	32/32	13%
Other	67% (3/3)	0% (11/11)	20% (5/5)	0% (2/2)	43% (7/7)	50% (4/4)	32/32	25%

**For each category, the percentage of positive replies to each item is calculated on the total number of replies to the headline question. The percentages in the column "average between categories" are the simple average of the percentages by category, without weighing for the number of replies or the volumes of issuance represented in each category.*

Overarching conclusion

- Public sector issuers are generally not subject to regulatory reporting requirements. Taxonomy alignment is on a voluntary basis.

- 'Best practice' and 'alignment with investors' classification/reporting needs', i.e., market factors, are driving the use of Taxonomy. Notably, one respondent highlighted that the Taxonomy is directly instrumental in providing the higher clarity promised by green finance, and that the anticipation of aforementioned market factors determined a strategic approach to both eligibilities and disclosures for the use of proceeds of its green bonds, even before entry into force of the EU Taxonomy Regulation.
- This is all happening despite the hurdle created by Article 8 of the Delegated Act, which excludes public sector exposures from the green asset ratio (GAR). This exclusion penalises both sides of public sector activities:
  - in terms of funding, it disincentivises the distribution of the public sector's Taxonomy-aligned green use-of-proceeds bonds in important investor segments, notably banks, diminishing the role of these bonds as an instrument of EU policy. As these bonds make up a substantial portion of the market, the effect is material.
  - in terms of financing, the exclusion deprives the public sector of a regulatory incentive to advise the final recipient of the funds regarding the operationalisation of the Taxonomy. The removal of the current exclusions may drive this role of the public sector beyond the mere application of best reporting practice.

2. What are the core modalities of your Taxonomy-alignment strategy for the classification and reporting of:

2.1. Activities that are eligible for allocation from your green bonds

Overarching conclusion

- Strategies are under development for the voluntary use of the framework and generally consist of **gradual Taxonomy alignment**, with an initial focus on: firstly, a reorganisation of the collection and reporting of relevant information in accordance with the logic of the Taxonomy; and, secondly, a comparison of the eligibility criteria for the use of proceeds with the technical screening criteria of substantial contribution of the Delegated Act – often with the objective of aligning the former with the latter over time.
- The respondents generally associate the **do no significant harm** (**DNSH) and minimum safeguards criteria with a higher degree of complexity and uncertainty as well as a lack of data**. In these two fields, they therefore approach assessment and improvement of existing practices incrementally and on a best-efforts basis, in a way that they are presently exploring on the ground with both peers and the ultimate recipients of the funds.
- Proxies are used as a practical first step to permit a systematic analysis of the status quo and alignment with the logic of the Taxonomy. Examples are a mapping of the DNSH/minimum safeguards requirements by reference to existing EU and national legislation or a comparison of present and past environmental and social standards with the principles of Articles 17 and 18 of the EU Taxonomy Regulation.

2.2. Totality of your activities (e.g., in the context of the Corporate Sustainability Reporting Directive)?

Overarching conclusion

- Work is currently still in progress and no definitive conclusion is generally in sight for the time being. **Green bonds therefore remain the most reliable indicator of the state of Taxonomy alignment within the public sector at this stage**, providing factual food for thought for the broader discussion of non-financial disclosures at entity level, which confirms their instrumental role in EU policy on sustainable finance.

2.3. Is there a difference between your responses for questions 2.1) and 2.2.)?

Overarching conclusion

- The EU Taxonomy Regulation provides a framework that directly serves the key objective of green use-of-proceeds bonds. These aim to enhance clarity, transparency, accountability and comparability of the allocations to eligible activities. These elements are enhanced by the progressive use of the Taxonomy.
- The green bond market is therefore spearheading the implementation of Taxonomy-based disclosures while the debate on **best reporting practices for the totality of an issuers' activities continues and is often delayed by reputational and legal concerns.**
- This primacy of green bonds stems, among other things, from the issuers' ability to refine the scope of their green bond frameworks (e.g., by aligning eligibilities on the thresholds for substantial contribution of the Taxonomy) and to focus on alignment progress rather than simply on regulatory compliance.
- On this basis, green bonds provide a more certain and therefore more solid basis for the dialogue with stakeholders in the current phase of a transition to a regulatory steady state.

2.4. What has been the feedback from investors to your Taxonomy-alignment strategy and its results so far?

Overarching conclusion

- The strategy of **gradual Taxonomy alignment** for the classification and reporting on green bond allocations **is received favourably by investors**, **both inside and outside the EU**. This appreciation is in fact reinforced, not weakened, by investor awareness and understanding of the challenges involved in Taxonomy alignment. Clarity on the status quo and the ability to monitor improvements on the path to convergence with the EU regulatory framework are increasingly becoming decisive features for sustainable investors' support, and therefore also for the support of investors at large. Some issuers see the primary and secondary outperformance of Taxonomy-aligned bonds as a testimony to investors' appreciation and encouragement in this field.

3. Separately for the two strategies (as set out under 2.1 and 2.2.) how do you treat (or plan to treat) the classification and reporting of:
3.1. New flows of activity

Overarching conclusion

- A Taxonomy-based classification and reporting of **new flows of activity** (commitments to investment as well as actual investment) is perceived as **essential to both strategies**.

3.2. Stocks of activity

Overarching conclusion

- Green bond-eligible activities: the proceeds of a green bond can be allocated in different ways (project by project or on a portfolio basis; past or new disbursements or a combination of the two; past or new commitments; with or without refinancing of existing disbursements; and on the basis of new or past eligibility criteria). Whatever the approach, **green bond reports inform about** the use-of-proceeds, quantifying flows of new activities and at the same time classifying the **underlying stock of existing activities to which the proceeds flow**.

- Totality of activities: in general terms, **work is still in progress** and no definitive conclusion is yet in sight. The **only exception is 'pure play' entities** in areas of more straightforward application of the Taxonomy (e.g., rolling stock), notably those for which the Taxonomy Regulation applies by law (e.g., French entities of public interest, to whom the Taxonomy Regulation has applied since 2021).

3.3. Activities that are Taxonomy eligible but not eligible for the calculation of the GAR under the Disclosures Delegated Act

Overarching conclusion

- Article 7(1) of the Disclosures Delegated Act currently excludes public sector exposures from the calculation of the numerator and denominator of financial undertakings' KPIs. This removes a regulatory incentive to the public sector involvement in the operationalisation of the Taxonomy as highlighted in item 1 above. However, there is a **market-driven incentive to report on (gradual) Taxonomy alignment for all Taxonomy-eligible activities**, as per item 1 above.
- This is confirmed by the replies received regarding green bond-eligible activities, notably by those that are gradually aligning with the EU GBS. As for the totality of activities, work is still in progress and no definitive conclusion is yet in sight.

3.4. Activities that are Taxonomy-aligned with regard to substantial contribution but not (or not fully) with regard to DNSH and minimum safeguards criteria

Overarching conclusion

- A holistic approach to Taxonomy compliance for reporting purposes, including on GAR, does not incentivise the publication of partial information (e.g., on substantial contribution when DNSH/minimum safeguards information is not available or is uncertain). As per item 1 above, however, there is a **market-driven incentive for issuers to publish already available information on partial alignment to clarify the status quo and make any progress able to be monitored by investors**.
- This **practice is already developing in the green bond market**. For the totality of the issuers' activities, a discussion is generally still ongoing, without clear conclusions in sight.

3.5. Notably: are voluntary reports on Taxonomy eligibility in addition to GAR eligibility and partial Taxonomy alignment (e.g., separately for substantial contribution, DNSH and minimum safeguards criteria), for all or some of these activities already implemented, foreseen or under discussion?

Overarching conclusion

- **Green bond practice on gradual alignment** in classification and reporting **is providing food for thought for the broader discussion on sustainability disclosures on the totality of issuers' activities**. This discussion is, however, still ongoing and **no general conclusions** may be drawn at present in this area.
- Some polled public sector issuers from each category (with the exception of the EU sovereign issuers plus EU and Government regional categories) have already implemented some **voluntary reports, generally limited to new activities**, so far.

4. What is your Taxonomy assessment with regard to the activities that are eligible for allocation from your green bonds?

Answer	Supranationals	EU sovereign Issuers plus EU	Government regional	Government local	Government development banks	Government agencies	Question respondents/total questionnaire respondents	Average of values provided by question respondents
4.1. Taxonomy-eligible activities as a % of activities that can be allocated from your green bonds	99.85% (2/3)	79% (6/11)	100% (2/5)	100% (2/2)	100% (1/7)	95% (3/4)	16/32	91%
4.2. Taxonomy-aligned activities as a % of Taxonomy-eligible activities	50% (2/3)	39% (3/11)	95% (1/5)	30% (1/2)	N/A (0/7)	8% (2/4)	9/32	40%
4.3. Substantial contribution-aligned activities as a % of Taxonomy-eligible activities	100% (2/3)	79% (4/11)	98% (1/5)	74% (2/2)	N/A (0/7)	85% (3/4)	12/32	85%
4.4. DNSH-aligned activities as a % of Taxonomy-eligible activities	50% (2/3)	46% (3/11)	95% (1/5)	30% (1/2)	N/A (0/7)	8% (2/4)	9/32	42%
4.5. Minimum safeguards-aligned activities as a % of Taxonomy-eligible activities	50% (2/3)	72 % (4/11)	100% (1/5)	30% (1/2)	N/A (0/7)	100% (1/4)	9/32	65%

Please note that not all surveyed issuers responded to this question. In the category columns, the percentages indicate average values within each category, while the numbers in parentheses indicate how many out of the total number of issuers within each category have provided information

Specifically for the activities covered by the EU Taxonomy Climate Delegated Act of January 2022 (2021/2139), please fill in Sheet 3 in the Excel file with any available information.

Provision of detailed Taxonomy-based information regarding activities eligible for allocation from green bonds	Supranationals	EU sovereign issuers plus EU	Government regional	Government local	Government development banks	Government agencies	Total number of issuers who have provided information across categories
Public sector issuers which provided detailed information on Taxonomy-based **classification** of activities eligible for allocation from green bonds	3 out of 3	5 out of 11	4 out of 5	1 out of 2	2 out of 7	3 out of 4	18 out of 32

Public sector issuers which provided detailed information on Taxonomy-based **reporting** of activities eligible for allocation from green bonds	3 out of 3	6 out of 11	4 out of 5	1 out of 2	0 out of 7	4 out of 4	18 out of 32

Overarching conclusion

- The respondents have achieved **most progress** in terms of Taxonomy assessment with regard to the mapping of Taxonomy-eligibility and alignment **with regard to substantial contribution criteria**. There is less progress in terms of alignment with DNSH and minimum safeguards, which reflects the challenges encountered in this area (see conclusions under question 7 for more details).
- The above outcome suggests that **the classification and reporting of green bond activities as per the EU Taxonomy on a voluntary basis is best addressed through a gradual/stepwise approach** (i.e., first by a mapping of Taxonomy-eligible activities; secondly by an assessment against/alignment with technical screening criteria for substantial contribution; and thirdly by addressing DNSH and minimum safeguards via proxies if formal demonstration of compliance is not immediately possible).

On this basis, how do you deem the chances that your green bonds may comply with the Taxonomy requirements of the EU GBS in the foreseeable future?

Overarching conclusion

Most polled categories of **public sector issuers think that their green bonds are unlikely to fully comply with the Taxonomy requirements of the EU GBS in the foreseeable future**. There is a need for more time to clarify the likely pace of alignment, especially regarding DNSH and minimum safeguards.

5. What is your Taxonomy assessment of the totality of your activities?

Answer	Supranationals	EU sovereign issuers plus EU	Government regional	Government local	Government development banks	Government agencies	Question respondents/total questionnaire respondents	Average of values provided by question respondents
5.1. Taxonomy-eligible activities as a % of total activities	96% (1/3)	72% (1/11)	N/A (0/5)	N/A (0/2)	5% (2/7)	63% (2/4)	6/32	51%
5.2. GAR-eligible activities as a % of Taxonomy-eligible activities	100% (1/3)	N/A (0/11)	N/A (0/5)	N/A (0/2)	5% (1/7)	N/A (0/4)	2/32	53%

5.3. Taxonomy-aligned activities as a % of Taxonomy-eligible activities	100% (1/3)	N/A (0/11)	N/A (0/5)	N/A (0/2)	N/A (0/7)	N/A (0/4)	1/32	100%
5.4. Substantial contribution-aligned activities as a % of Taxonomy-eligible activities	100% (1/3)	N/A (0/11)	N/A (0/5)	N/A (0/2)	N/A (0/7)	100% (1/4)	2/32	100%
5.5. DNSH-aligned activities as a % of Taxonomy-eligible activities	100% (1/3)	N/A (0/11)	N/A (0/5)	N/A (0/2)	N/A (0/7)	N/A (0/4)	1/32	100%

Please note that only a few of the surveyed issuers responded to this question. In the category columns, the percentages indicate average values within each category, while the numbers in parentheses indicate how many out of the total number of issuers within each category have provided information

Specifically for the activities covered by the EU Taxonomy Climate Delegated Act of January 2022, please fill in Sheet 4 of the Excel file with any available information.

Provision of detailed Taxonomy-based information regarding all the activities of public sector issuers	**Supranationals**	**EU sovereign issuers plus EU**	**Government regional**	**Government local**	**Government development banks**	**Government agencies**	**Question respondents/total questionnaire respondents**
Public sector issuers which provided detailed information on Taxonomy-based **classification** of all their activities	1 out of 3	0 out of 11	1 out of 5	1 out of 2	1 out of 7	3 out of 4	7 out of 32
Public sector issuers which provided detailed information on Taxonomy-based **reporting** of all their activities	1 out of 3	0 out of 11	1 out of 5	0 out of 2	0 out of 7	3 out of 4	5 out of 32

Overarching conclusion

- **The lack of answers and feedback received points to limited progress, uncertainty or reluctance to disclose information when it comes to the Taxonomy assessment of the totality of activities**. This suggests that **more time is needed** to clarify the status quo of the various dimensions of Taxonomy assessment (eligibility, alignment with technical screening criteria for substantial contribution and for DNSH, compliance with minimum safeguards).
- The experience gained and progress made with the Taxonomy assessment of green bond-eligible activities has proven to be a helpful catalyst for the Taxonomy assessment of the totality of activities, providing a stable platform of reference of practice and food for thought for the broader discussion.

On this basis, how do you deem the chances that your GAR may become significant in the foreseeable future?

Overarching conclusion

- The vast majority of public sector categories consider the **chances of their GAR becoming significant in the foreseeable future as very low**. Some issuers cite as a reason that significant parts of their lending go to entities which are not covered by GAR-related disclosure requirements. In addition, the GAR is not a relevant topic for issuers in the EU sovereign issuers plus EU category, as the related reporting requirements do not apply to them.
- As it currently stands, there is very limited information on GAR, notably due to questions of applicability for certain public sector entities. Extending reporting requirements to every type of entity could facilitate assessments.

