Assessing net-zero metrics for financial institutions

Supporting the monitoring of financial institutions' commitments

OECD

Financial markets need clear information and credible metrics to inform climate-related investment and financing decisions. This report explores key challenges and opportunities related to the transparency, specificity and integrity of metrics to support the monitoring of financial institutions' net-zero commitments. It provides an assessment of metrics put forward in five voluntary frameworks, identifies the type of information and metrics proposed, their common themes and gaps, as well as limitations in underlying methodological guidance that may hinder financial institutions' ability to report and disclose metrics. The report highlights a need for continued efforts to develop robust metrics and incentivise improved data disclosure, as well as for international co-operation to reduce fragmentation and provide further transparency on the scope of metrics and underlying methodologies.

Cover: Surasak Suwanmake / Getty Images

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The report has benefited from review by the five voluntary framework providers covered by the analysis: the Glasgow Financial Alliance for Net Zero (GFANZ), the Institutional Investors Group on Climate Change (IIGCC), the International Financial Reporting Standards Foundation's International Sustainability Standards Board (IFRS ISSB), the Task Force on Climate-related Financial Disclosures (TCFD), the UN-convened Net-Zero Asset Owner Alliance (NZAOA). In particular, the authors are grateful for the valued engagement from Jesica Andrews (NZAOA); Alice Carr (GFANZ); Mara Childress (TCFD); Mahesh Roy (IIGCC); Mardi McBrian (IFRS ISSB).

The results and conclusions presented in the report, however, remain the responsibility of the authors and should not be interpreted as representing the views of the five framework providers and of their consulted representatives. Further, it is important to have in mind that the landscape of such frameworks and the guidance they provide is a rapidly evolving field, and is being updated with complementary and supplementary guidance. As such, the report is based on and reflects a snapshot as of the time of its publication.

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Abbreviations

AUM	Assets Under Management
CDM	Clean Development Mechanism
CMF	Committee on Financial Markets
CO_2	Carbon Dioxide
ECB	European Central Bank
EPOC	Environment Policy Committee
GHG	Greenhouse Gas
GFANZ	The Glasgow Financial Alliance for Net Zero
IFRS	International Financial Reporting Standards Foundation
ISSB	International Sustainability Standards Board
IIGCC	Institutional Investors Group on Climate Change
$MTCO_{2e}$	Metric Tons of Carbon Dioxide Equivalent
NZAOA	UN-convened Net-Zero Asset Owner Alliance
OECD	Organisation for Economic Co-operation and Development
PA	Paris Agreement
SFWG	G20 Sustainable Finance Working Group
TCFD	Task Force on Climate-related Financial Disclosures
TCO_2e	Tons of Carbon Dioxide Equivalent
UN	United Nations

Key findings

Context

Climate change and its impacts are accelerating. Now more than ever, ambitious and effective policy action to rapidly curb greenhouse gas (GHG) emissions and speed up an orderly climate transition is needed, as well as to address physical climate-related risks and impacts. While public policy remains central to increasing the overall feasibility and financial viability of climate action, the financial system and financial institutions can play a role in reallocating capital to invest in climate solutions and finance the climate transition. In this context, there needs to be clear information and metrics to both contribute to informing climate-related investment and financing decisions by financial institutions, as well as to assess and monitor their progress in implementing net-zero strategies and plans.

A clear set of comparable, credible and transparent metrics is needed to track progress on net-zero commitments by financial institutions. The development and adoption of net-zero commitments in the financial sector is increasing. In this context, this OECD report takes stock of current developments in guidance by prominent voluntary financial sector frameworks on information to be disclosed by financial institutions in relation to GHG emissions, portfolio composition, engagement, as well as strategy and governance. Such voluntary initiatives support actions by market participants and can help develop good practices to strengthen market practices and confidence, as well as contribute to policies and regulations that further support a low-emissions transition by encouraging greater environmental integrity, transparency, and accountability.

The analysis presented in this report assesses the metrics and methodologies put forward by five climate-related voluntary frameworks and the availability of the underlying data. Such analysis aims to improve knowledge on key issues that impact the credibility, integrity, and transparency of metrics to support the monitoring of financial institutions' net-zero commitments. To this end, the first part of the report identifies the type of information points and metrics proposed by the frameworks, their common themes as well as gaps in proposed metrics and underlying methodological guidance that may limit financial institutions' ability to calculate and disclose these. The second part of the report illustrates current data availability in relation to the metrics put forward by the frameworks. Examples are given, primarily for metrics relating to GHG emissions and portfolio composition, as the number of metrics relating to engagement, strategy and governance, as well as the corresponding data availability are much more limited. This part of the assessment further highlights where guidance may be unclear or lacking, which can negatively impact the scope and quality of data being disclosed about financial institutions, either through their own reporting or by third-party data providers.

Analytical considerations

Overall, while voluntary frameworks provide a valuable resource on the broad information to be disclosed by financial institutions, more could be done to outline a clear set of specific and credible metrics. For example, while the five frameworks put forward relevant information points to be disclosed by financial institutions, only around 30% of these overall correspond to a quantifiable metric that could be

monitored and compared over time. Indeed, many metrics do not express associated unit values or calculation methods. Further, while data is becoming more widely available with respect to GHG emission metrics, data availability remains limited and varies widely across individual financial institutions, portfolios and underlying asset classes.

While there are commonalities in the themes (sub-categories) covered by such frameworks, there is limited agreement on specific metrics with calculation methods to assess progress by financial institutions on their net-zero targets (see Table 1). On subcategory themes where metrics are proposed, there can be differences in metric names, units and underlying methodologies. Metrics on historic and current GHG emissions have the most consensus across major frameworks, but challenges remain on calculation methods, for example for financed emissions and targets.

Specific challenges and implications identified in the assessment include:

- **On aggregate, the current landscape shows a reliance on qualitative text-based information points rather than quantitative unit-based metrics**, leading to significant variations in disclosure and limited comparability across financial institutions.
- **When quantitative metrics are proposed, there is a lack of explicit guidance on underlying calculation methodologies**, which leaves much room for interpretation, hampers transparency, and can lead to unnecessary inconsistencies.
- **There is limited consistency in the language used to refer to the same information points and metrics** (most notably for categories beyond GHG emissions), therefore leading to incomparable disclosures across financial institutions and a need to interpret data.
- **The set of metrics proposed is not necessarily comprehensive**, with limited guidance on forward-looking elements and only broad information proposed, for example on carbon offsets, which results in gaps in evidence needed to assess the credibility and integrity of financial institutions' progress against their net-zero commitments.
- Notwithstanding gaps in metrics, the number and range of proposed metrics highlight the **relevance of relying on different types of complementary metrics, while limiting the disclosure burden**, especially for smaller financial institutions.
- **The lack of methodologically mature metrics, and consensus thereon, challenges metric prioritisation**, bringing a need for further work on methodological and metric development as well as analytical work and evidence to support such development.
- **There is little consideration on how to handle the necessary heterogeneity in the characteristics of interim and overall targets,** which could lead to trade-offs between the credibility of approaches and standardisation of GHG reduction and net-zero target metrics.
- **Overall, there are significant data gaps for proposed metrics**, which give rise to the use of varying estimation methodologies by third parties, thereby raising concerns in terms of both financial integrity and environmental integrity.

Frameworks are being or can be expected to be updated and further developed, including to provide more specificity on metrics and information proposed. Some frameworks can be considered more living documents with frequent updates and consultations, other frameworks may have longer revision periods. In addition, some frameworks build on others or interact with them, to cover different considerations for reporting and disclosure (notably TCFD, IFRS ISSB and GFANZ). Some of the inconsistencies and lack of specificity between frameworks can also be explained in part by the fact that the frameworks serve different purposes and were designed for different use cases and audiences. These differences in perspectives should be considered when interpreting guidance put forward in frameworks. Nevertheless, relevant stakeholders (including financial authorities, financial institutions, civil society, framework providers, and other market participants) should pursue efforts to support improved clarity, comparability, and credibility of net-zero metrics for financial institutions (Figure 1).