6. What is the basis of your assessment of the eligibility/alignment of your activities? (Multiple selections possible)

Answer	Supranationals	EU sovereign issuers plus EU	Government regional	Government local	Government development banks	Government agencies	Question respondents/total questionnaire respondents	Average of values provided by question respondents
6.1. Data sources (including your self-assessment of the quality of the data)	100% (3/3)	91% (10/11)	60% (5/5)	100% (2/2)	57% (7/7)	50% (4/4)	31/32	74%
6.2. Governance, processes, due diligence and quality-check procedures applied to data sourcing to mitigate any issues that may arise from the assessment	100% (3/3)	45% (10/11)	20% (5/5)	100% (2/2)	43% (7/7)	50% (4/4)	31/32	50%
6.3. Internal and external resources applied for the purpose of the assessment	100% (3/3)	73% (10/11)	40% (5/5)	50% (2/2)	57% (7/7)	75% (4/4)	31/32	65%

For each category, the percentage of positive replies to each item is calculated on the total number of replies to the headline question. The percentages in the column "average between categories" are the simple average of the percentages by category, without weighing for the number of replies or the volumes of issuance represented in each category.

Overarching conclusion

- As a basis of their voluntary assessment of the eligibility/alignment of their activities, the polled categories of public sector issuers first and foremost use **data sources, including self-assessment of the quality of the data**.
- To solve data issues, especially for the DNSH and minimum safeguards criteria, the respondents use **internal and external resources** and governance processes, due diligence and quality-check procedures, **as well as proxies** such as their own environmental and social standards applied to all their operations, the Taxonomy Compass tool and sampling. There is also interest in the upcoming European Single Access Point.

7. What are the key obstacles or gaps in the assessment which are preventing your Taxonomy alignment? (Multiple selections possible)

Answer	Supranationals	EU sovereign issuers plus EU	Government regional	Government local	Government development banks	Government agencies	Question respondents/total questionnaire respondents	Average of values provided by question respondents
7.1 Usability of the EU Taxonomy	67% (3/3)	82% (11/11)	80% (5/5)	50% (2/2)	86% (7/7)	25% (4/4)	32/32	72%
7.2 Coherence of the Sustainable Finance Disclosure Regulation and the Non-Financial Reporting Directive/Corporate Sustainability Reporting Directive (CSRD) with the EU Taxonomy Regulation	0% (3/3)	9% (11/11)	0% (5/5)	50% (2/2)	14% (7/7)	25% (4/4)	32/32	12%
7.3 Data availability	67% (3/3)	91% (11/11)	80% (5/5)	100% (2/2)	100% (7/7)	100% (4/4)	32/32	91%
7.4 Data quality	67% (3/3)	36% (11/11)	40% (5/5)	50% (2/2)	86% (7/7)	100% (4/4)	32/32	91%
7.5 Internal considerations (e.g., resources, expertise, costs etc.)	33% (3/3)	55% (11/11)	80% (5/5)	100% (2/2)	43% (7/7)	75% (4/4)	32/32	60%
7.6 Other	0% (3/3)	6% (11/11)	20% (5/5)	0% (2/2)	57% (7/7)	25% (4/4)	32/32	21%

Note that the percentages in each category reflect the amount of time an answer was chosen in relation to the number of respondents within each category. The percentages in column 'average between categories' is an equal-weighted average of the percentages from each category.

Overarching conclusion

- To foster the alignment of public sector green bonds with the EU Taxonomy, some respondents consider the following helpful: creation of data banks; **improve the usability of the EU Taxonomy (e.g., extend reporting requirements to further public entities); and provide support (resources, expertise etc.**).
- Since the DNSH and minimum safeguards criteria are often reported as the most challenging, **phasing-in** these **requirements**, and **accepting proxies and lower levels of data quality** could be helpful for the uptake of the Taxonomy, according to some respondents.

Please provide further details on the identified challenges as well as any practical solutions you may have put in place to address such challenges (e.g., the use of proxies, with a precise description of any proxies you had to use and for what type of data, e.g., firm quantitative/qualitative, etc.)

A broad range of challenges have been identified.

Some are specific to issuers and their nature of operation, which can limit the ability to collect the necessary information on Taxonomy alignment from the final recipient of the funds. These include:

- **lending via budget programmes or via loans for general purposes**;
- **on-lending with intermediary banks** between the issuer and the end-beneficiary;
- **lending operations outside of the EU**, when information is not yet available/requested in adequate form;

Other challenges pertain more generally to the usability of the Taxonomy, the lack of data availability and quality:

- regulatory reporting and disclosure requirements under EU sustainable finance regulations are not applicable to the entire range of the issuers' clients and end-beneficiaries, which makes the collection of information on Taxonomy alignment particularly challenging, notably for the DNSH and minimum safeguards criteria;
- some end-beneficiaries are not yet ready or willing to strive for Taxonomy alignment for their projects, while public sector entities may not be able to provide financial incentives, such as margin discounts for the financing of their activities;
- time inconsistency, in the sense that some projects and expenditure programmes were approved and designed before the existence of the EU Taxonomy, making it impossible to retroactively source specific Taxonomy-related information; some issuers explicitly state in their green bond framework that any activity already appraised and included for green bond allocations will continue to be covered by the parameters in force at the time of the approval;
- generally complex and difficult processes to prove formal compliance with technical screening criteria for DNSH and minimum safeguards, given data unavailability;
- lack of clear guidance as to how to prove and document the alignment with the DNSH criteria (e.g., no market practice or industry-wide agreed guidance on how to deal with DNSH criteria, absence of clear advice from auditors);
- the lack of reference market practice, as well as conflicts and differences between the EU Taxonomy requirements and national/EU legislation (e.g., different water-related construction requirements for buildings on a national level compared with EU Taxonomy requirements; EU Taxonomy requirements being more demanding for labels of tyres of electric vehicles than existing legislation);
- project timing can lead to time lags in the availability of required information, even for substantial contribution, e.g., for some cases in construction, Taxonomy requirements can only be verified ex-post, while project evaluation and financing decisions occur ex-ante;
- the Taxonomy does not yet cover certain areas of activities, such as within research and development, (biological) agriculture and other activities contributing to objectives beyond climate change;

- uncertainty regarding the use of the EU Taxonomy for investments outside of the EU (e.g., deviation of the DNSH requirements from international standards);
- uncertainty regarding the use of proxies and therefore potential reputational risks associated with their use;
- the dynamic nature of EU legislation in sustainable finance, which is still evolving and subject to change, thus creating uncertainty.

The following details were provided in terms of practical solutions for voluntary use of the EU Taxonomy in the public sector:

- use of proxies for compliance with substantial contribution, e.g., by reference to:
    - the technical screening criteria for substantial contribution proposed by the Technical Expert Group's Final report on the EU Taxonomy of March 2020, in the absence of final criteria adopted by the Commission in the form of delegated acts;
    - the MDB/IDFC Common Principles for climate mitigation finance tracking in the context of operations outside of the EU;

- **use of proxies for compliance with DNSH, e.g., by reference to**:
  - applicable environmental and social EU and national laws and regulations;
  - the issuer's own procedures for environmental and social due diligence as part of its public set of environmental and social policy and standards, especially when these are aligned with EU legislation in force at the time of allocation of the funds;
  - the Recovery and Resilience Mechanism certificates;
  - the World Bank Group Environmental, Health and Safety Guidelines in the context of operations outside of the EU;

- **use of proxies for compliance with minimum safeguards, e.g., by reference to**:
  - national constitution and existing legislation;
  - signature to the OECD Guidelines for Multinational Enterprises;
  - implementation of the UN Principles on Business and Human Rights;
  - ratification of core International Labour Organization conventions.

On this basis, which specific arrangements could help you in the implementation of your Taxonomy-alignment strategy? The following feedback was provided :

- phased application of Taxonomy-requirements, with an initial focus on classification and reporting on substantial contribution and more time and flexibility for the application of DNSH and minimum safeguards criteria, e.g., by means of proxies such as those listed in the above box under 'practical solutions'.

Specific arrangements were mentioned:

- larger scope of Taxonomy-based classification and reporting by:
    - Taxonomy-based disclosures of a broader set of economic actors;
    - GAR eligibility of public exposures aligned with national legal requirements;
    - encouraging public sector voluntary reporting on non-GAR-eligible exposures.
- harmonised requirements of the EU Taxonomy Regulation, CSRD and the existing EU/national legislation, – e.g., DNSH criteria for water supply in hospitals;
- an official list of the entities subject to reporting requirements under Taxonomy Article 8/CSRD, as well as a database of Taxonomy-related information for all counterparties subject to such reporting requirements (e.g., within the European Single Access Point);
- broader coverage of activities by the Taxonomy e.g. includingagriculture-related activities or research and development;
- clearer and more concise official guidance on the implementation of Article 8 of the Taxonomy Regulation and the interpretation of technical screening criteria for substantial contribution, minimum safeguards and, most notably, DNSH;
- possibility of less demanding information provision in the interim (e.g., for SMEs), accepting less detailed data or proxies (especially for DNSH criteria), in exchange for more timely and transparent disclosure of such information in line with the logic of the Taxonomy, so that the market can be engaged in the monitoring of data quality improvements over time;
- availability of examples of proxies used in the market, including 'how-to guides' for (special) credit facilities;
- prioritisation of requirements in terms of 'nice to haves' and 'need to haves', especially for DNSH criteria for certain sectors (e.g., buildings with BREEAM and LEED certifications);
- higher awareness of the EU Taxonomy among clients, civil e awareness of the EU Taxonomy among clients, civil servants and politicians, new organisational structures suited to adapt to the new information and compliance requirements, coordination inside and between ministries or departments;
- adjusted accounting norms, such as IFRS 16 and IFRC 12;
- harmonisation with international standards, such as the IFC Performance Standards, in the context of operations outside of the EU.

8. What benefits do you otherwise associate with the application of the Taxonomy so far? (Multiple selections possible)

Answer	Supranationals	EU sovereign issuers plus EU	Government regional	Government local	Government development banks	Government agencies	Question respondents/total questionnaire respondents	Average of values provided by question respondents
8.1 Simplification	100% (3/3)	9% (11/11)	0% (5/5)	0% (2/2)	0% (7/7)	25% (4/4)	32/32	16%
8.2 Credibility	100% (3/3)	73% (11/11)	80% (5/5)	100% (2/2)	43% (7/7)	75% (4/4)	32/32	72%
8.3 Transparency	67% (3/3)	82% (11/11)	40% (5/5)	100% (2/2)	71% (7/7)	100% (4/4)	32/32	75%
8.4 Comparability	100% (3/3)	45% (11/11)	20% (5/5)	100% (2/2)	43% (7/7)	100% (4/4)	32/32	56%
8.5 ESG risk management or mitigation	67% (3/3)	18% (11/11)	40% (5/5)	50% (2/2)	29% (7/7)	50% (4/4)	32/32	34%

8.6 Other	0% (3/3)	9% (11/11)	40% (5/5)	50% (2/2)	0% (7/7)	0% (4/4)	32/32	12%

For each category, the percentage of positive replies to each item is calculated on the total number of replies to the headline question. The percentages in the column 'average between categories' are the simple average of the percentages by category, without weighing for the number of replies or the volumes of issuance represented in each category.

Overarching conclusion

- Despite usability challenges, public sector issuers of green bonds significantly associate the application of the EU Taxonomy with credibility, transparency and comparability.

9. Do you, or would you, also apply a prospective Taxonomy-alignment strategy to the classification and reporting of activities serving social objectives? If yes, could you please describe the core similarities and differences vis-à-vis your Taxonomy-alignment strategy for green activities?

Overarching conclusion

- **Only one respondent has been applying a prospective Taxonomy-alignment strategy to the classification and reporting of activities serving social objectives.** Social objectives and technical screening criteria for substantial contribution have been defined in line with the logic of the EU Taxonomy, based on the assumption that any potential future EU Social Taxonomy would follow that same logic. The results were audited with reasonable assurance (against ISAE 3000) in a manner consistent with the assurance of the respondent's green bond framework .
- Only a minority of the respondents are looking at the topic at this stage, while a few would favour the development of a social Taxonomy.
- The respondents recommend considering the topic only after the green Taxonomy has been fully established and implemented.

10. Is there any other aspect of relevance you would like to mention?

Overarching conclusion

- The European Commission's DG INTPA is creating an investment fund – the Global Green Bond Initiative – aiming at supporting higher-quality green bonds from emerging economies via lead investment orders while promoting the collection and the organisation of available information to develop a clearer and more fruitful dialogue with European investors.
- **The strategy for gradual Taxonomy alignment** consists in the first place of an alignment with the logic and structure of the Taxonomy to permit comparability, predictability and accountability of the alignment process under investor scrutiny. Such a strategy **could be a useful tool for the development of green, social and sustainability bond markets beyond EU borders, with modalities reflecting the circumstances of local issuers.**

7.2 Taxonomy-alignment of green bond – Supranational Central Europe

The subject of this case study is a multilateral development bank (MDB) that is not subject to reporting obligations under the Corporate Sustainability Reporting or Non-Financial Reporting directives. Strong institutional commitment to EU objectives in the two fields of the capital markets union and sustainable development as well as leadership in EU capital markets have led it to:

1. set in its 2021-25 operational plan the objectives to gradually align:
    a. its green loan tracking methodology with the framework established by the EU Taxonomy Regulation, as it evolves over time;
    b. its green bonds with the EU Taxonomy and the EU Green Bond Standard (GBS);
2. developing innovative solutions for the gradual operationalisation of the EU Taxonomy, using proxies in line with the logic and structure of the Taxonomy when required to overcome lack of data or usability issues.

Its approach is driven by best-practice considerations in sustainability disclosures, with two complementary perspectives on Taxonomy-alignment reporting within the context of EU legislation on sustainable finance. These are:

a) Green lending, where the approach to reporting is rather modelled by legal, risk and operational considerations upon entry into force of relevant legislation. Its focus is on voluntary compliance, considering, on the one hand, legal and reputational risks and, on the other hand, prudence linked to usability issues and the burden of proof where there is an absence of information and standard procedures/infrastructure for its collection.
b) Green bonds, where the approach to reporting is rather modelled by market-driven considerations, whose focus is on anticipation of sustainable investors' requests for Taxonomy-related information on the use of proceeds and therefore on timely and monitorable progress in that direction (an ex-ante approach).

The objective of this case study is to analyse the timing and modalities of the issuer's strategy of gradual Taxonomy-alignment in the field of green bonds to clarify the relevance of this strategy for:

- building a competitive edge in the market, while
- enhancing the issuers' protection against reputational and legal risks via the establishment of an unambiguous framework for dialogue with investors and reasonable assurance by an independent supervised auditor of the information provided to them;
- providing a useful reference for the broader discussion within the issuer as well as with EU official authorities on how to define best practice in the field of non-financial disclosures on the totality of its loan portfolio.

Description of the case study

The issuer has used the Taxonomy to substantiate its commitment to "accountability in the future disbursements" and "precise definition of the types of projects to be included" already entailed in its existing green bond programme. This commitment relied originally on a sectoral definition of the use of proceeds (renewable energy and energy efficiency projects), based on proprietary eligibility criteria. In late 2018, the issuer extended its use-of-proceeds issuance to green and social sustainability objectives other than climate change mitigation (via sustainability bonds).

The lower volume of disbursements in these new areas called for a new evolutionary and cumulative approach to eligibility to permit sufficient volumes of issuance. This, in turn, required an evolution from the original closed-end, sector-based definition of the use of proceeds to an open-ended, objective-based definition. The EU Taxonomy Regulation proposal of May 2018 provided the natural reference for the logic and structure of this new definition, which was embedded into both green and sustainability bond documentation. Implementation followed in parallel with the entry into force of the EU Taxonomy Regulation (July 2020) and the EU Taxonomy Climate Delegated Act (January 2022).

Against this background, the issuer's use-of-proceeds funding relies on two pillars, both gradually aligning with the EU Taxonomy and the EU GBS:

a) a pure green bond issuance programme with a focus on climate change mitigation (CCM); and
b) a sustainability bond issuance programme with a focus on the EU's other environmental and social objectives.

The green bond programme focused on CCM is the subject of this case. The same Taxonomy-alignment strategy also applies, however, to the sustainability bond programme. Different degrees of Taxonomy-use reflect the different phases of Taxonomy-development in the three distinct areas of eligibility for allocation of green and sustainability bond proceeds (CCM, other environmental, social), highlighting the flexibility and effectiveness of the issuer's gradual Taxonomy-alignment approach on the funding side.

Flexibility and effectiveness are enhanced by the fact that the issuer's activities eligible for allocation from its use-of-proceeds bonds are a sub-set of its overall lending activities, whose composition can change over time. For reasons of competence as well as segregation of responsibilities for the avoidance of conflicts of interest, the evaluation experts (not the funding officers) decide:

a) which objectives and which activities within each objective can be eligible for allocation; and
b) when they become eligible.

This approach has had two important benefits:

a) a rapid increase in the volumes of Taxonomy-aligning green and sustainability bond issuance;
b) organic and competence-based extension of non-financial disclosures to the bond-eligible loan portfolio; and
c) factual and unambiguous communication around them during a transition phase of the regulatory framework, characterised by uncertainty as to the modalities of its future application to the totality of the issuer's loan portfolio.

These aspects are directly relevant for the issuer's green bond programme, in the context of which:
1) issuance volume has increased by around 240% between 2018 and 2022; and
2) Taxonomy-alignment of the bond allocations in the field of substantial contribution has reached 100% of the total Taxonomy-eligible share already in 2022 – with such a share representing around 91% of total allocations in the year (still to be audited).

Within the green bond eligible areas, the issuer has gradually amended its eligibility criteria with two core objectives:

1. the gradual exclusion from allocations of Taxonomy-eligible lending activities that are not aligned with the EU Taxonomy's technical screening criteria (TSC) for substantial contribution; and
2. the gradual alignment of the issuer's frameworks and practice addressing do no significant harm (DNSH)/minimum safeguards with the EU Taxonomy's technical screening criteria for DNSH and minimum safeguards.

The issuer's ability to amend the eligibility criteria results from its disbursement-focused approach to allocations, which are, for all outstanding green bonds of the issuer:

a) based on the latest technical screening criteria decided by the evaluation experts;
b) to already or newly approved loans, but only to new eligible disbursements – without refinancing already outstanding disbursements;
c) to one primary sustainability objective only, with no double counting;
d) automated on a first-in, first-out basis, which permits objective and detailed description of how each new issue is allocated to individual projects;
e) 'frozen' and booked in a separate treasury portfolio, i.e., auditable.

The market is fully informed of the objectives, strategy, technical arrangements, implementation and results of the gradual Taxonomy-alignment via the issuer's annual green bond frameworks, which include detailed comparisons of the bond criteria with the EU Taxonomy criteria as well as Taxonomy-based allocation and impact reports. These are supported by the higher factuality and reliability secured through a reasonable assurance process, provided by an external supervised auditor in accordance with the International Standard for Assurance Engagements (ISAE) 3000.

Please provide further description and details on the case from a qualitative perspective

The core idea of the issuer's approach was that even before the EU Taxonomy is in place, its logic can be used to start collecting and organising information with a view to assessing the status quo, defining a course of action and reporting usability issues to the regulators for the steady improvement of the regulatory and supervisory framework. With a view to permitting a higher degree of comparability of bond eligibility criteria with the EU Taxonomy eligibility criteria, the issuer has thus reorganised the information it was collecting from 2020 to:

1. **align the bond eligibility criteria with the logic of the EU Taxonomy Regulation,*** with the goal of making the bond criteria directly and more easily comparable with the Taxonomy criteria in three dimensions.
    a. EU Taxonomy. To permit reasonable assurance (using ISAE 3000) of this deliverable, "aligned with the logic of the EU Taxonomy" has been defined by reference to Article 3 of the EU Taxonomy Regulation to mean "structured to include criteria or processes for the assessment of 'substantial contribution', 'no significant harm', 'minimum social safeguards'".
    b. the EU Taxonomy technical screening criteria for substantial contribution (TSC SC). To permit reasonable assurance of this deliverable, "aligned with the logic of the EU Taxonomy-TSC SC" has been defined by reference to the Technical Expert Group's (TEG) Usability Guide of March 2020 to mean "structured to incorporate principles, metrics and thresholds where possible and otherwise include qualitative criteria or processes for the assessment of substantial contribution".
    c. the EU Taxonomy principles for DNSH and minimum safeguards. To permit reasonable assurance via a comparison of the issuer's relevant Environmental and Social Principles and Standards (ESPS) with the provisions of Articles 17 and 18 of the EU Taxonomy Regulation.

2. **gradually align the use of proceeds with the EU Taxonomy via the alignment of the bond eligibility criteria with the EU Taxonomy TSC-SC.** In this field, the moodalities of the issuer's gradual Taxonomy-alignment of green bonds reflect the different timeline of the TEG Climate Taxonomy Proposal (TEG Proposal, March 2020), the EU Taxonomy Climate Delegated Act (January 2022) and, for the green objectives of the sustainability bonds, the Environmental Delegated Act (adopted in April 2023 and not yet in force).

*NB: In the context of the issuers' sustainability bonds, this approach has also been applied – in addition to environmental objectives within the scope of the EU Taxonomy Regulation – to social objectives and activities defined by the issuer under the assumption that, over time, the logic of the EU GBS will apply pari passu to social bonds, whose use of proceeds will be aligned with the social sustainability part of the EU Taxonomy, if any.

Please provide further description and details on the case from a quantitative perspective

In the context of its green bond programme, which has a focus on climate change mitigation, the issuer decided to use the TEG Taxonomy Proposal of March 2020 as a proxy for the EU Taxonomy until the Climate Delegated Act entered into force in January 2022. On this basis, the issuer could obtain the external auditor's reasonable assurance on:

1. The alignment of bond eligibility criteria with the logic of the EU Taxonomy Regulation in the dimensions of:
    a. the EU Taxonomy, in the context of the 2020 green bond framework;
    b. the EU Taxonomy TSC-SC, as in the context of the 2020 green bond framework.
    c. The DNSH/minimum safeguards criteria, in the context of the 2021 green bond framework.

This established an accountable and reliable platform for further improvement of the issuer's existing practice.

2. The gradual alignment of the use of proceeds with the EU Taxonomy via alignment of the bond eligibility criteria with the EU Taxonomy TSC-SC:
   a. the 2020 green bond framework compared the 2020 green bond criteria with the TEG criteria and found that the former were not entirely aligned with the latter. This gap was closed by the issuer's evaluation experts in 2021 for all green bond eligible activities in scope of the TEG proposal, and the 2021 green bond framework showed that the 2021 green bond criteria were aligned with those of the TEG.
   b. The 2021 green bond framework also compared the 2021 green bond criteria with the criteria of the Climate Delegated Act, and found that the former were not entirely aligned with the latter. This gap was closed by the issuers' evaluation experts in 2022 for all green bond-eligible lending activities in scope of the January 2022 Climate Delegated Act.

In a nutshell, 100% of the green bond allocations to Taxonomy-eligible activities (91% of total 2022 allocations) are already Taxonomy-aligned in terms of meeting the substantial contribution criteria. This will be audited with reasonable assurance (against ISAE 3000) in the issuer's upcoming 2022 green bond framework, to be published later in 2023.

What is the outcome?

In the context of the issuer's 2021 green bond framework, the auditor has assured with reasonable assurance that:

1. its green bond eligibility criteria are aligned with the logic of the EU Taxonomy[24]

2. the green bond TSC-SC to climate change mitigation are:
   - for all green bond-eligible activities, aligned with the logic of the TSC-SC of the EU Taxonomy;[25]
   - for all green bond-eligible activities that are in the scope of the TEG Taxonomy Proposal, aligned with the TSC-SC of the TEG Taxonomy Proposal;
   - for a selection of green bond-eligible activities that are in scope of the Delegated Act, aligned with the TSC-SC of the Delegated Act, as detailed in the green bond framework.

3. the environmental and social principles and standards (ESPS) for 2011-21, which are also relevant for the 2021 green bond allocations, are aligned with the logic of the EU Taxonomy, as:
   - with regard to the DNSH principles in Article 17 of the EU Taxonomy Regulation, these ESPS
     - address a selection of principles, as described in the framework;
     - establish transparent and accountable guidelines for the assessment of a selection of principles in line with EU legislation in force at the time of appraisal, as described in the framework;
     - require that adequate evidence thereon is collected systematically during the project appraisals, as described in the framework.

And

   - With regard to the minimum safeguards principles in Article 18 of the EU Taxonomy Regulation, these ESPS

[24] "aligned with the logic of the EU Taxonomy" is defined as "structured to include criteria or processes for the assessment of "substantial contribution", "no significant harm", "minimum social safeguards", in line with Article 3 of the EU Taxonomy Regulation

[25] "Aligned with the logic of the TSCSC of the EU Taxonomy" is defined as "structured to incorporate principles, metrics and thresholds where possible and otherwise including qualitative criteria or processes for the assessment of substantial contribution", in line with the TEG EU GBS Usability Guideline of March 2020.

- address and establish transparent and accountable guidelines for assessment, in line with EU legislation in force at the time of appraisal, for a selection of principles as described in the framework;
- require that adequate evidence thereon is collected systematically during project appraisals for each principle, as described in the framework.

Data and methodology used to compile the market practice	
Data and Methodology	Publicly available data from the green bond frameworks of the issuer, interpreted with the help of the issuer's replies to the outreach questionnaire. Systematic analysis of the sequence of steps undertaken by the issuer in its 2019-21 frameworks and of the accompanying solutions adopted in cooperation with the auditor to permit reasonable assurance of the results of the gradual Taxonomy-alignment strategy.
Use of Proxies	**For the EU Taxonomy** Use of the TEG's Taxonomy proposal as per the TEG Taxonomy Report of June 2019 and TEG Final Taxonomy Report of March 2020, as initial touchstones for the assurance of the gradual EU Taxonomy-alignment of the green bond's TSC-SC, in the absence of an official EU Taxonomy TSC at the time. **For the EU Green Bond Standard** Use of the TEG EU Green Bond Standard Proposal of June 2019 and TEG EU Green Bond Standard Usability Guide of March 2020 as initial touchstones for the assurance of the EU GBS-alignment of the non-Taxonomy-related components of the EU GBS, in the absence of an official EU GBS. **For DNSH/minimum safeguards criteria** Comparison of the issuer's ESPS with the provisions of Articles 17 and 18 of the Taxonomy Regulation.
Internal resources	Proprietary IT tool for the automated allocation of bond proceeds and freeze of allocations to enable their auditability. Human resources for coordination of the reporting and audit process in the context of the yearly green bond frameworks: three dedicated headcounts in the finance area and two coordinating headcounts in the issuer's projects area.
External resources	External supervised auditor (2-3 people)

Did you encounter any obstacles or gaps?

1. Usability:
   - In terms of substantial contribution, the issuer highlights limitations and potential solutions.
   - In terms of DNSH/minimum safeguards, the issuer highlights limitations and potential solutions.

2. Data availability and quality:
   a) On new disbursements under new green bond-eligible loans signed after entry into force of the Climate Delegated Act: no issue for the substantial contribution criteria. As for the DNSH/minimum safeguards criteria, data availability and quality depends on the availability and quality of information provided by the issuer's clients on the lending side, who are still going through their own activity assessment within the context of the new regulatory framework. This issue is exacerbated by pending usability issues, as per item 1 above.
   b) On new disbursements under outstanding signatures: no issue for the substantial contribution criteria. Some data is not available for the DNSH/minimum safeguards criteria, and Taxonomy-alignment can only be addressed by proxy via comparison of the issuer's past ESPS with the provisions of Articles 17 and 18 of the Taxonomy Regulation.

c) On old disbursements already allocated with green bond proceeds, which took place prior to the establishment of the EU Taxonomy TSC-SC, Taxonomy-conformity can only be addressed by proxy, for both of substantial contribution and DNSH/minimum safeguards criteria, to aim for alignment of available data presentation (e.g. carbon footprint) with the logic of the Taxonomy.

3. Internal considerations: the obstacles created by usability issues in the field of DNSH/minimum safeguards extend beyond the pure technical aspects and are also organisational. The uncertainty surrounding the development of new Taxonomy-compliant DNSH/minimum safeguards procedures, for example, entails both reputational and legal risks with regard to the related public reports as well as additional operational burdens.

How were the obstacles addressed?

Although substantial contribution, DNSH, minimum safeguards and the related technical screening criteria are all essential pieces of the Taxonomy, they can, as the issuer's Taxonomy-alignment process has highlighted, be usefully integrated in a phased way – namely first by encouraging transparency on how existing green bond processes address substantial contribution, DNSH and minimum safeguards criteria, and then in later phases, moving towards the application of the TSC and adopting more prescribed disclosures. This later phase of moving towards application of the TSC and specific disclosures on all three parts of the Taxonomy framework can be best achieved in separate steps for the substantial contribution criteria and for the DNSH/minimum safeguards criteria, with priority to the former and more time for adjustment and reporting on the latter two.

What were the benefits of applying the EU Taxonomy and the sustainable finance framework:

☒ Simplification
☒ Client engagement
☒ Credibility
☒ ESG risk management / mitigation
☒ Greenwashing mitigation
☒ Transparency
☒ Comparability
☒ Other – *please specify*

The assurance approach developed by the issuer in collaboration with its external auditor has permitted the issuer to provide the capital markets with an accountable and reliable description of the progress of its gradual alignment with the EU Taxonomy along its three core dimensions of substantial contribution, do no significant harm and minimum safeguards. Reasonable assurance endows the information provided in the green bond framework with a high level of factuality and reliability. It also deters statements for which no evidence can be produced and turns gradual Taxonomy-alignment into a reliable discovery process for ascertaining facts and monitoring progress on the path to convergence with the regulatory requirements that are taken as reference for best practice.

What was the feedback from stakeholders?

External stakeholders (particularly investors and capital market practitioners in the first instance) appreciate the issuer's approach to gradually align with the EU Taxonomy and EU GBS from even before their entry into force and, specifically, the high degree of factuality and accountability provided by the reasonable assurance audit of the issuer's frameworks.

This applies to both EU and non-EU investors. Investors' interest in the distinguishing technical features of the issuer's green bonds has grown and extended geographically, as the EU regulatory framework has become more detailed and has attracted increasing international attention. The issuer's pragmatic and accountable strategy has produced tangible and visible results within that context, adding to its credibility.

This investor approval can be seen in the outperformance in the secondary market of the issuer's green bonds versus its conventional euro benchmark curve (where this comparison can be made in a systematic and auditable manner). This outperformance is significant, given that the two types of bond issue carry the same credit risks, and other commoditised financial features. Approval can also be seen in the size, quality and diversification of primary orderbooks, which facilitate execution and pricing, whatever the composition of the final allocations.