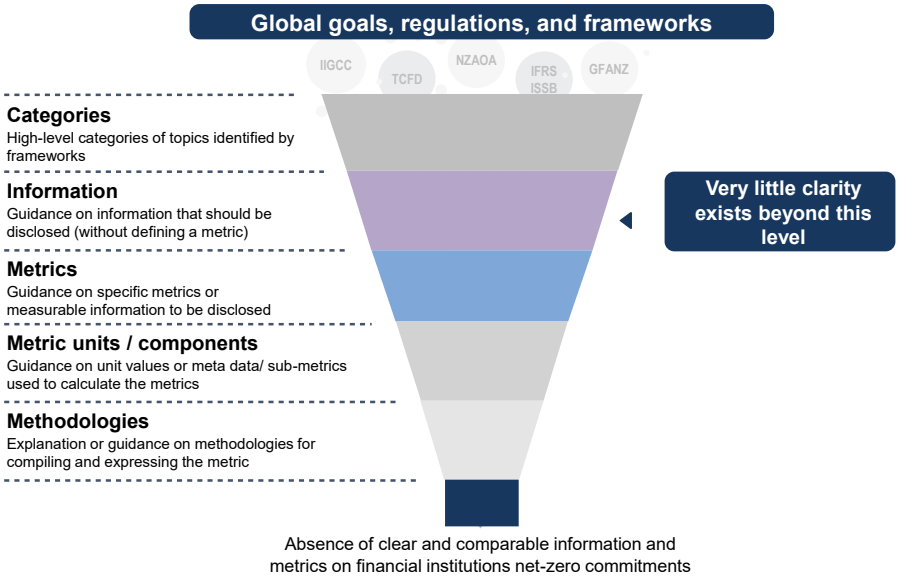
Table 1. Snapshot of metrics currently proposed by the five voluntary frameworks

- Consistent quantitative metric(s) across frameworks
- Quantitative metric(s) with partial consistency across frameworks
- Some quantitative metric(s) with partial consistency across frameworks
- Limited quantitative metrics(s) with limited consistency across frameworks
- No quantitative metric(s) proposed by the frameworks

GHG emission metrics	
Historic and current GHG emissions	
GHG emission targets (short, medium and long term)	
Alignment assessment with a benchmark, including the Paris Agreement	
Use of offsets as a stand-alone metric (current and future use)	
Portfolio composition metrics	
Portfolio share in low GHG assets and climate solutions	
Portfolio share in assets consistent with net zero, or with targets based on an alignment assessment	
Portfolio share in carbon-intensive assets and assets exposed to transition risks and phase-out	
Investment allocation practices driving GHG emission reductions	
Overall portfolio composition and sector coverage	
Engagement metrics	
General engagement/stewardship practices	
Voting procedures and practices	
Engagement escalation process	
Collaborations and alliance engagements	
Advocacy-based activities	
Strategy and governance metrics	
Remuneration linked to climate performance	
Management/Board oversight and accountability	
Integration of climate considerations in internal reporting and analytical processes	
Integration of climate considerations in strategic decision-making and investment strategies	
General strategy on climate goals and transition plans	

Note: Consistent quantitative metric(s) across frameworks means all 5 frameworks analysed in this report for a given category agree on (a) common quantitative metric(s) with the same calculation method(s). Quantitative metric(s) with partial consistency means that all frameworks propose quantitative metrics that overlap in naming and calculation method, but not all proposed metrics in the category are consistent in terms of calculation method. Some quantitative metric(s) with partial consistency means 3 to 4 frameworks propose (a) metric(s) in a given category, with some consistency in the naming of such metric(s). Limited quantitative metrics(s) with limited consistency means 1 or 2 frameworks propose (a) metric(s) with no or limited consideration for overlap in naming. No quantitative metric(s) means no framework proposes any metric.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-Zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

Figure 1. Further specificity is needed in guidance provided by frameworks to support clear and comparable net-zero metrics for financial institutions



Source: OECD authors' illustration.

Policy considerations

The challenges identified in the present analysis signal a need for both continued efforts to develop robust metrics and incentivise improved data disclosure, as well as for co-operation among relevant stakeholders to address fragmentation and provide further transparency on the scope of metrics and underlying methodologies. There is a need and benefit in having frameworks that speak to actors in different parts of the financial system, leading to legitimate differences in guidance to reflect the characteristics of various types of financial institutions or asset classes. Yet policymakers, market participants, and third parties may want to consider ways to address these challenges, including by:

- **Supporting the identification of pertinent sets of core yet complementary metrics** to credibly assess financial institutions' progress against their net-zero commitments;
- **Considering ways to address data gaps** by encouraging both the further development of quantitative metrics (including forward-looking metrics) and of data disclosures on such metrics;
- **Encouraging framework providers to more systematically and transparently define or refer to specific methodologies** for such metrics;
- **Enhancing coordination across providers of frameworks, methodologies and data** to improve comparability and transparency.

In doing so, relevant stakeholders should coordinate and work together where relevant to consider ways to fill such gaps and improve the comparability and completeness of metrics and data to assess progress on financial institutions' net-zero commitments. An important area of this will be to consider trade-offs between credibility and integrity on the one hand, and reporting burden on the other hand, in relation to data, metrics and policy considerations. Analytical and policy work by the OECD can contribute to international efforts in this area while ensuring synergies and complementarity with international initiatives on metrics and data for financial institutions. In particular, future work could focus on data analysis at an aggregate level across countries from third-party (commercial) data providers, with the objective of identifying data gaps, methodological approaches, and data restrictions. Broader OECD work will continue to assess metrics and methodologies needed to safeguard environmental integrity in the monitoring of financial institutions' net-zero commitments.

1 Development of net-zero metrics for the financial sector

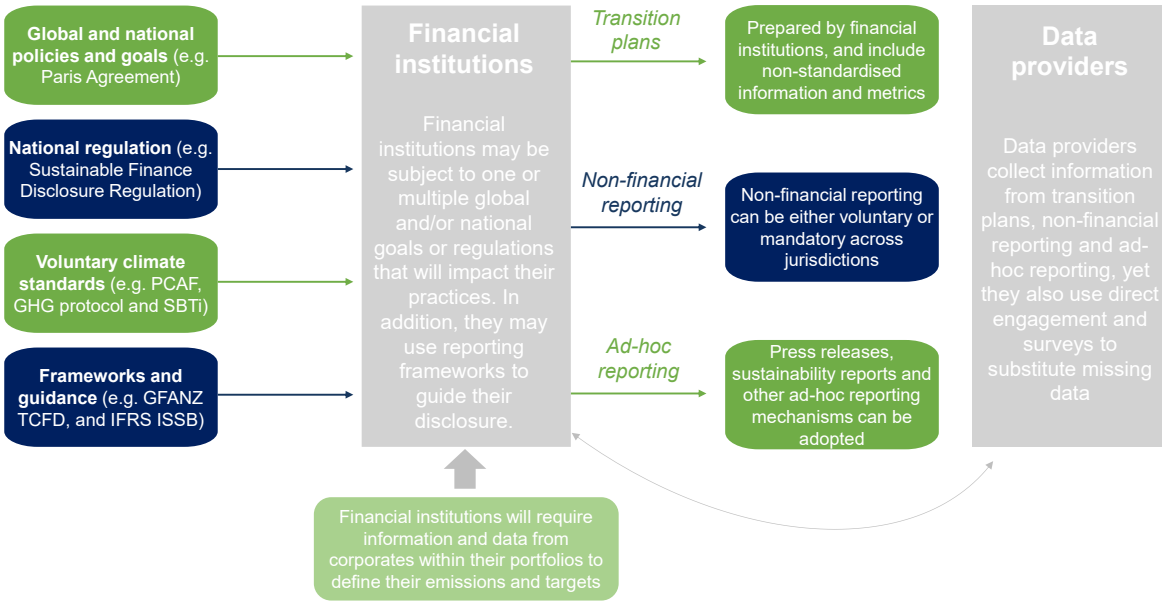
1.1. Rationale for the assessment

Recent momentum behind commitments made by governments and financial institutions on net zero[1] are encouraging. However, turning increased ambition into outcomes that ensure a transition towards net-zero GHG emissions in the real economy by 2050 as well as the necessary near-term actions remains a major challenge. Public policy instruments, including carbon pricing, have a primary role in establishing the conditions for and triggering emission reductions. Yet the financial system itself can play an important role in mobilising and reallocating capital to support climate change mitigation and building resilience to climate change impacts. In line with this, financial institutions have engaged in activities to address key questions relating to a net-zero transition, including the extent to which financial institutions are exposed to financial risks resulting from transition and physical climate-related risks; the extent to which systemic risks can be managed to ensure that losses are balanced with gains across the system; and the extent to which certain financial sector activities and/or assets within portfolios contribute or not to achieving the climate change mitigation and resilience goals.