Other aspect you would like to mention

1. **Applicability beyond the EU borders**

The issuer's voluntary strategy of gradual alignment of its sustainability lending and funding activities with the EU Taxonomy framework and the EU GBS – to permit comparability, predictability and accountability of the alignment process under investor scrutiny – could be a useful tool for the development of green bond markets beyond Europe, with modalities reflecting the individual circumstances of local issuers.

The core challenge for sustainable investment in emerging and developing economies is the lack of clear and comparable, easy-to-use and easy-to-verify information, which leads to uncertainty on the contribution of potential investments to the Sustainable Development Goals. This is, in the first place, due to the absence of a uniform approach to the classification, impact measurement and objective comparison of investment alternatives. In addition, the legal, administrative and supervisory infrastructure is typically less developed in emerging markets than in more advanced economies, limiting interoperability with the international capital markets and hampering domestic access to sustainable finance from overseas.

An increasing number of non-EU economies (e.g., Singapore, other ASEAN countries, Israel, Mexico and South Africa) are now taking the EU as a reference for the development of their own sustainable finance legislation, with the explicit objective of developing a clearer and therefore more fruitful dialogue with European investors. This is expected to make their domestic standards more comparable, facilitating capital flows from the EU through more efficient pricing of investments.

The issuer is a strong advocate of this approach and draws attention to the ideas presented by the European Investment Bank and the China Green Finance Committee in their joint **White Paper on the need for a common language in green finance** of November 2017, which could, for example, bear fruit in the context of new EU initiatives such as the Global Green Bond Initiative, currently promoted by DG INTPA, notably in the related technical assistance facility.

2. **Challenges in the field of substantial contribution:**

Activities 1.1-1.4, 3.6, 3.10, 4.5, 4.6, 4.7, 4.18, 4.19, 4.22, 4.23, 8.2, 9.1, 9.2 of the Climate Delegated Act:
In certain cases, the first Climate Delegated Act requires verified greenhouse gas assessments according to certain standards. If promoters do not have an appropriate greenhouse gas assessment verified to the required standards, issuers could apply their project carbon footprint methodologies to assess compliance with the greenhouse gas threshold.

Activity 6.14 (Infrastructure for air transport) of the Climate Delegated Act:
For criteria related to the need for a plan for electrification, a longer timescale may be defined for some developing countries, where justified in exceptional circumstances.

Activity 7.1 (Construction of new buildings) of the Climate Delegated Act:

Outside the European Union, adoption of best energy standards is required, as compared to a baseline which is defined on a case-by-case basis. For example, internationally recognised certification schemes with an energy baseline defined through a transparent, practical method (IFC Edge certification, LEED, BREEAM, etc.), with the achievement of energy levels 20% below the baseline, would qualify. Criteria relating to disclosure on airtightness and thermal integrity for buildings over 5,000 m^2 could be applied to new EU projects from 2022. Projects for which the preliminary information note was approved before 2022 could be exempt from applying criterion 2, subject to approval of the operation by the end of 2022.

For buildings larger than 5,000 m^2 inside the EU, the issuer has been working to establish guidance for the implementation of criteria on life cycle global warming potential.

Activity 7.2 (Renovation of Buildings) of the Climate Delegated Act:

An alternative approach to major renovation could be applied, where the projects outside the EU adopt best energy standards compared to a different baseline, for example internationally recognised green building certification standards, while retaining the threshold of at least a 30% energy reduction. In specific cases outside the European Union where the split of renewable energy is not possible or if the certification schemes used do not implement such a split, reductions in net primary energy demand through renewable energy sources may be taken into account.

Activity 9.1 (Early market research, development, and innovation (RDI)) of the Climate Delegated Act:

To cover early-stage RDI, and RDI in climate change mitigation activities not covered by the EU Taxonomy Climate Delegated Act, a separate activity could be defined, in line with the MDB/IDFC Common Principles.

3. <u>Challenges regarding the DNSH and minimum safeguards criteria:</u>

On DNSH:

- The issuer has analysed the DNSH TSC related to economic activities listed in the Climate Delegated Act and has classified them into six categories, based on the potential due diligence implications required to verify compliance. The issuer carries out environmental and social due diligence on its operations in line with its Environmental and Social Policy and its Environmental and Social Standards. Some of the DNSH criteria are already verified by the issuer's standard due diligence processes, while others present new elements.
- Therefore, the classification was developed exclusively for internal purposes using the issuer's existing due diligence procedures as a benchmark. The approaches to due diligence and verification presented in this table are only proposals, and not yet formally adopted by the issuer, and are the result of ongoing dialogue with clients, other banks and market operators more generally.

Note: The approaches proposed below are applicable only to loans aimed at infrastructure projects with clearly identified scope at the moment the project is appraised (called investment loans by the issuer). These same approaches would not be applicable to other financial products linked to intermediated lending, where the exact scope of the investments is not fully defined at the time of appraisal. These types of financial products require a different type of approach, based on proxies or estimates, which is currently a matter of discussion.

<u>DNSH category: EU impact assessment legislation or environmental legislation with the issue of authorisation/permit by the Competent Authority</u>

Examples:

EU environmental horizontal and other impact assessment-related legislation:

- EIA Directive
- Habitats Directive (Article 6.3)

- Water Framework Directive
- Marine Strategy Framework Directive.

Environmental sectorial legislation:

- Industrial Emission Directive plus best available technology (BAT)
- Major accidents legislation (Seveso III Directive).

The issuer's due diligence benchmarking: these DNSH criteria require the application of EU environmental horizontal or impact assessment legislation (e.g., Environmental Impact Assessment (EIA), Habitats and the Water Framework directives) for which compliance can be verified by reviewing the supporting documents (EIA reports, appropriate assessments) and authorisations/permits issued by the competent authority, as provided by the promoters. From the issuer's perspective, the due diligence required to demonstrate compliance does not differ from current practice.

Proposed due diligence options:

- Request the promoter provides confirmation and evidence of relevant permits/approval by competent authorities.
- If necessary, review assessments and/or supporting documents (e.g., EIA reports) to identify specific elements required by the DNSH criteria

DNSH category: Specific EU sectoral legislation that does not require issue of an authorisation/permit by the competent authority

Examples:

1. Project-related requirements
   - requirements related to sulphur oxides (SOx) and nitrogen oxides (NOx) emissions
   - Biocides legislation
   - Fertilizers legislation.
2. Generic requirements indirectly related to the project (e.g., rules for placing on the market)
   - Chemicals legislation (REACH) and the relevant conventions
   - Eco-design energy-related products.

Issuer's due diligence benchmarking: these DNSH criteria cover specific EU legislation strictly related to an economic sector that does not imply the need for impact assessment and does not require issue of an authorisation/permit by the competent authority in relation to the project. This is already generally covered by the issuer's contractual conditions.

Proposed due diligence options:

- The issuer's master finance contract already includes clauses requiring compliance with EU legislation; therefore, this covers all DNSH criteria in this category.
- If necessary, a specific additional condition or undertaking can be added.

DNSH category: Extended scope of EU legislation

Examples:

- Assessment of the impact on UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas;
- Compliance with BAT for activities below the Industrial Emissions Directive thresholds;

Issuer's due diligence benchmarking: these DNSH criteria go beyond the scope of mandatory existing environmental legal requirements. From the issuer's perspective, this also goes beyond current due diligence practice. Verification of compliance with DNSH criteria requires expert judgement to verify the applicability and the completeness of the information provided.

Proposed due diligence solutions:

- Ask the promoter to confirm specific requirements are complied with.
- If necessary, review assessment and/or supporting documents provided (e.g. EIA reports) to identify specific elements required by the DNSH criteria.

DNSH category: Specific standards (International Organization for Standardization, European Committee for Standardization) or qualitative criteria in the absence of specific EU law requirements

Examples:

- design for high durability, recyclability of products manufactured
- Performance of water appliances (appendix E)
- 70% of construction/demolition waste prepared for reuse/recycle
- Forest management plans.

Issuer's due diligence benchmarking: these DNSH criteria require compliance with a set of defined practices or a list of qualitative requirements in the absence of clear legal references. From the issuer's perspective, this goes beyond current due diligence practice, as these aspects will require additional information from the promoter and cannot be easily verified based on objective evidence.

Proposed due diligence solutions:

- Ask the promoter to confirm that specific requirements are complied with.
- If necessary, specific additional information on national requirements and/or relevant certification schemes, etc. to be assessed during appraisal.

DNSH category: Best management practice in the absence of an EIA report or screening decision

Examples:
Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works

Issuer's due diligence benchmarking:
These DNSH criteria are based on best management practice, which are normally part of the EIA report/screening.

Proposed due diligence solutions:

- Ask the promoter to confirm that specific requirements are complied with.
- If necessary, request specific additional information

DNSH category: biodiversity-related restrictions

Examples:
Construction of new buildings not allowed on arable land, forest, areas of high biodiversity value.

Issuer's due diligence benchmarking:
Very specific requirements are not part of the issuer's standard due diligence.

Proposed solutions:

- Request promoter to confirm that land is earmarked for construction in local planning.
- Use of cut-off date for any change of land use.

On minimum safeguards
The issuer has analysed the requirements of minimum safeguards and considered them in the context of the existing counterparty due diligence and project-level social due diligence, carried out in line with its Environmental and Social Standards.
As with DNSH criteria, some aspects of minimum safeguards are already covered by the issuer's standard due diligence practice while others present new elements, especially in light of the fact that minimum safeguards must be verified at the promoter rather than at the project level.

The issuer has considered three main options to verify whether promoters satisfy the minimum safeguards requirements:

- The first option is to rely on a statement by the promoter that it satisfies minimum safeguards.
- The second option is to issue a questionnaire covering the subject areas of minimum safeguards to promoters as part of the issuer's project appraisal, requiring promoters to provide evidence for each aspect of minimum safeguards.
- The third option is for the issuer to carry out its own assessment of whether promoters satisfy minimum safeguards based on public sources of information.

No final decision has been taken on the preferred route, though the issuer has started road-testing the third option on a very limited sample of clients to verify the feasibility of relying on public sources of information. As with the DNSH criteria, the approaches to minimum safeguards presented above are only proposals and are not yet formally adopted by the issuer.

7.3 Taxonomy-alignment of green bond – Supranational Northern Europe

The market practice highlights the value to a supranational issuer of a voluntary Taxonomy-alignment strategy, with an initial focus on the substantial contribution criteria and the use of proxies for the do no significant harm (DNSH) and minimum safeguard criteria for:

- credibly conveying the issuer's efforts to constantly improve its sustainability disclosures, based on best practice;
- structuring dialogue with clients to permit the collection of relevant information needed to assess all new transactions vis-à-vis the Taxonomy; and
- promoting the Taxonomy for the greening of the wider market.

Please provide further description and details on the market practice

The issuer considers the use of the EU Taxonomy as best reporting practice requested by investors, and it wants to promote its usability and implementation by engaging with clients and exploring its operationalisation and, as a result, providing benefits to the wider market. While not legally required to disclose information in accordance with the Taxonomy, it has therefore started applying the Taxonomy to the classification and reporting of activities to which proceeds from its green bonds can be allocated.

The issuer has taken a forward-looking approach in its Taxonomy-alignment strategy, due to the absence of relevant metrics and information for the green bond-eligible projects assessed before the introduction of the Taxonomy, notably because it is not possible to go back to clients and ask for more information once a deal is closed. This absence of information makes it especially challenging to assess alignment with the DNSH criteria. The internal processes that have covered the minimum safeguards requirements also need to be mapped against the new criteria.

At the same time, the issuer sees access to information improving, likely driven by both more stringent regulatory requirements and increasing awareness around sustainability. It has therefore amended its policy framework for project assessment to better reflect the EU Taxonomy requirements and to permit the collection of the missing information going forward. In 2022, the issuer started to perform a EU Taxonomy alignment assessment at project level for all new projects. In addition to its regular sustainability due diligence, specific information has been requested to assess substantial contribution and DNSH alignment. Some client education is necessary for this purpose, as clients are asking for guidance regarding Taxonomy implementation. If challenges around usability are overcome, however, the issuer believes that the EU Taxonomy could make things simpler in terms of data/metrics alignment for its clients.

For stocks of activity, which are much more difficult to assess, the issuer has adopted a broader approach on a 'best efforts' basis. The issuer states that the fear of criticism due to insufficient data or poor data quality makes many clients and other issuers that would like to implement the taxonomy freeze, rather than act and then seek to improve, which it believes would be a better approach. It therefore proposes that issuers use their experience and include metrics that might have been collected in the past which, although slightly different from those needed to demonstrate EU Taxonomy alignment, would provide some transparency, and would allow the market to assess the robustness of the data provided.

This raises the importance of the use of proxies for such voluntary approaches, both with regard to missing data, or overall. For example, the issuer's position is that for projects that have successfully undergone an environmental impact assessment in an EU member state, the relevant DNSH criteria can be judged to be fulfilled if the applicable EU directives have been implemented in national legislation.

This step-by-step approach is also reflected in communication with the market. On a voluntary basis, the issuer has provided a systematic description of its alignment assessment for its green bond-eligible activities, presenting it separately for (i) substantial contribution (but not able to prove DNSH alignment) and (ii) substantial contribution, including DNSH-alignment.

Please provide further description and details on the case from a quantitative perspective

The issuer's annual report estimates that, for 2022, and without assurance,

a) of total green bond-eligible disbursements:
   1. 99.6% were Taxonomy-eligible;
   2. 77% were fully and 23% partially aligned with the Climate Delegated Act substantial contribution criteria
   and
b) of the fully substantial contribution-aligned green bond-eligible disbursements:
   3. 82% were fully (50% of the projects) and 13% (43% of the projects) partially aligned with the Climate Delegated Act DNSH criteria and, in 5% of the cases, DNSH-alignment could not be assessed due to lack of data.
c) Of the partially substantial contribution-aligned green bond-eligible disbursements:
all were partially aligned with the Climate Delegated Act DNSH criteria.

What is the outcome?

- The issuer has adopted a step-by-step Taxonomy-alignment strategy for the classification and reporting on activities that are eligible for allocation of proceeds from its green bonds.
- The experience and market recognition gained with this process and practice is now feeding into the issuer's assessment of the flows of its new operations.
- Thanks to the early action permitted by this strategy, the issuer considers that there is a strong chance that it will be able to adjust its current green bond framework to become an 'EU Green Bond Standard' framework.

Data and methodology used to compile the market practice

Data and methodology	Publicly available information from the issuer and the issuer's reply to the questionnaire as part of the outreach exercise. The issuer has: a) mapped its green bond-eligible categories against the Taxonomy categories ; b) screened such categories using the technical screening criteria for • climate change mitigation and adaptation of the Climate Delegated Act; • the remaining environmental objectives in the EU Platform for Sustainable Finance recommendations of March 2022. c) focused on borderline projects to assess what information was available in relation to the relevant technical screening criteria.
Use of proxies	For compliance with DNSH criteria, a regular permitting process covering material DNSH aspects in the context of its project sustainability review. For compliance with minimum safeguard criteria, its own policies and processes to identify, manage, and mitigate potential negative environmental and social impacts. According to its green bond framework, only projects for which such a review has not identified any potentially threatening risk elements may be included in the green bond-eligible portfolio.
Internal resources	A dedicated team for the project assessment

Did you encounter any obstacles or gaps? If so, please describe.