As called for by the Paris Agreement (Article 2.1c), achieving climate policy goals is dependent on "making finance flows consistent with a pathway towards low greenhouse gas (GHG) emissions and climate-resilient development" (UNFCCC, 2015[6]). This implies both scaling up low-GHG emission assets and activities in financial markets, as well as embedding climate consistency considerations in all investment and financing decisions, which can drive capital away from non-consistent activities towards activities that support the transition towards low-GHG emissions. In turn, there needs to be clear and credible targets and transition plans by financial institutions, as well as metrics and data to support tracking and assessment over time. This has led to a complex landscape for financial institutions to navigate in setting their own climate change (and in turn net-zero) strategies and objectives, as well as associated transition targets. Figure 1.1 represents a simplified example of this, indicating the channels of external factors feeding into financial institutions' net-zero strategies, and highlighting the multiple channels by which they communicate these (along with concrete information and metrics) to data providers and the public.

1 There are varying definitions of net zero. This report refers to the following wording included in the Article 4.1 of the Paris Agreement adopted in 2015: "*aim to reach global peaking of greenhouse gas emissions as soon as possible" and "to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century*."

Figure 1.1. The landscape influencing net-zero metrics for financial institutions is complex



Note: There are a number of additional global goals, regulations and reporting frameworks, yet this infographic provides a simplified example.
Source: OECD authors' illustration.

Global goals relate to international commitments on climate change. These largely centre around individual net-zero commitments or the Paris Agreement, which was adopted in December 2015.[2] Clear policies and regulations will impact financial institutions, and these are developing in an increasing number of jurisdictions. These notably include mandatory and voluntary disclosure requirements for climate-related information, as well as considerations to make voluntary net-zero commitments public. For example, jurisdictions such as Canada, the European Union, and United Kingdom (among others) have mandated or are considering mandating the disclosure of climate-related information alongside financial disclosure.

There are also a growing number of civil society- and business-driven climate-related frameworks that put forward guidance or principles. In a number of cases, these frameworks set out practical guidance, which can include precise metrics and references to specific methodologies and reference points to address one or more of the practical steps needed to achieve certain standards and goals or targets. For instance, climate alignment assessment methodologies provide a detailed approach for calculating the degree of alignment or misalignment for a given type of asset or actor, sometimes detailed by sector.

Financial institutions will report and disclose information and metrics relating to their climate change strategies through different channels. These notably include transition plans, non-financial reporting (which can be subject to voluntary or mandatory requirements), and ad-hoc reporting. These are seldom standardised, with a range of formats for information and metrics, including different metrics covered and/or methodologies to define key climate objectives and targets. As a result, the G20 Sustainable Finance Working Group's (SFWG) 2022 Sustainable Finance Report calls for better disclosure of metrics in a consistent and comparable way to assess and monitor financial institutions' progress in implementing net-zero strategies and priorities, and calls on relevant organisations to support this (G20 SFWG, 2022[7])

[2] Its main elements are: a long term temperature goal: governments agreed to keep the increase in global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit it to 1.5 degrees; nationally-determined contributions: governments agreed to communicate their action plans every five years, with each plan setting more ambitious targets; a transparency framework: countries agreed to report to each other and the public on how well they are doing in reaching their targets, to ensure transparency and oversight.

(G20 SFWG, 2023[8]). Initiatives such as the Net-Zero Public Data Utility are undergoing efforts to provide harmonised data for around 400 corporates (financial and non-financial) that disclose publicly through CDP (NZPDU, 2023[9]).

This complex landscape of factors directly impacts the way in which financial institutions develop their net-zero strategies, as well as the subsequent information and data that financial institutions provide to market participants. As such, the wide range of approaches results in the fragmentation of information and metrics, which in turn impacts the ability of market participants and policymakers to track financial institutions' progress against their net-zero commitments, as well as assess credibility and integrity in this context. This fragmentation is a key motivation for this work.

Improved metrics and information would help inform actions by financial authorities, climate policymakers, market participants as well as framework, methodology and data providers to strengthen market practices and confidence by encouraging greater environmental integrity, transparency and accountability on the current products, practices and tools being used in financial markets. These actions are necessary to facilitate the reallocation of capital towards greener solutions, informing engagement practices towards investing in and financing the transition of economic activities towards low-GHG emission alternatives, while avoiding GHG lock-in and asset stranding. This report serves to support these efforts, based on an assessment of metrics put forward by voluntary climate-related frameworks, which have attracted participation by financial institutions and influenced their practices to date.

1.2. Scope of the assessment

The analysis covers five frameworks that have attracted significant participation by financial institutions and influenced their practices to date. The OECD deems these relevant due to the frequency to which they are cited in existing transition plans, and also as they aim to support objectives and commitments made by financial institutions. The frameworks included within this assessment are (see Background on frameworks included in the OECD assessment for additional background on frameworks):

- Institutional Investors Group on Climate Change (IIGCC, 2021[3]) Net Zero Investment Framework Implementation Guide,
- Task Force on Climate-related Financial Disclosures (TCFD, 2021[5]) report on Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures,
- UN-convened Net-Zero Asset Owner Alliance (NZAOA, 2023[4]) Target Setting Protocol (Third Edition),
- The Glasgow Financial Alliance for Net Zero (GFANZ, 2022[1]) Recommendations and Guidance on Financial Institution Net-Zero Transition Plans,
- International Financial Reporting Standards Foundation's International Sustainability Standards Board (IFRS ISSB, 2023[2]) Sustainability Disclosure Standards.

These frameworks have been developed with different audiences in mind, and with the objective to serve a range of purposes, from financial risk management to supporting a shift in investments to contribute to global net-zero goals. In practice, these differences include:

- The IIGCC framework (IIGCC, 2021[3]) aims to support asset owners and asset managers in shifting their investment strategy to meet the global goals on net-zero GHG emissions. Within the guidance, metrics largely cover GHG emission reduction targets and objectives, as well as strategic asset allocation, asset class alignment, policy advocacy and market engagement, governance, strategy and management.
- The TCFD was developed to support developers and users of financial disclosures, including financial institutions, to understand their exposure to climate-related risks. The framework (TCFD,

2021[10]) proposes both cross-sector and sector-specific metrics that cover a wide range of categories including GHG emissions, strategy and governance, engagement, portfolio, sub-portfolio targets and climate solution investment targets.

- The NZAOA framework (NZAOA, 2023[4]) addresses asset owners who have publicly committed to decarbonising their portfolios to meet global net-zero goals by 2050. The framework outlines metrics on GHG emissions, as well as on engagement, sector targets, climate solution investment targets and sub-portfolio targets. In addition, the framework proposes tailored metrics for specific economic sectors as well as specific asset types, notably corporates, with detailed methodologies and examples of how to calculate methodologies (where available).
- GFANZ (GFANZ, 2022[1]) builds on the TCFD to provide a framework for financial institutions to interpret the TCFD guidance. To this end, the framework proposes almost 30 qualitative and quantitative metrics that fall under three proposed categories: financed GHG emission reduction, real-economy transition metrics and net-zero transition plan implementation. While these metrics are applicable to all financial institutions,[3] GFANZ notes that its guidance is aimed at asset managers and asset owners.
- The IFRS ISSB was founded to set guidance to support disclosure on financial and non-financial management of sustainability-related risks and opportunities. The exposure draft documents and resulting framework (IFRS ISSB, 2023[2]) propose information to be disclosed on investment management, transition and physical risk exposure, as well as policies designed to incentivise responsible behaviour. For those in the financial sector, these are tailored to asset managers, investment banks and insurance institutions.

Many frameworks have been developed with the aim of being living documents that integrate international developments and updates that take into consideration the findings of working groups with specific stakeholders and financial institutions. In addition, a number of frameworks cross-reference metrics and methodologies used in others, as well as build on other frameworks (for example, parts of the GFANZ framework build on work and guidance by the TCFD).

Considering this, and the varying objectives of each framework, the OECD assessment does not intend to compare frameworks or make value judgements about one framework versus another, but rather aims to understand how the landscape of frameworks as a whole can support more complete, comparable and verifiable information on financial institutions' progress against their net-zero commitments.

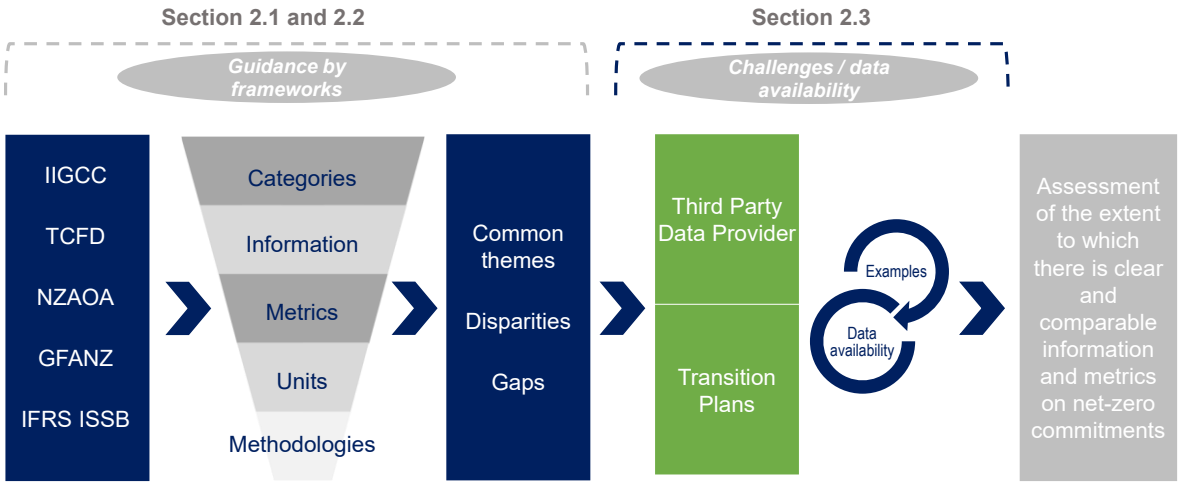
Section 2.1 and 2.2 provide an assessment of the information points and metrics put forward by frameworks, and try to understand commonalities, differences and gaps in proposed information and metrics that could be used to track and assess financial institutions' progress against their net-zero commitments (see Figure 1.2).[4] This includes an overview of information points and metric names, as well as whether unit values (or metadata) and methodologies are put forward to help financial institutions calculate these. Section 2.3 aims to better understand current data availability and understand the challenges that arise with respect to frameworks when data for metrics is analysed (see Figure 1.2). Examples are given for specific metrics, yet these largely centre on areas in which data availability is relatively better, such as on GHG emissions and portfolio composition. This part of the assessment also

[3] GFANZ does connect to different categories of financial institutions via the following sector-specific alliances, to which institutions previously signed on: Net-Zero Asset Owner Alliance, Net-Zero Asset Managers initiative, Paris Aligned Asset Owners, Net-Zero Banking Alliance, Net-Zero Insurance Alliance, Net-Zero Financial Service, Net-Zero Financial Service Providers Alliance, Net-Zero Investment Consultants Initiative and the Venture Climate Alliance.

[4] This work focuses on climate mitigation and transition rather than resilience to climate impacts and physical risks. Guidance on resilience-related metrics is currently limited and faces significant conceptual and technical challenges (Mullan and Ranger, 2022[40]).

highlights examples of where guidance may be unclear or lacking, which can impact the quality of the data being disclosed, and subsequently provided by third-party data providers.

Figure 1.2. The OECD provides an assessment of frameworks and then challenges and data availability



Source: OECD authors' illustration.

Box 1.1. Defining information points and metrics

This report classifies guidance by frameworks on information points and metrics using the following definitions:

- Information points are defined as general statements and guidance which can have different interpretations and implementations depending on the recipient. It would typically result in descriptive disclosure on actions taken by financial institutions as well as on institutional knowledge and practices.
- Metrics are defined as a more precise individual metric name or specific measure that leaves less room for different interpretations by a financial institution. It would typically measure actions and outcomes by financial institutions which would result in quantifiable disclosure or measurable qualitative disclosure (e.g., yes or no related binary data).

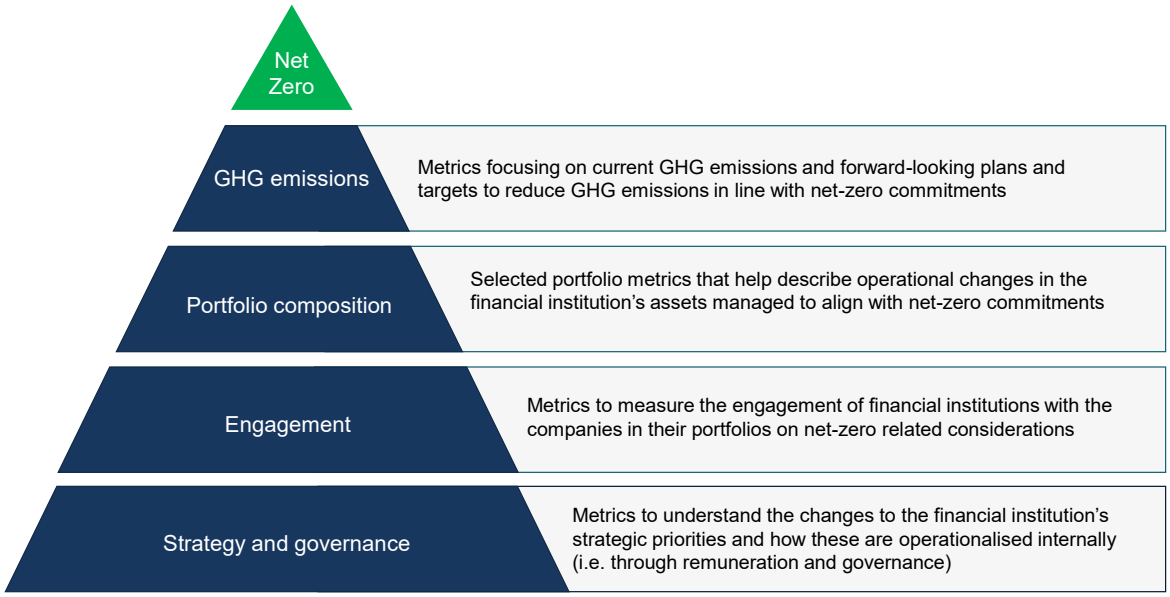
2 Assessment of information and metrics provided by frameworks

This section provides an overview of information points and metrics put forward by the five frameworks included in the assessment. This includes grouping information points and metrics and understanding the extent to which frameworks set out elements such as unit values and/or methodologies. The aim of this assessment is to identify whether there are commonalities, disparities or gaps with respect to metrics that could support an assessment of net-zero commitments by financial institutions.

The assessment across frameworks makes a distinction between proposed information points and metrics. The assessment refers to information when the framework provides a general statement that can have different interpretations and implementations depending on the recipient, in contrast to those where it is possible to indicate a precise individual metric name that leaves less room for different interpretations by a financial institution. Beyond this, considerations are given as to whether the framework states a unit value, calculation, or methodology in line with a specific metric.

This section begins by providing an overview of the broad categories of information and metrics set out in the selected frameworks, which can be summarised in the following four categories: GHG emissions, portfolio composition, engagement, and strategy and governance (Figure 2.1,Box 2.1).

Figure 2.1. Frameworks define information and metrics across four key categories



Source: OECD authors' illustration.

Box 2.1. Categories of information points and metrics identified throughout the assessment

Given the stages of assessment for progress over the short, medium and long term, four core categories of information points and metrics are identified:

- The **GHG emissions** category consists of information points and metrics designed to assess the change in gross and net emissions each year. Such metrics are in principle quantifiable and can help establish the baseline of progress toward interim and net-zero targets. The design of the metrics within this category is critical to ensure that the right incentives are set for the financial sector to contribute to reducing actual emissions in the real economy, in line with net-zero commitments or the Paris Agreement temperature goal.
- The **portfolio composition** category includes information points and metrics that serve to inform the changes in the financial institutions' investment or lending approach to reduce the GHG footprint and intensity of the portfolio, as a portion of new, lower-carbon investments and as lending/investment replaces legacy assets that are (presumably) higher in GHG emission intensity. As such, this category is useful to provide insight into how the composition of the portfolio proceeds over a medium-term investment horizon. Importantly, this category also addresses investments in climate solutions and activities enabling the climate transition that may not be captured by GHG-based metrics and assessments. This category could also include lending/investment changes (criteria, restrictions) by industry or asset class.
- The **engagement** category includes information points and metrics covering engagement with the economic actors underlying financial assets to reduce emissions. As such, this category captures: (i) strategies to facilitate the progress of borrowers and investees through incentives; and (ii) consequences for lack of progress toward decarbonisation, such as shareholder action, reduced capital, or higher cost of capital. In contrast, the portfolio composition category could affect portfolio rebalancing and composition (divesting, incremental new lending/investments in lower-GHG assets, transition and enabling activities, as well as climate solutions).
- The **strategy and governance** category includes information points and metrics that measure progress already made and internal changes to the financial institution's strategy, or operationalisation of the strategy. In this respect, incentive schemes and processes to incorporate climate transition into remuneration, decision-making and governance are key. Yet, capturing such changes through comparable metrics requires careful consideration. This category provides further insights into the potential for medium-term progress to be made.