☒ Challenges related to the use of the EU Taxonomy (including data availability, criteria interpretation, clarity on scope of application, other)

With regard to the substantial contribution criteria, the issuer reported that challenges may arise for sectors/activities (e.g. green buildings) where the issuer's assessment may not be directly comparable with the Taxonomy criteria.

With regard to the DNSH criteria, the issuer reports challenges from data unavailability and insufficient data quality.

☐ Challenges in terms of coherence and consistency of the EU SF framework

7.4 Taxonomy-alignment of green bond – Sovereign Eastern Europe

The case study highlights the value to a sovereign issuer of pursuing a gradual Taxonomy-alignment strategy, on a voluntary basis. It initially focused on substantial contribution and the use of proxies for the do no significant harm (DNSH) and minimum safeguards criteria, to enable a transparent process of clarification of the status quo and thereby credibly convey the sovereign's efforts to align with best practice over time.

Please provide further description and details on the market practice

The issuer has started applying the Taxonomy requirements, on a voluntary basis, to the classification and reporting of activities that are eligible for allocation of proceeds from its green bonds.

It is taking a gradual approach in its Taxonomy-alignment strategy, aligning its green bond eligibility criteria on a best-efforts basis with the substantial contribution criteria from the EU Taxonomy Climate Delegated Act, and taking into account the DNSH criteria to the extent possible. The issuer reports that all of its Taxonomy-eligible activities are aligned with minimum safeguards requirements. To ascertain the state of things and proceed in a systematic way, the issuer mapped its green bond categories against the list of Taxonomy-eligible activities.

The issuer was able to progress most in Taxonomy-alignment in the area of substantial contribution, having aligned the majority of its eligible activities with the technical screening criteria for substantial contribution in the January 2022 Taxonomy Climate Delegated Act.

Regarding the DNSH criteria, the issuer's initial focus was on demonstrating alignment of its eligibility criteria for a selection of activities within a subset of its eligible project categories, where it was able to provide sufficient information in relation to DNSH criteria for an external review by a second-party opinion (SPO) provider. Its green bond framework states that the issuer intends to gradually extend the DNSH analysis to additional categories and economic activities, on a best-efforts basis.

The issuer has approached the EU Taxonomy's requirements for minimum safeguards with reference to the country's constitution and existing legislation, highlighting also that the country is a signatory to the OECD Guidelines for Multinational Enterprises, UN Principles on Business and Human Rights, and the International Labour Organization (ILO) conventions – which are the standards underlying the Taxonomy's minimum safeguards requirements.

In the SPO accompanying the issuer's green bond framework, each activity eligible for allocation under the green bond framework is mapped against the Taxonomy activities and assessed against the Taxonomy's substantial contribution criteria and a subset thereof against DNSH criteria, which includes a differentiation of the degree of substantial contribution- and DNSH-alignment between "aligned", "partially aligned" and "not aligned". Based on an assessment of policies, management systems and processes applicable to the use of proceeds criteria, including the regulatory context in the geographical location of activities and projects, the SPO concluded that the activities and projects to be financed under the framework will be carried out in alignment with the EU Taxonomy's minimum safeguards.

The issuer's recently published green bond framework states that allocation reporting will seek to:

a) demonstrate that the proceeds have been allocated in accordance with its newly updated criteria for eligible green expenditures; and
b) include a percentage of alignment of expenditures with the EU Taxonomy (if any), separately for the substantial contribution, DNSH and minimum safeguards criteria.

Please provide further description and details on the case from a quantitative perspective

The issuer sent an outreach questionnaire and it found that:

- 88% of the activities that can be allocated proceeds from the issuer's green bonds are Taxonomy-eligible;
- 49% of its Taxonomy-eligible activities are Taxonomy-aligned

- 68% of its Taxonomy-eligible activities are substantial contribution-aligned
- around 49% of its Taxonomy-eligible activities are DNSH-aligned
- 100% of its Taxonomy-eligible activities are minimum safeguard-aligned

What is the outcome?

The issuer has voluntarily adopted a gradual Taxonomy-alignment strategy for the classification and reporting of activities that are eligible for allocation from its green bonds. This strategy is detailed, market-driven and transparent, enabling the issuer to: further align its own institutional objectives with EU Taxonomy policy objectives; comply with best-practice considerations; reduce uncertainty and reputational risks; and align with its investors' classification and reporting needs in response to their own Taxonomy-related regulatory requirements.

Data and methodology used to compile the market practice

Data and Methodology	Data Publicly available information from the issuer and the issuer's reply to the questionnaire as part of the outreach exercise. Methodology The preparer used primary analytical research with mixed methods (both qualitative and quantitative).
Use of Proxies	As proxy for compliance with the DNSH criteria, the issuer submitted to its SPO provider the applicable environmental and social EU and national laws and regulations, e.g., the EU's Habitats Directive and Birds Directive for the biodiversity objective. As proxy for compliance with minimum safeguards, the issuer refers to the country's constitution and existing legislation, highlighting also that the country is a signatory to the OECD Guidelines for Multinational Enterprises, UN Principles on Business and Human Rights, and the ILO conventions.
Internal resources	A cross-departmental working group with representatives from various ministries.
External resources	An SPO provider.

Did you encounter any obstacles or gaps? If so, please describe.

The issuer identifies as challenges the usability of the EU Taxonomy, data availability, data quality and internal considerations (e.g., resources, expertise and costs). In general, demonstrating the fulfillment with substantial contribution criteria is easier compared with DNSH, where the issuer lacks information for various activities to be able to demonstrate alignment with the DNSH criteria.

Solutions: How were the obstacles addressed?

The issuer is addressing usability challenges with the help of the proxies described above.

Benefits of applying the EU Taxonomy & Sustainable Finance Framework:

☐ Simplification
☐ Client engagement
☒ Credibility
☒ ESG risk management / mitigation
☒ Greenwashing mitigation
☒ Transparency
☒ Comparability
☒ Other – *please specify*

The issuer stated that the application of the Taxonomy allows for better alignment with climate goals and helps in the transition to a net zero economy.

What was the feedback from involved stakeholders?
Investor expectations and demands are increasingly subject to their own EU Taxonomy-related reporting requirements. Investors therefore welcome the ambition and level of transparency of the issuer's green bond framework, appreciating particularly the process of assessing alignment with the EU Taxonomy and EU Green Bond Standards.

7.5 Taxonomy-alignment of green bond – Sovereign Western Europe

The market practices combine information provided to the Platform on Sustainable Finance by a sovereign issuer. The main topics covered relate to public sector lending.

Objective of the market practice

The market practice presents an example of a sovereign issuer pursuing a gradual Taxonomy-alignment strategy, on a voluntary basis. It initially focused on substantial contribution and the use of proxies for the do no significant harm (DNSH) and minimum safeguards criteria, to enable a transparent process of clarification of the status quo and thereby credibly convey the sovereign's efforts to align with best practice over time.

Please provide further description and details on the market practice

The issuer is not legally required to disclose information in accordance with the Taxonomy, yet it fully supports the increased level of ambition and transparency introduced as a result of the EU's sustainable finance legislation, and it voluntarily considers the Taxonomy in the classification and reporting of its activities in light of best practice considerations. The issuer aims to support market best practice and the uptake of the EU Taxonomy, while being transparent about the level of alignment in its reporting and external review.

The issuer has started applying the Taxonomy requirements for the classification and reporting of activities that are eligible for allocation of proceeds from its green bonds. The issuer is taking a gradual approach to its Taxonomy-alignment strategy, aligning its green bond eligibility criteria with the EU Taxonomy and (on a best-efforts basis) the upcoming EU Green Bond Standard. To ascertain the state of play and proceed in a systematic way, the issuer has mapped the eligible expenditures under its green bond framework against Taxonomy-eligible activities.

Through updates to its green bond framework, the issuer has, over time, selected eligible expenditures that align – as a minimum – with the technical screening criteria (TSC) for substantial contribution to the EU Taxonomy economic activities, making detailed reference to activities in the Climate Delegated Act as well as the recently adopted Environmental Delegated Act. The issuer also aims to align with the DNSH and minimum safeguards criteria. Due to the unavailability of information required to demonstrate such alignment in some cases, the issuer retains the flexibility to include expenditures in its green bond framework without full DNSH/minimum safeguards alignment. To provide investors with more transparency, the issuer includes an overview in its green bond framework of the most relevant laws and regulations and on how they address the DNSH and minimum safeguards criteria on a best-efforts basis. The SPO complements this high-level mapping with further details for each eligible activity, and how it adheres with the substantial contribution and DNSH criteria, listing relevant and applicable criteria, laws and regulations.

Please provide further description and details on the case from a quantitative perspective

The issuer's 2022 allocation report discloses an overall 65% alignment with the Taxonomy (without publication of the details provided in the table above). The allocation report also indicates the percentage of alignment with the Taxonomy per expenditure. The allocation report is supported by:

- the report of the independent central government auditor; and
- a post-issuance verification letter by an SPO provider.

What is the outcome?

The issuer has adopted a gradual Taxonomy-alignment strategy for the classification and reporting of activities that are eligible for allocation from its green bonds. The use of the Taxonomy enables a credible market-driven approach, enabling the issuer to further align its own institutional objectives with the EU Taxonomy policy objectives and to be among leading issuers in terms of best practice.

Data and methodology used to compile the market practice

Data and Methodology	Data Publicly available information from the issuer and the issuer's reply to the questionnaire as part of the outreach exercise. Methodology The issuer began by analysing government documents concerning the eligible expenditure, with additional information requested from relevant government services. Possible gaps – specifically for demonstrating alignment with the DNSH criteria – were filled by analysing relevant legislation. The analysis was finally reviewed by the SPO provider. The issuer used primary analytical research with mixed methods (both qualitative and quantitative).
Use of Proxies	As proxy for compliance with the DNSH criteria, the issuer listed in its green bond framework all applicable environmental and social EU and national laws and regulations by environmental objective e.g., the European Water Directives for the environmental water objective, and the Industrial Emissions Directive for the Pollution prevention objective. As proxy for compliance with the minimum safeguards criteria, the issuer refers in its green bond framework to: a. its adherence to the UN Guiding Principles on Business and Human Rights, as well as its National Action Plan on Business and Human Rights b. its signature and ratification of a list of international human rights agreements, namely: ○ the International Covenant on Civil and Political Rights; ○ the International Covenant on Economic, Social and Cultural Rights; ○ the International Convention on the Elimination of All Forms of Racial Discrimination; ○ the Convention on the Elimination of All Forms of Discrimination against Women; ○ the Optional Protocol to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; ○ the Convention on the Rights of the Child; ○ the International Convention for the Protection of All Persons from Enforced Disappearance; ○ the Convention for the Protection of Human Rights and Fundamental Freedoms; ○ the European Social Charter.
Internal resources	A cross-departmental working group was established with representatives from various ministries.
External resources	An SPO provider and investment banks were used as advisors.

Did you encounter any obstacles or gaps?

The issuer identified the usability of the EU Taxonomy and data availability as challenges. It highlights that eligible expenditures for a sovereign often consist of subsidies for projects, for which the availability of information is limited or is insufficiently detailed to show adherence at the level the EU Taxonomy requires. Specifically with regards to demonstrating alignment with DNSH criteria, the issuer noted that this is only possible if the same conditions are required by national law, which would make it conditional for granting the subsidy in the first place – or if the recipient of the grant is subject to reporting obligations. As an example, the pollution prevention DNSH criteria for electric vehicles (EVs) require that the EVs are equipped with the best grade of tyres, while the law also allows cars to be equipped with the second-best grade. As the issuer (or any industry body) does not have any information about the type of tyres used by its EV fleet, it is impossible to demonstrate compliance with DNSH.

How were the obstacles addressed?

The issuer noted that some activities that are Taxonomy-aligned may not remain so if the activity is broken down into phases. An example would be research into wind and soil conditions necessary for the construction of an offshore wind farm, where the research phase in itself may not qualify as an economic activity, although it is an enabler and/or prerequisite for construction. The government may only finance or subsidise a part of the project phase, whereas it would be useful if such a phase would also be considered Taxonomy-aligned.

Furthermore, Taxonomy technical screening criteria have not yet been developed for some economic activities which will make a substantial contribution to environmental objectives.

What was the feedback from stakeholders?

Investors appreciate the efforts of gradually aligning with the EU taxonomy, while being understanding of the difficulties involved in doing so. Market expectations in terms of Taxonomy alignment are going to be greater in the years to come.

7.6 Taxonomy-alignment of green bond – Government Regional Germany

The market practice highlights the value of a gradual Taxonomy-alignment strategy with an initial focus on substantial contribution and the use of proxies for DNSH and MS in the government regional category in order to enable a transparent process of clarification of the status quo and thereby credibly convey the issuer's efforts in aligning with best practice and regulatory requirements over time

Please provide further description and details on the market practice from a qualitative perspective

The issuer is legally required from 2024 to disclose information in accordance with the EU Taxonomy under Article 8 and will be subject to the Corporate Sustainability Reporting Directive reporting requirements. The issuer has taken a proactive stance and considers the new frameworks being established by the Taxonomy and upcoming EU Green Bond Standard (GBS) as important drivers for standardisation and credibility in the green bond market.

It has therefore adopted a voluntary strategy of early and gradual alignment with the Taxonomy and EU GBS. It has taken the Taxonomy and EU GBS final reports from the Technical Expert Group (TEG) as initial reference in its 2020 green bond framework and its green asset pool as of March 2023. The issuer intends to allocate its green bond proceeds to a mixture of Taxonomy-aligned and likely Taxonomy-aligned assets during a transition period, and to provide investors with information in a transparent way. It defines likely-aligned assets as those that are reasonably assumed to meet the Taxonomy thresholds, although it is difficult to factually determine this, due to insufficient data. Its ambition is to keep the transition period short and to increase the proportion of Taxonomy-aligned assets.

The issuer is applying a selection of thresholds from the TEG report's technical screening criteria for substantial contribution for a range of green bond-eligible activities in the areas of climate change mitigation and adaptation, providing examples of applied thresholds in its green bond framework. It further integrates requirements for the DNSH principle and reports to systematically fulfil minimum safeguards. A second-party opinion (SPO) on the issuers' green bond framework concludes that most of its green projects are considered as aligned, on a best-efforts basis, with the TEG proposal for the EU Taxonomy and the relevant activity-specific technical screening criteria, and DNSH and minimum social safeguards criteria.

Please provide further description and details on the case from a quantitative perspective

- Taxonomy-eligible activities as a % of the activities that can be allocated from the issuer's green bonds: 100%
- Taxonomy-aligned activities as a % of the Taxonomy-eligible activities: 95%
- Substantial contribution-aligned activities as a % of the Taxonomy-eligible activities: 98%
- DNSH-aligned activities as a % of the Taxonomy-eligible activities: 95%
- Minimum safeguards-aligned activities as a % of the Taxonomy-eligible activities: 100%

Source: Reply to the outreach questionnaire, unaudited

What is the outcome?