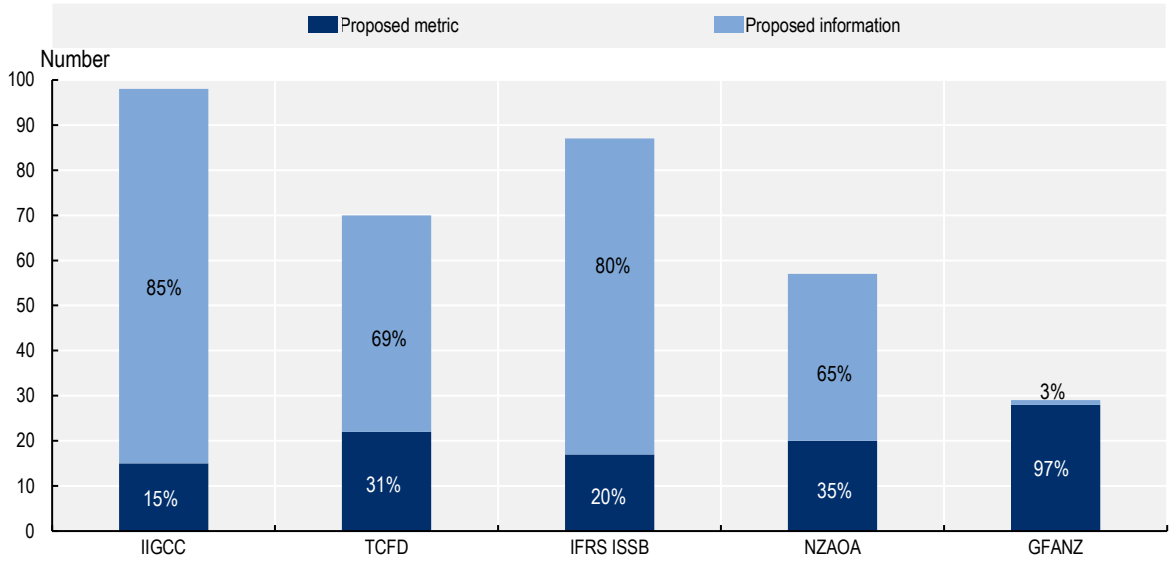
2.1. Overview of information points and metrics proposed by frameworks

2.1.1. Guidance for a range of information, but relatively fewer concrete metrics

The overview of the guidance put forward by the selected frameworks highlights a high amount of information points, with limited metrics defined (see Figure 2.2). While there is no optimal number of metrics, most frameworks currently appear to focus on covering a wide range of information.

Figure 2.2. Frameworks put forward guidance on information, yet fewer metrics are clearly defined

Proposed information points and metrics, number by framework



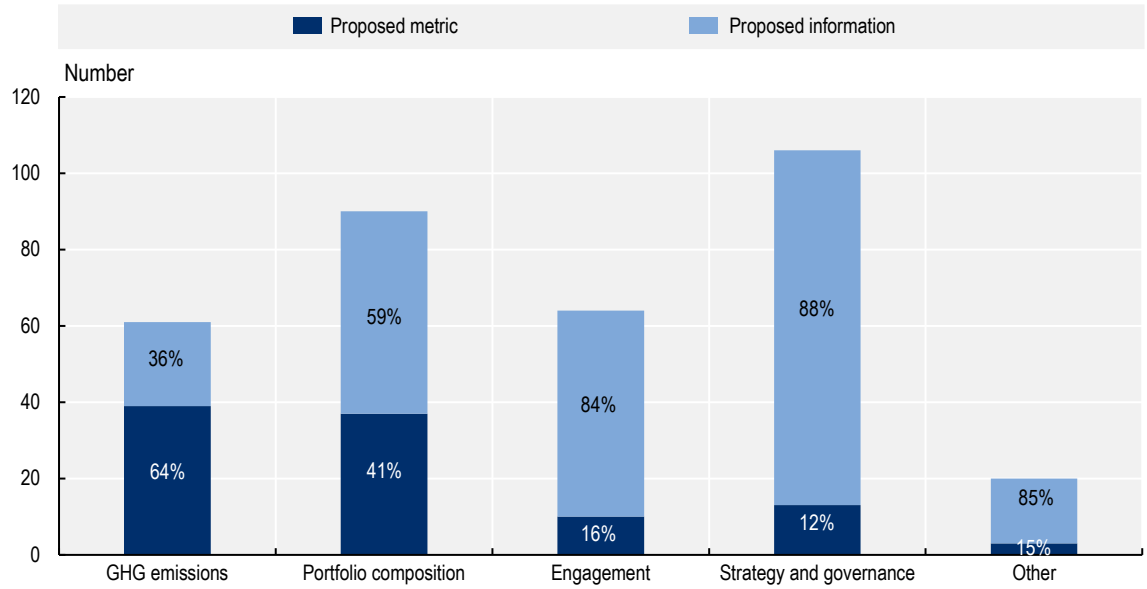
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-Zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures

The proposed information points and metrics generally fall into one of the four categories identified: GHG emissions, portfolio composition, engagement, and strategy and governance, with some information points and metrics falling into a category noted as other (see Figure 2.3). The GHG emissions category has the largest number of proposed metrics (39), followed by 37 on portfolio composition, 10 on engagement, 13 on strategy and governance, and 3 other respectively.[5]

[5] Given challenges around metric names and methodologies, this does not account for duplication across the frameworks for similar metrics.

Figure 2.3. The number of proposed information points and metrics differ across categories

Proposed information points and metrics by frameworks, number of metrics by category



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

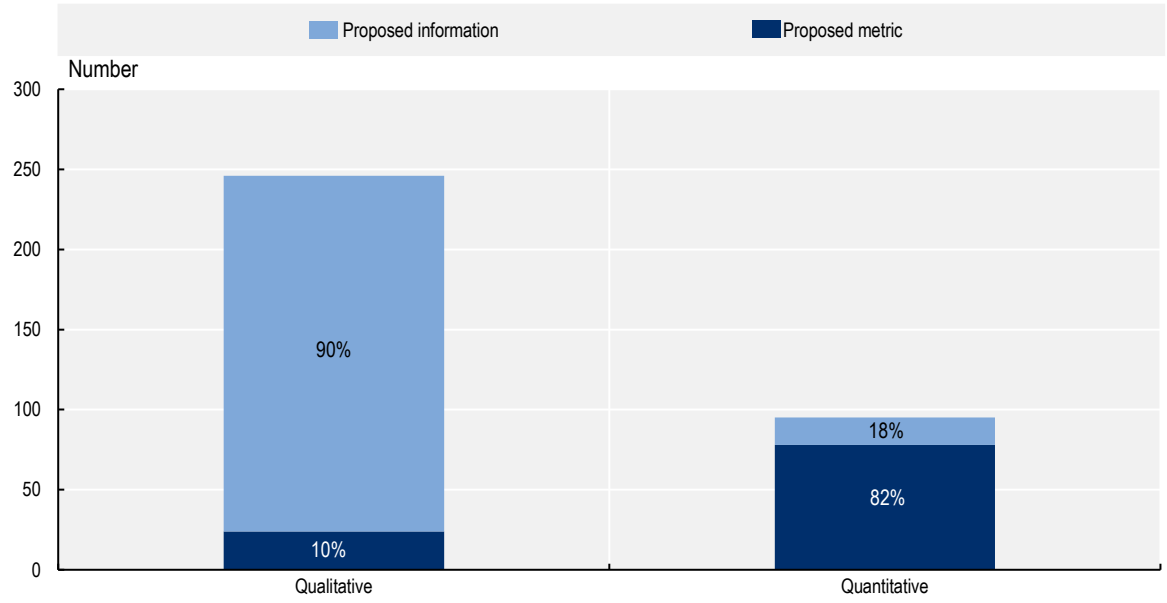
2.1.2. Qualitative text-based information points are more prominent than quantitative unit-based metrics

The vast majority of information points proposed by frameworks refer to qualitative information and guide financial institutions to outline the presence of policies. In some cases, these information points could be interpreted as having a binary yes or no response, which could be expressed in a numerical value, yet this is not always explicit in guidance by frameworks (see Figure 2.4).