The issuer has adopted an early and gradual Taxonomy-alignment strategy for the classification and reporting of activities that are eligible for allocation from its green bonds. This strategy is pragmatic and market-driven, enabling the issuer to follow best practice and better align with its investors' classification and reporting needs, in response to their Taxonomy-related regulatory requirements and associated requests. Thanks to this early action, the issuer expects to be able to comply with the Taxonomy requirements of the EU GBS in the foreseeable future.

Data and methodology used to compile the market practice

Data and Methodology	Publicly available information from the issuer and the issuer's reply to the questionnaire as part of the outreach exercise. The issuer's dedicated ESG team is responsible for project selection, focusing on those projects with the highest contribution to the climate policy of the issuer, the federal state, country and the European Union. The analysis of compliance with substantial contribution, DNSH and minimum safeguards is conducted by an SPO provider, on the basis of the information provided by the issuer. The preparer of the case study has performed primary analytical research with both qualitative and quantitative methods.
Use of Proxies	As a proxy for compliance with the substantial contribution criteria, the issuer has used the TEG final report on the EU Taxonomy of March 2020 and the associated technical annex. As a proxy for compliance with the DNSH criteria, the SPO provider highlighted the legal compliance of the issuer in the context of the highly regulated nature of projects in the issuer's state of operation as a basic proxy for the purposes of a high-level assessment of DNSH criteria (e.g., compliance with, *inter alia,* specific national operating permit requirements and Directive 2005/64/EC on recyclability was used to demonstrate alignment with DNSH in the area of circular economy). As a proxy for compliance with the minimum safeguards criteria, the SPO provider highlighted the OECD membership of the issuer's country of operation, the ratification of International Labour Organization core conventions into national legislation, as well as its implementation of UN Guiding Principles on Business and Human Rights. The SPO provider notes that the issuer's compliance processes ensure alignment with the relevant legislation.
Internal resources	Internal ESG team
External resources	• **Information provided by the issuer's clients** • **SPO provider**
What was the feedback from stakeholders?	
The issuer's investors like its approach and have provided positive feedback, appreciating in particular the issuer's straightforwardness, transparency and high standards.	

7.7 Taxonomy-alignment of green bond – Government Local Sweden

The case study highlights the value of a **voluntary** gradual Taxonomy-alignment strategy with 1) a mapping of existing green-bond eligibilities against the EU Taxonomy and 2) a progressive exclusion of activities that are not aligned with the EU Taxonomy from allocations from green bonds' proceeds. This strategy aims to enable a transparent process of clarification of the status quo and thereby credibly convey one's efforts in aligning with best practice over time and increasing comparability in the market.

Please provide further description and details on the market practice

The issuer is not legally required to disclose information in accordance with the EU Taxonomy, but it voluntarily considers the EU Taxonomy in the classification and reporting of its activities, due to the following considerations:

a) pursuit of best practice;
b) the reduction of uncertainty and reputational risks;
c) alignment with its investors' classification and reporting needs in response to their EU-related regulatory reporting obligations;
d) alignment with classification/reporting needs of counterparties on the asset side, and associated requests.

The issuer has started applying the requirements of the Taxonomy initially for the classification and reporting of activities that are eligible for allocation of proceeds from its green bonds. Applying the Taxonomy to the totality of its activities will be carried out in 2023-24.

The issuer takes a gradual approach in its Taxonomy-alignment strategy, focusing the alignment of its green bond eligibility criteria first with certain activities due to usability issues related to technical screening criteria for the substantial contribution and DNSH criteria.

To ascertain the state of things and proceed in a systematic way, the issuer mapped all its green bond categories against the Taxonomy-eligible activities. According to its second-party opinion (SPO) provider, the issuer was able to align its green bond eligibility criteria with the technical screening criteria for substantial contribution, DNSH and minimum safeguards for all types of activity under its framework (see details in the table above).

Under its new green bond framework, the issuer will only admit Taxonomy-aligned activities. Excluded activities relate to past projects and new projects for buildings, especially hospital buildings, due to their specific nature. Allocations to past projects in these activities from outstanding green bonds – past legacy allocations – are most likely to be aligned but will be reported as not classified. This explains the partial alignment (60%) of the issuer's green bonds in the answer to the next question. New projects in these activities – new legacy allocations – would be excluded according to the issuer's policy, reducing the scope of the green bond framework.

Please provide further description and details on the case from a quantitative perspective

- Taxonomy-eligible activities as a % of the activities that can be allocated from the issuer's green bonds: 100%
- Taxonomy-aligned activities as a % of the Taxonomy-eligible activities: 60%
- substantial contribution-aligned activities as a % of the Taxonomy-eligible activities: 60%
- DNSH-aligned activities as a % of the Taxonomy-eligible activities: 60%
- minimum safeguards-aligned activities as a % of the Taxonomy-eligible activities: 60%

Source: issuer's reply to the outreach questionnaire

NB The values of 60% mentioned in this box refer to Taxonomy activities that are currently assessed. The assessment of buildings remains unclear. These values could also be up to 100% as in the table "Taxonomy-based classification of activities eligible for allocation from green bonds" (see attached document with full tables).

What is the outcome?
The issuer has adopted a gradual Taxonomy-alignment strategy for the classification and reporting of activities that are eligible for allocation of proceeds from its green bonds. This strategy is pragmatic and market-driven, having enabled the issuer to map the entirety of its eligible project categories against the activities of the Climate Delegated Act and to reach an indicative alignment of 60% of its existing green bond-eligible activities with the Taxonomy. The issuer's early operationalisation of the Taxonomy on the green bond side and the experience gained in this process may enable synergies and provide guidance for Taxonomy-reporting on the entirety of its activities which is in the making, notably against the background of increasing investor interest in both areas.
Data and methodology used to compile the market practice
Public information from the issuer and the issuer's reply to the questionnaire sa part of the outreach exercise.
Other aspects you would like to mention
The organisation thinks that the green transformation of the capital markets is very important and will play a key role for future sustainable development and climate mitigation.

7.8 Taxonomy-alignment of green bond – Government Development Bank France

This issuer is one of the few public sector entities to have provided a Taxonomy-based classification for the totality of its activities in its reply to the questionnaire. At the same time, while it reports that around 50% of such activities are Taxonomy-eligible, it also reports a low level of green asset ratio (GAR)-eligible activities, due to its focus on sovereign exposures (50% of total) and non-EU exposures (90% of the total). In addition, it stresses that the collection of data for Taxonomy-based classification and reporting on its activities outside the European Union is extremely complicated, notably against the do no significant harm (DNSH) criteria.

This case therefore focuses on:

- the relevance of EU capital flows to low- and middle-income countries outside the EU and therefore the instrumental role of the Taxonomy in establishing a common language to facilitate sustainable investment in these countries;
- the challenges associated with holistic approaches to Taxonomy alignment (from a voluntary standpoint).
- a voluntary 'market-based', gradual approach to Taxonomy-alignment that, with the help of proxies, reorganises the collection and reporting of available information to permit a clearer and more comparable description of the status quo, thus enabling a transparent process of clarification and thereby credibly conveying the issuer's efforts in aligning with best practice under market monitoring over time.
- how a more extensive definition of the GAR can incentivise the issuer's engagement in operationalising this approach and reflecting its results into the GAR.

Please provide further description and details on the market practice from a qualitative perspective

The issuer recognises the importance and usefulness of the EU Taxonomy. The issuer is not legally required to disclose information in accordance with the Taxonomy, but it has started voluntarily and gradually applying the Taxonomy requirements for the classification and reporting of its activities, due to market-driven factors, i.e.:

- best practice considerations and
- investors' classification/reporting needs in response to their EU Taxonomy-related regulatory requirements and associated requests (e.g., for Taxonomy-based reports on the allocations of green bonds).

The issuer highlights several obstacles in relation to its activities in low- and middle-income countries – which represent the majority of its activities – that do not permit the application of the EU Taxonomy to the entire scope of its assets, including the ones eligible for allocation from its green bonds.

With regard to new flows of activity, the issuer plans to integrate in its processes the collection of necessary information for Taxonomy-eligibility and alignment although, at this stage, Taxonomy criteria are not adapted to the geographies where it operates. In addition, data accessibility and local standards are expected to make this information challenging to obtain. It would be even more difficult to collect Taxonomy-alignment information for the stock of its activities.

The non-EU activities of the issuer can align with part of the technical screening criteria for substantial contribution, but it is particularly difficult to meet the DNSH technical screening criteria, due to different standards and local regulations. The issuer recommends the use of proxies (see below) to address this challenge and is specifically exploring a potential voluntary KPI based on such proxies (what it calls the 'development bank ratio') in addition to the GAR, although this project is still at an early stage.

Please provide further description and details on the case from a quantitative perspective

- Taxonomy-eligible activities as a % of total activities: 23% (i.e., voluntary GAR eligibility – see below)
- GAR-eligible activities as a % of the Taxonomy-eligible activities: 26%

These ratios are based on the following estimates:

- GAR-eligible activities as a % of total activities: 6%
- Voluntary GAR eligibility (i.e., including activities outside of EU) as a % of total activities: 23%
- For voluntary KPI eligibility that would include all exposures where the use of proceeds is known and which excludes all of those where the use of proceeds is not known (both EU and non-EU activities): 59%

Source: reply to the outreach questionnaire

What is the outcome?

- The issuer has adopted voluntary gradual Taxonomy alignment for the classification of the totality of its activities for best practice and alignment with investors' classification/reporting needs in response to their Taxonomy-related regulatory requirements.
- As a development bank institution operating mainly outside the EU, the issuer is promoting a pragmatic approach to Taxonomy classification and reporting of non-EU activities, based on proxies adapted to the context of developing countries.

Data and methodology used to compile the market practice

Data and Methodology	Public information from the issuer and the issuer's reply to the questionnaire as part of the outreach exercise. The issuer referred notably to the MDB-IDFC common principles for tracking climate change mitigation and adaptation finance. The preparer of the case study used primary analytical research, with both qualitative and quantitative methods.
Use of Proxies	As a proxy for compliance with substantial contribution criteria for activities outside the EU, the issuer mentioned the MDB-IDFC common principles for climate change finance tracking. As a proxy for compliance with DNSH criteria for activities outside the EU, the issuer refers to the World Bank Group Environmental, Health and Safety Guidelines. As a proxy for compliance with minimum safeguards for activities outside the EU, the issuer mentions its own list of excluded activities, which it considers globally in line with the parameters defined by the Commission. This is the only component of the Taxonomy mentioned in the issuer's Sustainable Development Goals bond framework.
Internal resources	Due diligence reviews and analyses with cross-departmental committees.
External resources	Second-party opinion and supervised auditor.

Did you encounter any obstacles or gaps?

The key obstacles or gaps in the assessment which are preventing the issuer's Taxonomy alignment are: usability of the EU Taxonomy, data availability and data quality.

Solutions: How were the obstacles addressed?

See details in box "description and details on the case from a qualitative perspective"

The issuer proposes as a solution to address the usability issues of the EU Taxonomy beyond EU borders to use as proxies and map:

- the MDB-IDFC common principles for climate finance against the EU Taxonomy's substantial contribution technical screening criteria
- the World Bank Group Environmental, Health and Safety Guidelines against the Taxonomy's DNSH technical screening criteria.

It also proposes to map the EU Taxonomy against other Taxonomies in developing countries as a way to support the uptake of the EU Taxonomy and EU Green Bond Standard by public sector issuers in those countries.

What was the feedback from the stakeholders?

The issuer does not communicate on its Taxonomy-alignment strategy, given its mission as a development bank institution that operates mainly outside the EU.

7.9 Taxonomy-alignment of green bond – Government Agency Spain

The case study highlights the value of a voluntary gradual Taxonomy-alignment strategy for green bonds with an initial focus on substantial contribution and the use of proxies for the do no significant harm (DNSH) and minimum safeguards criteria, in order to enable a transparent process of clarification of the status quo and thereby credibly convey the issuer's efforts in aligning with best practice over time.

Please provide further description and details on the market practice from a qualitative perspective

The issuer explicitly refers to the Climate Delegated Act for the definition of the list of green bond-eligible project categories. This highlights a high degree of alignment of the issuer's institutional objectives with EU Taxonomy policy objectives.

However, the issuer is not legally required to disclose information in accordance with the EU Taxonomy, yet voluntarily considers the Taxonomy in the classification and reporting of its green bond activities and totality of activities, on the basis of the following considerations:

1) best practice considerations
2) the reduction of uncertainty and reputational risks
3) alignment with its investors' classification and reporting needs, in response to their EU-related regulatory reporting obligations.

The issuer has started applying the Taxonomy requirements first for the classification and reporting of activities that are eligible for allocation of proceeds from its green bonds, aiming to progressively examine all projects in line with the EU Taxonomy as it becomes available, final and relevant for projects eligible under its green bond framework. The issuer takes a gradual approach in its Taxonomy-alignment strategy, focusing the alignment of its green bond eligibility criteria first with the technical screening criteria for substantial contribution of the Climate Delegated Act, while not yet planning to formally align with the DNSH and minimum safeguards criteria.

To ascertain the state of things and proceed in a systematic way, the issuer mapped all its green bond categories against the activities in the Taxonomy Climate Delegated Act. It was able to align its green bond eligibility criteria with the technical screening criteria for substantial contribution for all green bond activities that were Taxonomy-eligible (see details in the above table). For the time being, the issuer is not carrying out a formal DNSH and minimum safeguards analysis, but highlights its adherence to the Equator Principles, which requires environmental and social risk management procedures to be carried out for projects which are subject to them. The issuer also highlights that all projects comply with national and community-level environmental and social legislation as a proxy for DNSH and minimum safeguards.

The issuer is also planning to report on the Taxonomy-eligibility of the totality of its activities in its loan portfolio. It is now working on calculating the ratio of Taxonomy-aligned activities within its loan portfolio to its total lending (i.e., its green asset ratio) which requires demonstration of alignment with technical screening criteria for substantial contribution and DNSH, as well as compliance with minimum safeguards. This work is presently carried out for projects with clients that are subject to mandatory Taxonomy-reporting under the Corporate Sustainability Reporting Directive, as the issuer is basing its own calculations on the information provided by its clients. Depending on the nature of the operation, the issuer either directly reports the Taxonomy-alignment percentage published by its clients in their non-financial reporting, or otherwise the issuer identifies Taxonomy-eligible activities within a project and reaches out to its clients to confirm Taxonomy-alignment and provide the required information. As the use of proxies for mandatory Taxonomy-alignment reporting is not allowed, the issuer considers projects as not aligned whenever information is incomplete or unavailable. In operations with clients not subject to Taxonomy reporting, there is generally less information available for the issuer's reporting on the totality of its activities, yet the issuer still requests information for those operations that are eligible under its green bond framework.

Please provide further description and details on the case from a quantitative perspective

- Taxonomy-eligible activities as a % of the activities that can be allocated from the issuer's green bonds: 100% (this percentage refers to projects which have received proceeds from the issuer's green bonds between 2019-2022)
- Taxonomy-aligned activities as a % of the Taxonomy-eligible activities: no analysis conducted

- substantial contribution-aligned activities as a % of the Taxonomy-eligible activities: 89%
- DNSH-aligned activities as a % of the Taxonomy-eligible activities: no analysis conducted
- minimum safeguards-aligned activities as a % of the Taxonomy-eligible activities: no analysis conducted.

Source: reply to the outreach questionnaire

What is the outcome?