Information points more commonly guide financial institutions to consider disclosing general information on their net-zero-related policies and practices. In some cases, these information points can be valuable in explaining how a certain metric is calculated or the underlying methodology used (including scenarios used to define targets). When metrics are defined, these are typically expressed in quantitative terms (see Figure 2.4), and mostly cover absolute values (emissions, currency, or number of policies), followed by percentages and intensities. A smaller number of metrics are expressed as indices or time unit values.

Figure 2.4. Qualitative text-based information points are more prominent than quantitative unit-based metrics

Proposed information points and metrics by frameworks, number by quantitative or qualitative

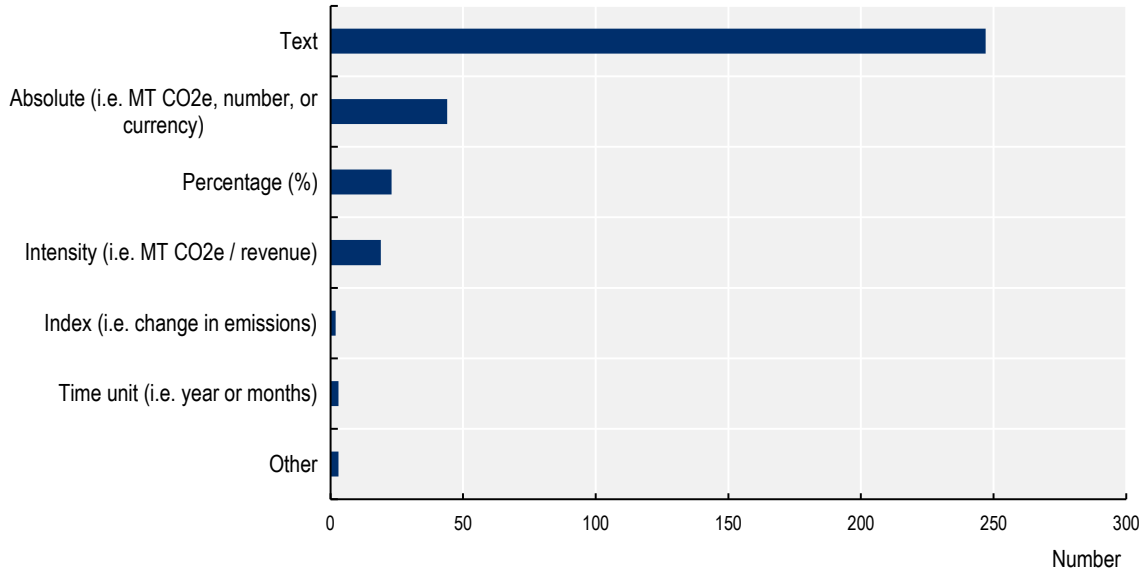


Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

The language used in frameworks implies that most information points should be disclosed using text (most notably an explanation of policies and practices), and the majority of metrics will have a unit value of measurement (see Figure 2.5). However, in some cases, metrics do not have a unit value of measurement proposed in the guidance, or measurement can be interpreted as a text-based (qualitative) response (i.e. a one-word response with multiple options). These types of metrics are most common in the engagement, strategy and governance categories.

Figure 2.5. Information points are largely text-based, while metrics typically have a unit value

Proposed information points and metrics by frameworks, number by unit value



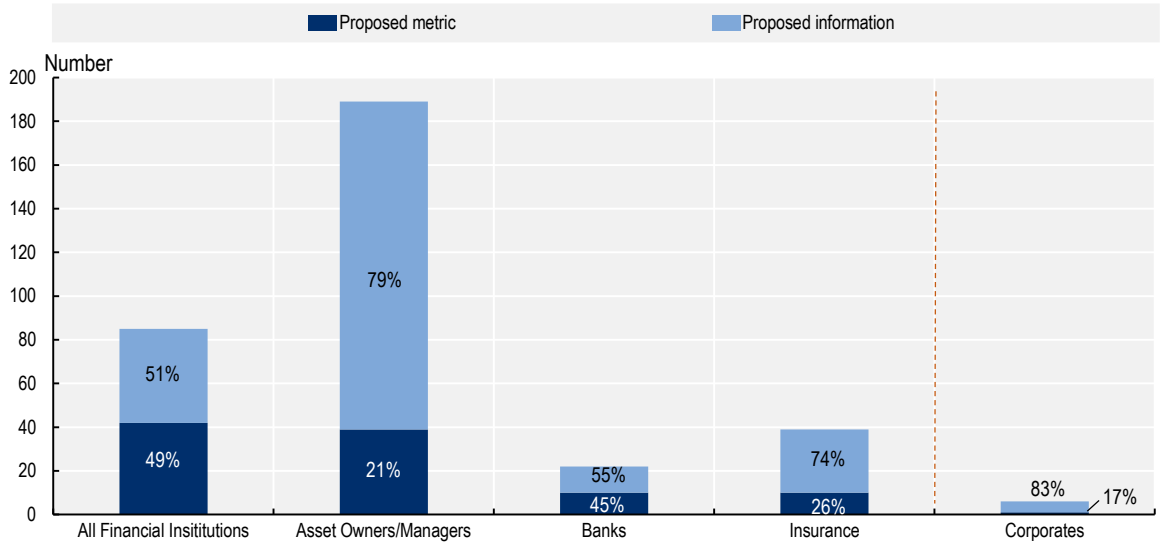
Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

2.1.3. There exists an uneven or relatively unspecified coverage of financial institutions and asset classes

While in some cases frameworks highlight information and metrics that are specific to certain types of financial institutions, frameworks are often more general and provide overall guidance to a range of financial institutions. In some cases, the frameworks also propose information points or metrics for non-financial corporates and sectors of relevance to financial institutions' portfolios (see Figure 2.6).

Figure 2.6. Frameworks address different audiences when outlining information points and metrics

Proposed information points and metrics by frameworks, number by audience type cited in the guidance

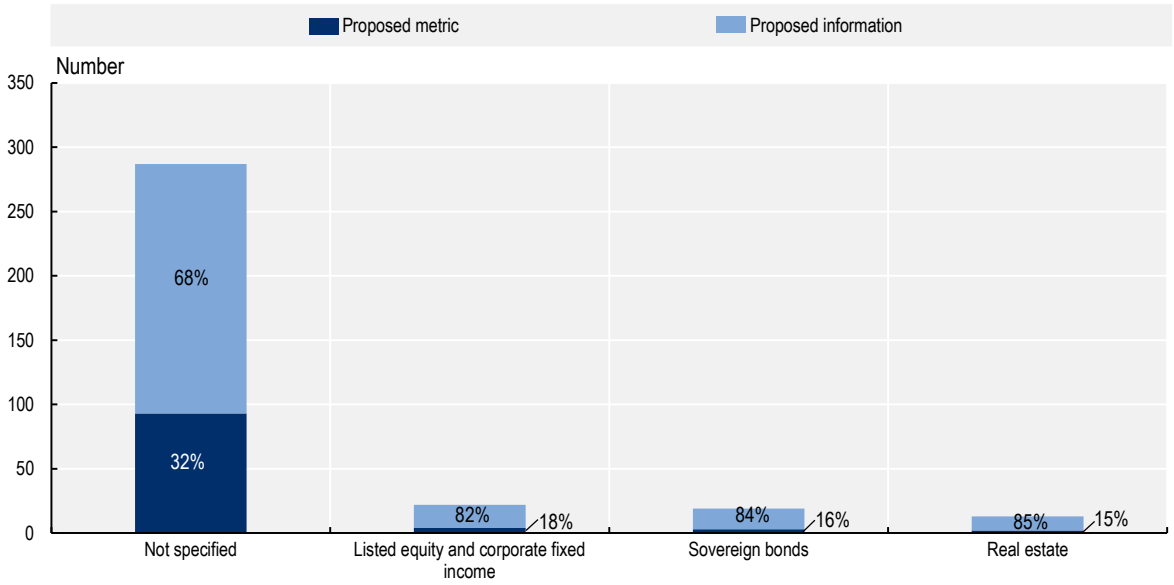


Note: Different frameworks refer to asset owners and asset managers in different ways, sometimes explicitly referring to them in their metrics and others only generally. In addition, some frameworks state that certain metrics only refer to an asset owner or asset manager, while others group these together. Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

The majority of information points and metrics proposed by frameworks do not specify a relevant asset class, thus lacking clarity in terms of both relevance to and coverage of the range of different asset classes found in financial institutions' portfolios (see Figure 2.7). In the few cases where an asset class is specified, it often refers to listed equities (which links to previous findings from (Noels and Jachnik, 2022[11])), and also to sovereign bonds or real estate asset classes.