- The issuer has adopted a voluntary gradual Taxonomy-alignment strategy for the classification and reporting of activities that are eligible for allocation from its green bonds. The use of the Taxonomy permits a credible market-driven approach, having enabled the issue to progress significantly regarding Taxonomy-alignment in terms of substantial contribution for its green bond activities.
- The issuer's early operationalisation of the Taxonomy on the green bond side and the experience gained in this process may enable synergies that facilitate processes for the reporting of Taxonomy alignment on the entirety of its activities.

Data and Methodology

The issuer identifies assets in its overall portfolio that are potentially eligible for allocation under its green bond framework and requests its clients provide the information required to verify compliance of the projects against its green bond eligibility criteria. For the totality of its activities, the issuer relies on the information publicly provided by its clients and reaches out to its clients for additional information and verification requests if needed. The issuer does not conduct an analysis to demonstrate formal alignment with DNSH/minimum safeguards criteria.
The preparer of the case study has performed primary analytical research with both qualitative and quantitative methods.

Use of Proxies

As proxies for compliance with DNSH and minimum safeguards: the issuer refers to its adherence to the Equator Principles and the compliance of all operations with national and community environmental and social legislation.

External resources

- The issuer's clients, either via publicly available non-financial reporting or additional ad hoc information requests by the issuer
- A second-party opinion provider

Did you encounter any obstacles or gaps?

The issuer relies on the information provided by its clients, a subset of whom are subject to mandatory Taxonomy-reporting requirements. Data unavailability issues persist and, whenever complete information about the client's alignment is not available, the issuer considers the activities underlying its projects as non-aligned. The issuer would like to see the development of a database that integrates the eligibility/alignment information of all companies subject to Taxonomy reporting, which would improve transparency and accessibility of data.

The issuer also notes that the major challenge for the alignment with the proposed EU Green Bond Standard is the requirement to align eligible green bond activities with the EU Taxonomy, which is challenging due to ongoing usability issues.

What were the benefits of applying the EU Taxonomy and the sustainable finance framework:

The issuer sees more and more investor interest in information regarding the share of Taxonomy alignment, both for activities eligible under the issuer's green bond framework and also for the totality of the issuer's loan portfolio. For the time being, investors are more interested in having data on the share of alignment and do not yet expect to see high percentages of alignment.

8. Benchmarks

Disclaimers

This document is not an official European Commission document nor reflects an official European Commission position. Nothing in this document commits the European Commission nor does it preclude any policy outcomes.

This report represents the overall view of the members of the Platform on Sustainable Finance. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

The considerations below are compiled under the aegis of the Platform on Sustainable Finance and cannot be construed as official guidance by the European Supervisory Authorities (ESAs). As a result, the views and recommendations do not purport to represent or anticipate any future official guidance and views issued by the ESAs which may differ from the contents of this report. The inclusion of market practices in this report cannot be construed as their endorsement or validation, in particular for the purpose of assessing Taxonomy-alignement of exposures or use of proceeds, by the PSF, the ESAs, nor the European Commission. The market practices described in the Annex to this report shall not be deemed to be automatically compliant with the legal obligations under the Commission Delegated Regulation (EU) 2021/2178 or other relevant EU legislation or Commission guidance documents.

8.1 The EU climate benchmark landscape: An overview

Andreas G. F. Hoepner & Gabija Zdanceviciute (both University College Dublin)

EU climate benchmarks are a new category of investment benchmarks officially introduced by the European Commission in November 2019 (via Regulation (EU) 2019/2089) that incorporate greenhouse gas (GHG) emission reductions alongside financial objectives. The Climate Benchmark Regulation introduced two types of benchmarks – Climate Transition (CTB) and Paris-aligned (PAB) – both of which achieve a similar decarbonisation target but differ in their pace of carbon reduction.

To qualify an index as a PAB or CTB, the index provider needs to demonstrate that the constituents of the index have a carbon intensity 50% or 30% lower than the parent index, respectively. Either index also has to deliver at least a 7% annual reduction in GHG emissions each year.

With climate benchmarks being a recent regulatory development, academic research is still quite sparse. Studies to date focus on the climate benchmark implementation and the evaluation of the subsequent portfolio (Hodges et al., 2021; Schwaiger et al., 2021; Wang et al., 2021) and discuss the main challenges (Ekman et al., 2022). This study therefore aims to provide an overview of the current EU climate benchmark market, focusing on the listed funds as well as the indices created by the key index providers. The fund market is evaluated on the basis of size, fund type (PAB or CTB), asset class, issuer and region.

The data

The subsequent analysis is based on the fund and index universe with data collected from Refinitiv and Bloomberg as well as index and fund provider websites. The fund and index data were collected as of March 2023 by filtering funds and indices for names that contain keywords such as “PAB”, “CTB”, “Climate Transition” or “Paris Aligned”. The selected data platforms do not provide a list of Paris-aligned or climate transition funds or indices, meaning that each fund or index in the universe had to be manually verified to confirm if the product indeed follows the methodology outlined in the Benchmark Regulation. A universe of 137 PAB and CTB funds was defined and used for the analysis presented in the following sections.

As a result of the verification process, it became apparent that not all benchmarks related to funds with the keywords “Paris Aligned” or “Climate Transition” in their name follow the EU Climate Benchmark decarbonisation methodology. Most commonly, these funds offer a less ambitious decarbonisation target or lack of clear trajectory in terms of annual carbon reductions. This may create confusion in the market; participants and data providers therefore need to ensure appropriate methodology checks are performed to ensure that financial product objectives are, in fact, aligned with the EU Climate Benchmark principles.

EU climate benchmark funds

Market size

The universe of 137 PAB and CTB funds as well as known governmental or other asset owner investments was evaluated as a proxy for the size of the climate benchmark market. Our estimate for assets under management (AUM) is consistent with that published by the European Commission in the June package (2023), reaching over US$116bn as of 27 March 2023 (see Table 1). Based on the fund data collected, the fund products account for just over half the estimated climate benchmark market AUM.

AUM	US$ million
PAB/CTB fund universe	63,462.83

Separately Managed Accounts total	52,988.70
Total	**116,451.53**

Table 1: Climate benchmark market size

Market Composition

We further analysed the climate benchmark market to evaluate its composition. The 137 funds in the PAB and CTB fund universe primarily cover three asset classes – equity, fixed income, and real estate equity. The fund distribution however is significantly imbalanced, with 120 equity funds, 15 fixed income and two real estate investment trusts (see Figure 1). The biggest fixed income fund providers are BNP Paribas, DWS and Tabula, with three or four fund offerings each. The asset class split in terms of market share (in terms of AUM) is proportional to that of the number of funds.

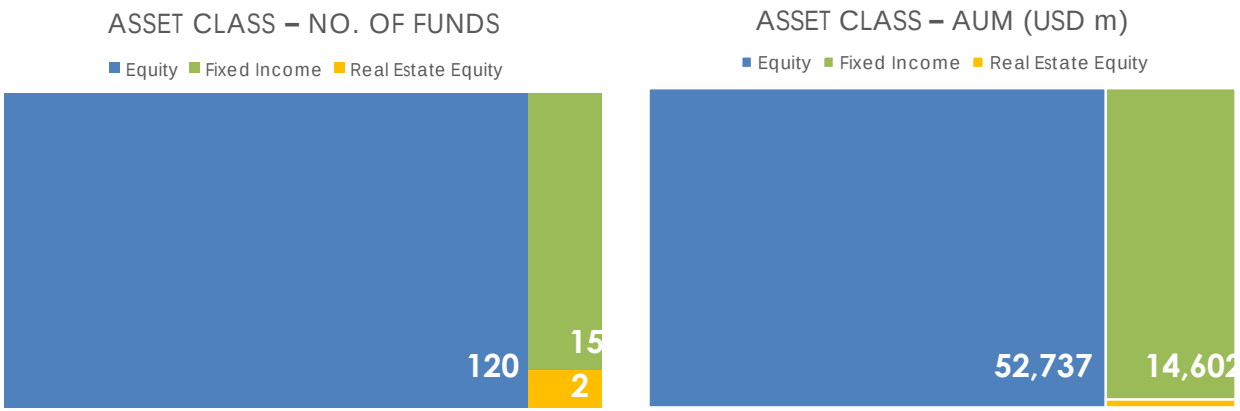


Figure 1

However, there are considerably more PAB funds versus the number of CTB funds (see Figure 2 below). The effect is observed in number of funds as well as AUM share.

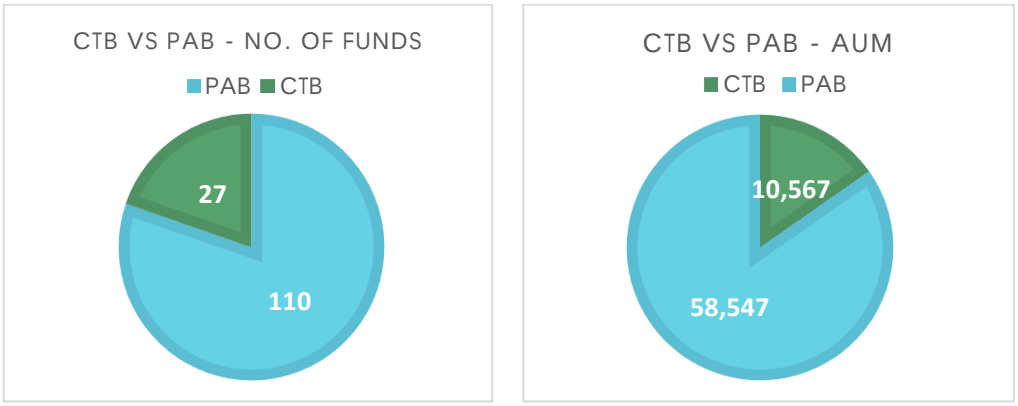


Figure 2

The majority of climate benchmark funds are concentrated in developed markets, with the highest number of funds providing exposure to the European, US, Eurozone and Japanese markets, with an additional 17 funds offering global exposure. It is worth highlighting that more concentrated PAB overlays were recently introduced, focused on the UK, India, Canada, and Nordic markets. This suggests that PAB strategies can be implemented in more concentrated portfolios.

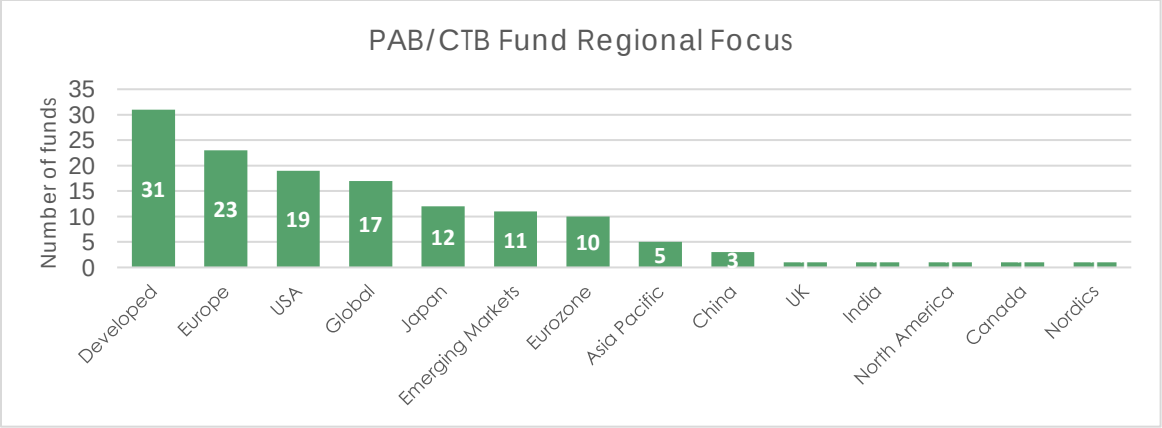


Figure 3

Lastly, the PAB/CTB universe is broken down by asset manager to identify the key fund issuers in the market. Based on the number of funds and the AUM share in the market, the leaders in PAB and CTB space are Amundi, DWS, BNP Paribas and Lyxor, which collectively offer 67 funds and manage over US$54bn in assets.

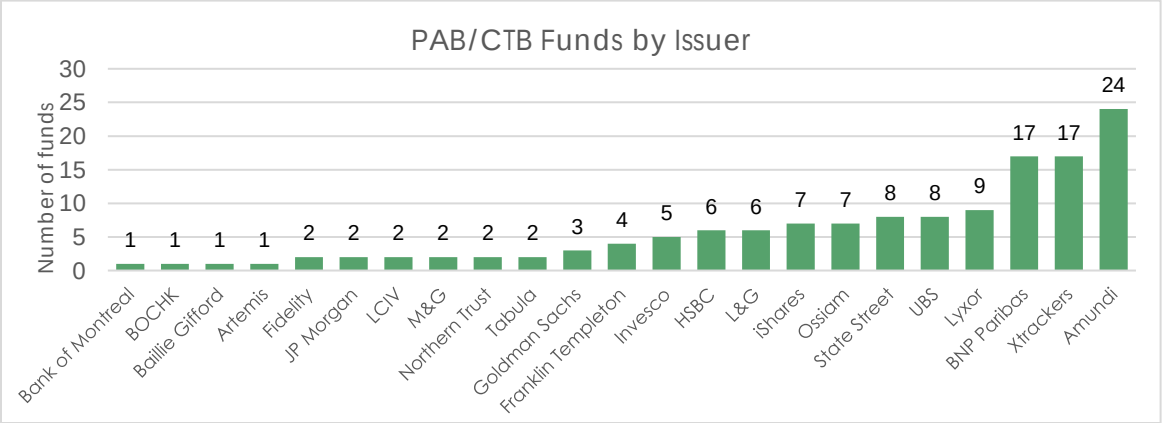


Figure 4

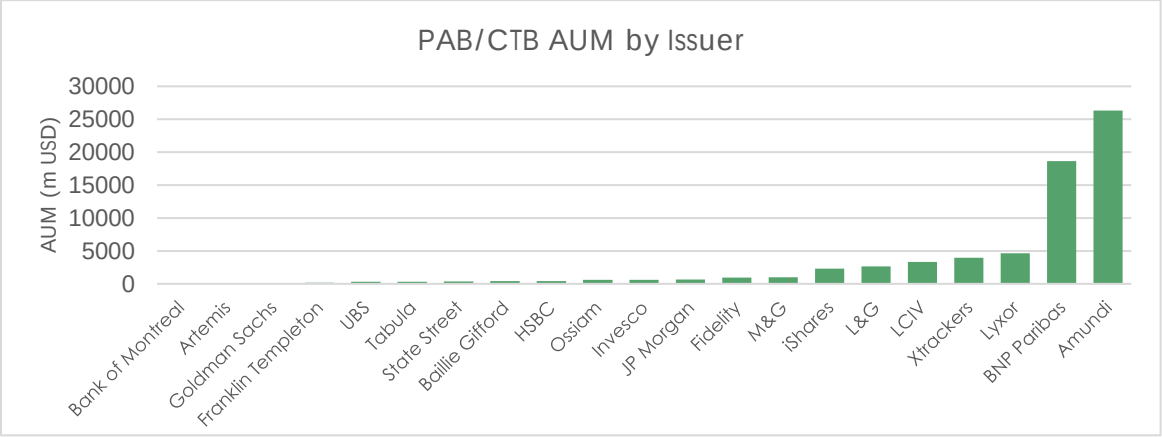


Figure 5

8.2 Paris-aligned fixed income solutions: High yield, fallen angels and more

In January 2021, an investment manager launched a EUR IG Bond Paris-aligned Climate UCITS ETF. This was the first fixed income exchange-traded fund (ETF) that allowed passive investors to align core corporate bond allocations with a 1.5°C Paris scenario. The investment manager has since launched two more Paris-aligned funds, investing in debt issued by European high yield names and global fallen angels, and is about to launch a European ultrashort fund which will invest in sub-1-year bonds excluded from the investment-grade fund.

The objective with these ETFs is to create simple and transparent products that meet the EU Paris-aligned benchmark (PAB) criteria. The investment manager uses three different index providers and two different ESG data sources. In accordance with PAB rules, all of the indices deliver a 50% reduction in greenhouse gas emissions relative to the relevant broad bond market index at inception, and a minimum 7% annual reduction. Fossil fuel companies are excluded and other important ESG screens are applied (e.g., social norms and controversial weapons).

Why a Paris-aligned approach?
When developing the ETFs, the manager focused on three aspects: simplicity; quality of data; and stewardship.

Simplicity: One key advantage of the EU climate benchmarks is that, amid a multitude of ESG products and indices, they are defined by the EU and provide a clear starting point for investors. While there are pros and cons to the methodology, it is simple and transparent. As one of the first investment managers to apply this methodology to the bond market, the manager felt that retaining this simplicity was important. While some equity PAB indices have included additional screens (e.g., companies certified by the Science Based Targets initiative (SBTi) or that meet certain climate risk metrics), the investment manager believed this would add complexity, making due diligence more onerous and making it more difficult to see how performance might diverge from traditional benchmarks. Particularly In the bond market, where many issuers are not household names, applying screens like SBTi could potentially reduce the universe and limit the ability of investors to use the ETFs as core products. The only additional feature in all the investment manger's PAB ETFs are some constraints that keep the sector, rating and maturity profile within range of the broader market, as well as strict liquidity filters to ensure the ETF is cheap and efficient to trade.

High quality data: Data quality is one of the most important considerations in any ESG product, but this is particularly so for passive products, where rules are applied across a broad universe and there is no scope for manager intervention. The investment manager's current PAB ETFs use ESG and emissions data provided by ISS-ESG and MSCI.
The value of the approach was highlighted by some of the early investors in the investment manager's first PAB fund. For example, the combination of a simple methodology and the use of a highly regarded data provider allowed them to secure early investment from a major Scandinavian fund manager which had committed to aligning one of its equity fund ranges with Paris goals but had not yet found a suitable solution for its fixed income portfolio.

Stewardship: The investment manager took the unusual step of focusing their stewardship efforts on issuers that are excluded from the ETF. There are three reasons for this. First, as a bond holder, the manager does not have voting rights, so their ownership status is less important. Secondly, because of the limits on fossil fuel revenues in the PAB rules, their PAB ETF is underweight the energy sector. Many of the excluded energy companies are important bond issuers. In an ideal world, a core passive product would reflect the market. However, to qualify for the ETF, these issuers would need to adjust their revenue mix by focusing more on renewables. Finally, as a climate-focused ETF, it makes sense for climate to be the focus of their stewardship. The investment manager has joined the Institutional Investors Group on Climate Change and Climate Action 100+ (where many of the target companies are excluded from the ETF), becoming active participants in collaborative engagements and joining the engagement group of a major energy company that is an issuer of euro-denominated bonds.

What were the outcomes, benefits and challenges? And what are the next steps?

Outcomes:

- The ETFs create investments which offer a significant reduction in portfolio emissions. Investors can use them to reduce the emissions of their bond allocations by over 50% versus the broad market.
- The ETFs send a strong signal on climate and the importance of the Paris goals. In addition, the exclusion of fossil fuel companies by bond investors could begin to impact refinancing, particularly if it coincides with action on lending by banks.
- The ETFs contribute to the EU Taxonomy's do no significant harm criteria. The PAB rules stipulate that issuers violating global norms are excluded.
- The ETFs offer a diversified ETF with a clear risk profile compared with existing bond benchmarks.

Benefits:

Not all investors are ready or able to use specialist or impact-focused funds. These ETFs allow passive investors to move core bond allocations in a more climate-oriented direction, rather than waiting for more impactful but also potentially more complex and less diversified solutions. They use a regulator-defined methodology, providing reassurance for traditional benchmark investors. By applying the methodology without many additional features, the investment manager has created a replacement for existing core products. The liquidity offered by the ETFs means that they can also be used for tactical or short-term positions.

In an evolving market where there is no 'right answer', transparency is another benefit. The investment manager publishes detailed daily portfolio composition information. It also produces monthly emissions reporting and quarterly commentary, providing performance and carbon metrics but also highlighting relevant climate-related news, recent exclusions/inclusions and its stewardship activities.

The investment manager's range of Paris-aligned funds

	Ultrashort index	Investment-grade ETF	Global Fallen Angels ETF	High Yield ETF
Exchanges	[TBD]	Frankfurt, Milan, Zurich	LSE	Frankfurt, Milan, Zurich
Credit ratings	Investment grade (>BBB-)	Investment grade (>BBB-)	High yield, majority BB	High yield, all ratings
Maturity range	0-1 year	>1 year	>1 year	> 1 year
Average maturity (year)		4.81	5.70	3.55
Average duration	0.40	4.44	4.08	3.02
Current yield (gross)	4.20%	4.08%	8.45%	7.22%
Number of bonds	413	334	173	222
Number of issuers	277	147	88	132
Currency of bond holdings	Euro	Euro	USD, Euro, GBP +	Euro
Currency of fund	Euro	Euro	USD	Euro
Currency hedged share classes	Yes	Yes	Yes	Yes
Benchmark provider	Solactive	Solactive	Bloomberg	S&P/IHS Markit (iBoxx)

Challenges

Differences between data providers have been a major challenge. Even where underlying emissions data is similar, the choice of GHG metric (absolute emissions or intensity) and/or the calculation method can have a significant impact. An investor analysing one of the ETFs using a different data provider could get different and sometimes counterintuitive results. The investment manager works with its index providers to deliver a high level of transparency. The investment manager also works with other data providers to understand their methodologies and explain discrepancies to investors. Even in a passive product, ESG screening and the inclusion/exclusion of specific issuers can also raise questions. For example, ESG data providers have held differing views on VW and whether it should still be excluded for violation of UN Global Compact principles. This has led to many interesting discussions with investors. Again, transparency is key.

Next steps

The investment manager intends to launch more Paris-aligned/climate products and is gathering investor feedback to make ongoing improvements. As passive investors become more committed to climate issues, the manager expects to see greater flexibility on tracking error, and an acceptance that passive benchmarks should reflect the new economy rather than the old economy.

8.3 Introducing the “cash PAB”

EU climate transition and Paris-aligned benchmarks (CTBs and PABs) have become mainstream. Five years after the EU’s action plan and almost four years after Regulation (EU) 2019/2089 was published in the Official Journal, this statement sounds all-too sober to describe the achievement. By now, the product line-ups of all major asset managers’ and fund providers’ include at least one CTB- or PAB-linked products, available to both institutional clients and retail investors across all major financial markets. Even asset owner strategies have been influenced by the concept.

From an index provider’s perspective, this success is obviously reflected in the range of products we offer in the space. A more anecdotal yet striking piece of evidence is how EU climate benchmarks have dominated client discussions over several years – from early discussions and concerns around construction, to full-scale adoption of standard methodologies, differentiation through the inclusion of customised features and discussions around disclosure categories in the context of the Sustainable Finance Disclosure Regulation and Article 8/9 up- and downgrades. Over the past five years, these climate benchmarks have dominated discussions with our client base relative to other ESG benchmarks but also generally. It’s hard to think of any other product category with a similar track record. So, when we describe the benchmarks as mainstream, this hardly captures the scale at which they have influenced financial markets over the past years. Yet, we presume, this is exactly the description that lawmakers, members of the EU’s Technical Expert Group and others involved in their development were hoping for.

This raises the question: what comes next?

From our perspective, adoption so far is mainly characterised by the proliferation of CTBs and PABs across ‘standard universes', i.e., well-known broad market indices, covering various global and regional size segments of international financial markets, for both equities and fixed income. This is an expected first step for the CTB/PAB frameworks. When it comes to future use cases, other well-established frameworks that have been around in financial markets for a longer time give the investment manager some insights into the features needed to stand the test of time.

First, a framework must be flexible enough to be applied to many different universes. Here, think of smart beta approaches, e.g., weighting a portfolio equally or by inverse volatility, which are featured in vast amounts of investment products. These approaches are applied in large institutional portfolios and narrow thematic products alike. The limiting factor in this regard for CTBs and PABs is the size of the portfolio. Universes that are too small leave less breathing room for the optimisations that are required to achieve required decarbonisation outcomes. However, “too small” is a verdict that affects only a subset of all available, investable universe. In our view, there is still a lot of uncovered ground before we hit that wall for good.

Furthermore, frameworks and methodologies that can be applied in changing economic circumstances are much more likely to gain widespread adoption. Here, take factor investing, where specific drivers of return are targeted, which offers attractive opportunities in both bull and bear markets. One of our recent PAB products, developed in collaboration with another investment manager, demonstrates how EU climate benchmarks can tick both these boxes, ultimately setting them up for long-term adoption and success as a product category.

Against the backdrop of increasing interest rates around the globe, money market instruments have increased in attractiveness. At the time of writing, short-dated fixed income instruments are underrepresented in the CTB/PAB product universe, yet there is, from a first principles perspective, no reason why this should be the case. Therefore, we have developed an ISS Paris Aligned Select 0-1 Year Euro Corporate IG Index to provide investors access to money market instruments as a substitute for cash, while allowing them to reflect strong climate considerations in line with EU PAB requirements.

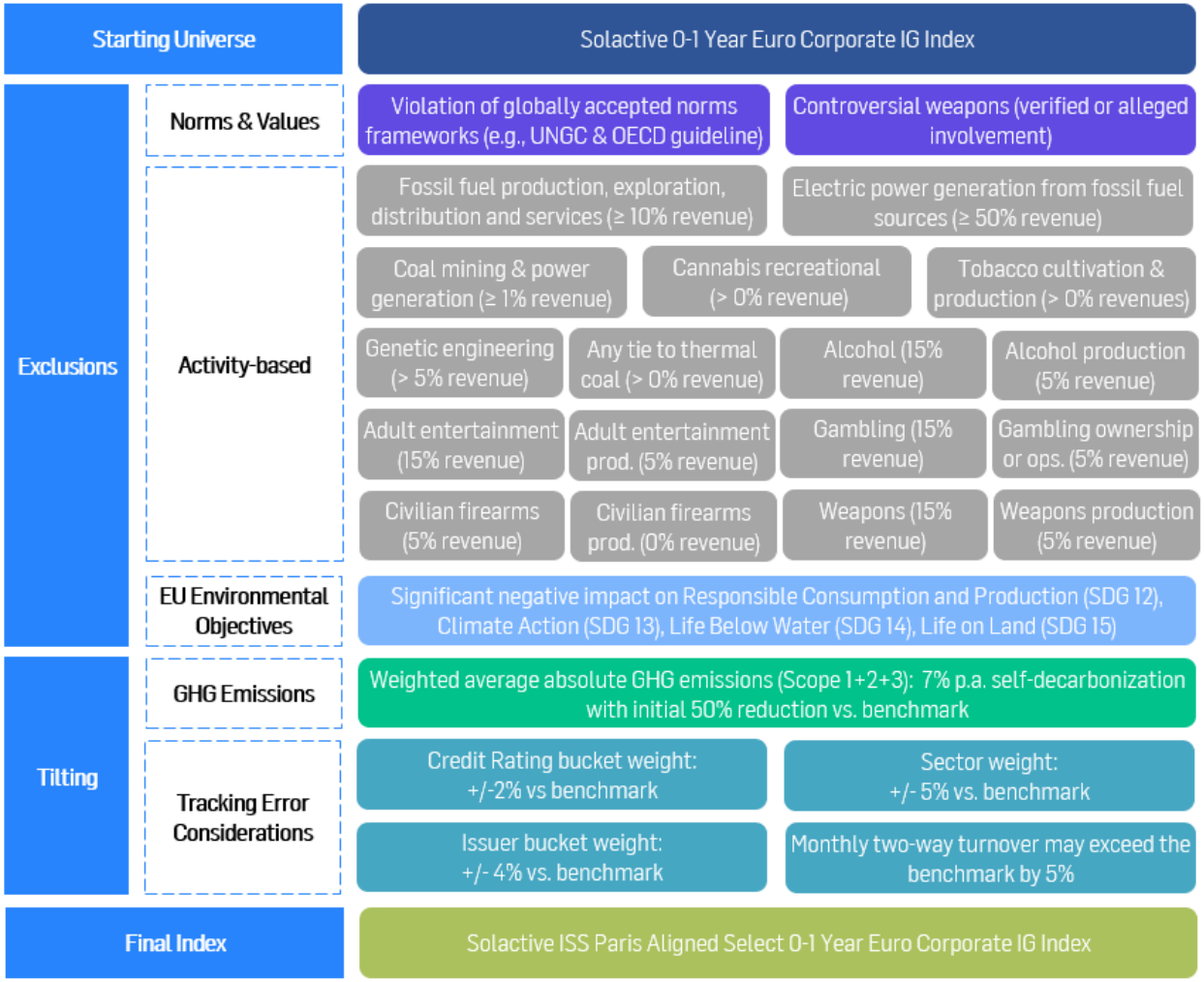


Figure 1: Construction methodology of the ISS Paris Aligned Select 0-1 Year Euro Corporate IG Index

The investable universe is a 0-1 Year Euro Corporate IG index that comprises euro-denominated investment-grade bonds with maturities of up to one year with minimum outstanding amounts of €500m.

The index includes an exclusion policy in line with the requirements of Article 12 of Commission Delegated Regulation (EU) 2020/1818, to exclude companies significantly harming EU environmental objectives. To do so, the methodology relies on a holistic assessment of companies' operations, based on the UN's Sustainable Development Goals (SDGs) instead of considering only controversies in relation to these EU objectives. Companies whose operations are found to have significant negative impact on SDGs 12, 13, 14, 15 are thus

excluded from the index. In conjunction with our client, we apply further activity-based exclusions barring companies with involvement in, *inter alia*, firearms, alcohol, cannabis or gambling from entry into the index.

Then, the index applies an optimisation mechanism that ensures compliance with the PAB's decarbonisation requirements while keeping the risk/return profile of the final index closely aligned with that of the benchmark. On the GHG emissions side, reduction targets are set based on absolute emissions as the metric of choice for fixed income indices and considers Scope 3 emissions from the start, rather than making use of the optional multi-year phase-in. The full methodology of the ISS Paris Aligned Select 0-1 Year Euro Corporate IG Index is shown in *Figure 1*.

As of 1 September 2023, the index includes 263 bonds, representing 65% of the instruments included in the parent universe, i.e., with 142 bonds excluded as part of the norms- and activity-related screens described above. The index features an average duration of 0.43 and an average yield of 4.27%, meeting its initial aim of providing a cash alternative and access to money market instruments for climate-aware investors.

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