Figure 2.7. Frameworks seldom specify an asset class for information points and metrics

Proposed information points and metrics by frameworks, number by relevant asset class



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

2.2. Assessment of information points and metrics across thematic categories

This section provides a more in-depth analysis of proposed information points and metrics for each of the four thematic categories defined in Figure 2.1 and Box 1.1 (GHG emissions, portfolio composition, engagement, and strategy and governance). For each category, information and metrics are grouped according to common dimensions and sub-categories. Where applicable, proposed metrics are assessed based on their level of specificity in terms of unit type and methodologies. This section also references existing sustainable finance and climate policy literature to highlight limitations, challenges and opportunities for proposed metrics.

2.2.1. Proposed GHG emission information points and metrics

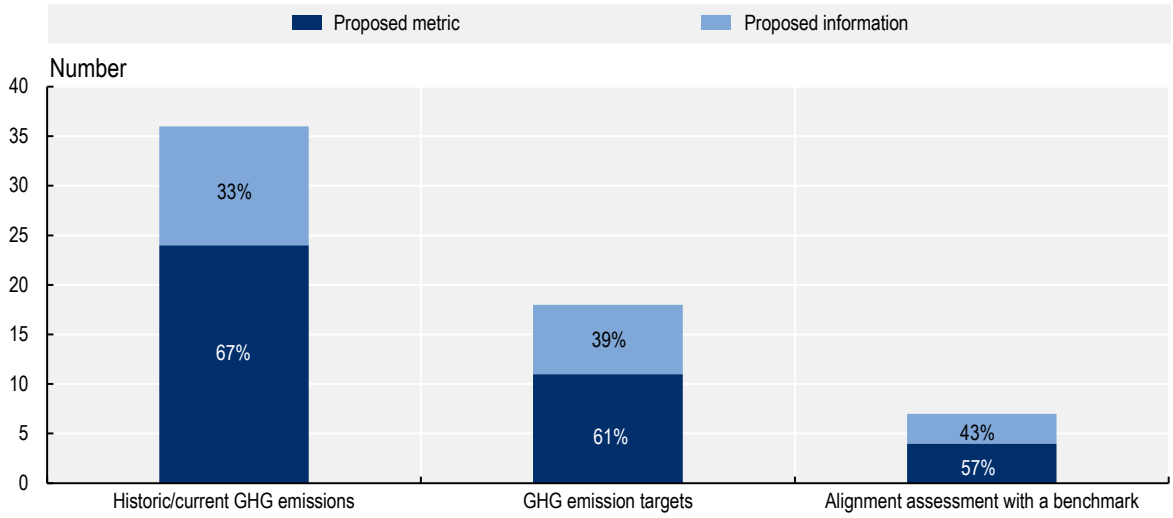
GHG emission information points and metrics serve to capture progress on decarbonisation efforts, which in principle reflect the impact on real-economy GHG emissions of input actions in terms of portfolio management, engagement and strategy. The frameworks largely propose information points in the form of recommendations and suggested actions to meet GHG emission goals in line with defined net-zero commitments. The proposed information points and metrics assessed can be grouped into three sub-categories that:

- Outline historic or current GHG emissions;
- Define GHG emission targets (short, medium, and long term); and
- Support an alignment assessment in line with net zero or a recognised benchmark (including the Paris Agreement)

The majority of proposed metrics fall into the historic or current GHG emissions subcategory, with the GHG emission targets, and to greater extent the alignment assessments sub-categories, being less prominent overall (see Figure 2.8). Although international guidance relating to scope 1, 2 and 3 emissions (e.g. (World Resources Institute & World Business Council for Sustainable Development, 2004[12])) and target setting (e.g. (SBTi, 2020[13])) have helped bring clarity to metrics in this area, this assessment indicates that there are still differences in the names of metrics or ways in which they are expressed in frameworks, as well as unit values or underlying methodology suggested for calculating metrics. As highlighted in previous OECD analysis, inconsistencies are even more acute for alignment assessment-related metrics, owing to their complexity and design choices (Noels and Jachnik, 2022[11]).

Figure 2.8 Frameworks propose various types of GHG emission information points and metrics

Proposed information points and metrics by frameworks, number by GHG emission performance sub-categories



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

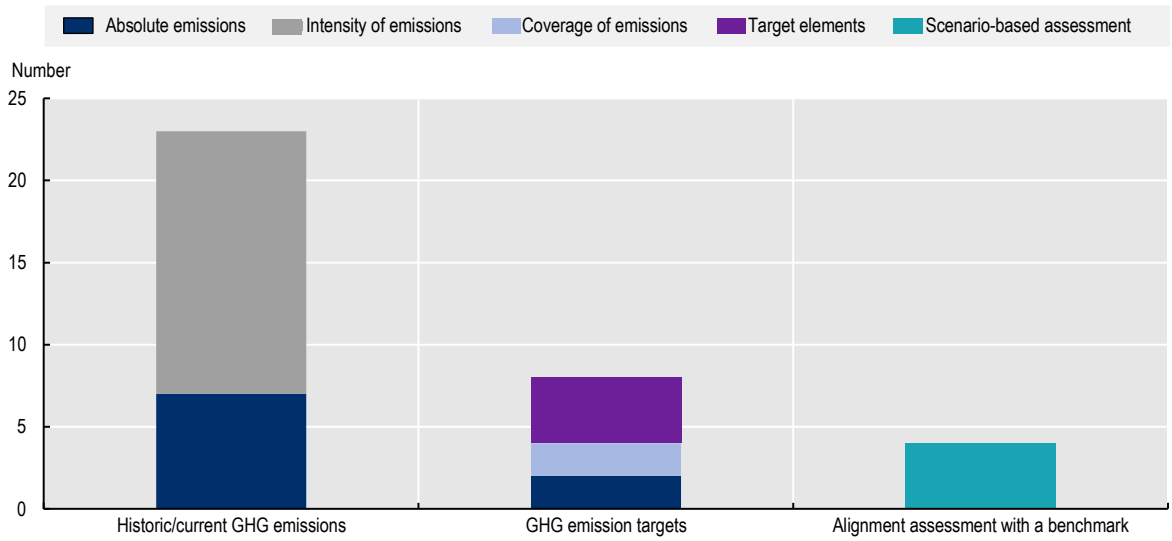
The metrics proposed by frameworks to assess GHG emission performance of financial institutions can highlight different aspects of GHG emission performance or be defined for different portfolio segments or types of financial institutions. Variations in such metrics can serve a range of purposes and be complementary in providing a more holistic view of GHG emission performance. However, metrics and differing units of measure mean that they remain complex to compare. In order for results to be actually comparable, methodologies and units used should be clearly stated. Examples of such metrics are as follows:

- **Absolute emissions**: Metrics that indicate the total amount of emitted GHG emissions within a specific time range covering scope 1, 2 and 3 (including financed emissions). These metrics are represented through tCO_2e (tonnes of carbon dioxide equivalent) as a unit of measurement, however the collection and calculation of these can differ.
- **Intensity of emissions**: Metrics that measure emissions relative to another factor. For example, the measurement of emissions relative to the units of production output or revenue, covering scope 1, 2, and 3. Such metrics are often sector specific.

- **Coverage of emissions**: Metrics of this kind could include a percentage amount of the portfolio covered by metrics on actual GHG emissions and GHG emission targets, as well as relate to the extent to which the different asset classes within the financial institutions' portfolio are covered or not.
- **Target elements:** Metrics that define the different elements of targets, including overall or interim target amounts, baseline or reference years, as well as time frames, within which the decarbonisation goals and interim targets are expected to be accomplished**.**
- **Alignment approach or assessment against a scenario**: Metrics that aim to analyse alignment with net-zero targets or the Paris Agreement temperature goal, or with net-zero pathways for specific sectors or geographies. There are ongoing discussions at an international level with respect to such metrics, and they are currently based on complex methodologies that involve a range of design choices and assumptions (Noels and Jachnik, 2022[11]).

Figure 2.9. Proposed metrics measure various aspects of GHG emission performance

Proposed metrics by frameworks, number by GHG emission performance sub-categories and metric component



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

Different types of GHG emission metrics take different perspectives that each have advantages and disadvantages (see Table 2.1). For example, contractions in absolute GHG emissions by financial institutions typically link back to progress towards climate transition in the real economy as a result of investment decisions and through engagement strategies by financial institutions. GHG emission intensities instead reflect GHG performance and efficiency improvements regardless of entity size. This means that improvements in GHG emissions based on intensity-based metrics could be attributed to either actual environmental improvements of the assessed institution, or mere changes in the turnover/returns of an institution.

Table 2.1. Overview of GHG performance metrics for underlying financial assets

	Advantages	Disadvantages	Data needs	Data availability
AEC: Absolute Emissions Contraction *(Difference in GHG emissions)*	• Is a less complex metric • Is a less data intensive metric • Can be applied to all asset classes • Relates more to the remaining carbon budget and climate impacts of cumulative carbon emissions • Could initially incentivise efficiency improvements and substitution of higher emitting products or technologies with lower-emitting alternatives	• Could reflect decreased output rather than improved performance • Could disincentivise business growth, even for activities with a better climate performance. This particularly affects start-ups and young companies, or those that have already made a significant improvement previously	Low	High
SDA: Sectoral Decarbonisation Approach *(GHG emissions divided by physical output)*	• Reflects GHG performance and efficiency improvements regardless of entity size, business growth and price changes • Applies to homogenous sectors, companies and asset classes • Incentivises both efficiency improvements and growth into or expansion of lower-emitting products or technologies	• Is more data-intensive • Is difficult to apply to companies with diverse activities and in heterogeneous sectors • Absolute emissions could still increase while intensity-based climate performance improves • Difficult to compare across sectors	High	Low
EIC: Economic Intensity Contraction *(GHG emissions divided by economic output)*	• Reflects GHG performance and efficiency improvements regardless of entity size • Applies to non-homogenous sectors and companies • Understood more easily by investor audience due to economic/financial denominator • Relates more closely the decoupling between emissions and the economy • Incentivises both efficiency improvements and growth into or expansion of lower-emitting products or technologies	• Is sensitive to volatility in macroeconomic conditions making it difficult to track true changes in GHG performance • Absolute emissions could still increase while intensity-based climate performance improves • Assessing the PA consistency of projections for economic denominators (e.g. GDP) is difficult	Medium	Medium

Note: Data needs refers to both needs on corporate GHG emissions data and other corporate output data such as production volumes, value added or financial performance. Data availability is generally higher for listed than unlisted companies, however, the relative availability remains the same.
Source: Noels and Jachnik, (2022[11]), Assessing the climate consistency of finance: Taking stock of methodologies and their links to climate mitigation policy objectives

Box 2.2. Financed emissions: Definition, use in the financial sector, and risks

For financial institutions, scope 3 GHG emissions are typically referred to as "financed emissions" due to the nature of their business model. Financed emissions represent almost all of financial institutions' total GHG emissions, i.e. financial institutions' scope 1 and 2 emissions are typically a small share of their total GHG emissions. For this reason, scope 3 data is fundamental to measuring a financial institution's performance. Nevertheless, measuring and disclosing financed emissions accurately presents several difficulties due to the complex nature of these emissions, as well as the lack of direct control that financial institutions may have over them.

Two main approaches exist on GHG emissions accounting resulting from investment activities: the GHG Protocol, and the Partnership for Carbon Accounting Financials (PCAF). While the former more generally focuses on scope 3 emissions categorised by equity or debt investments, the latter provides a more detailed breakdown by seven asset classes. PCAF's work, using the GHG Accounting and Reporting Standard as a basis, is comprised of three parts, including financed emissions, facilitated emissions and insurance-associated emissions.

While a host of frameworks and emerging approaches exist, there is currently no universally accepted standard for measuring and reporting scope 3 financed emissions, leading to a number of challenges:

First, existing guidance's differences can lead to the use of disparate underlying methodologies by financial institutions to calculate financed emissions. More harmonised guidance on financed emissions metrics could facilitate quality disclosure and ensure greater comparability, as well as address differences in high-level elements when metrics intend to measure the same information.

Second, there are data gaps and divergence for scope 1, 2 and 3 GHG emissions, which can in some cases give rise to the use of heterogeneous estimation methodologies by third parties. Clarity and transparency on methodologies should be used to calculate financed emissions metrics, where relevant.

Third, uncertainties remain around the comparability and accuracy of available data, affecting its robustness and usefulness for market participants, particularly where national authorities are considering voluntary and mandatory disclosure requirements. Available public data is not necessarily comparable across financial institutions, and questions also remain on the transparency and usefulness of available data. In addition, the low coverage of scope 1 and 2 emissions for listed companies, as well as changes in disclosure practices over time have affected the quality and accuracy of available data.

Inaccurate data on scope 3 emissions can mislead market participants and may hinder the effective assessment of a financial institution's performance, given that market participants typically look at overall emissions (scope 1, 2 and 3). Therefore, a lack of scope 3 data would affect general comparisons, not only detailed ones. Improved metrics and information on financed emissions would help inform actions by financial institutions and help strengthen market practices, confidence and integrity by encouraging greater transparency on how strategies can be translated into actions that lead to reduced emissions over time.

Source: PCAF, (2019[14]), *The Global GHG Accounting and Reporting Standard for the Financial Industry*, https://carbonaccountingfinancials.com/standard; CDP, (2022[15]), *CDP Technical Note: Relevance of Scope 3 Categories*, https://www.tcfdhub.org/resource/cdp-technical-note-relevance-of-scope-3-categories-by-sector; MSCI ESG Research, (2022[16]), *Reported Emission Footprints: The Challenge is Real*, https://www.msci.com/www/blog-posts/reported-emission-footprints/03060866159

Box 2.3. Climate change mitigation scenarios and their use in the financial sector

Climate change mitigation scenarios translate temperature and emissions goals (such as 1.5°C end-of-century global temperature increase, and net-zero global CO_2 emissions by 2050) into possible decarbonisation pathways. Different scenarios can explore different mitigation policies and decarbonisation strategies resulting in different possible pathways. Such pathways can then be used as a reference on the transformations different economic activities would (need to) undergo to reach a given climate ambition.

Scenario analysis is a key forward-looking analysis tool for the financial sector to evaluate potential transformations of and risks to financial institutions and the financial system as a whole. Financial sector participants and other relevant stakeholders are increasingly relying on climate change mitigation scenarios to assess the potential impact of the climate transition on their activities. They also use climate change mitigation scenarios to set climate-related targets, develop climate transition plans and design metrics to assess progress and alignment with climate change mitigation policy goals (Noels et al., 2023[17]). For example, climate alignment assessments compare the climate performance of financial assets against a scenario pathway, such as the International Energy Agency and NGFS climate scenarios.

The choice of scenario and its characteristics have a significant influence on the results of climate-related metrics and analyses in the financial sector. Consequently, inaccurate use of scenarios can contribute significantly to environmental integrity concerns and greenwashing risks in methodologies and metrics used to assess and report the climate change mitigation performance of the financial sector.

Current challenges to the use of mitigation scenarios in the financial sector include (1) few of the scenarios frequently used in the financial sector can be considered as consistent with stringent interpretations of the Paris Agreement, (2) current limited geographical and sectoral granularity requires financial market participants to make significant assumptions to downscale available scenario output data, and (3) users do not always have sufficient information on uncertainties relating to scenario assumptions and feasibility. By bridging potential information and coordination gaps among scenario providers, relevant stakeholders can support action to enhance the use and design of climate change mitigation scenarios for climate-related analyses in the financial sector (Noels et al., 2023[17]).

Source: SBTi, (2020[13]), *Science-Based Target Setting Manual Version 4.1*, https://sciencebasedtargets.org/resources/legacy/2017/04/SBTi-manual.pdf; OECD (2022[18]), *Guidance on Transition Finance: Ensuring Credibility of Corporate Climate Transition Plans*, https://doi.org/10.1787/7c68a1ee-en; Noels and Jachnik, (2022[11]), *Assessing the climate consistency of finance: Taking stock of methodologies and their links to climate mitigation policy objectives*, https://10.1787/d12005e7-en; NGFS, (2022[19]), NGFS Scenarios for central banks and supervisors, https://www.ngfs.net/ngfs-scenarios-portal/

While several frameworks propose metrics on scope 3 emissions, few are specific on financed emissions (expressed as category 15 of scope 3 emissions). Frameworks acknowledge that absolute and intensity metrics should encompass the full array of scope 3 emissions, including emissions resulting from a financial institution's investments and loans – otherwise known as 'financed emissions' (World Resources Institute & World Business Council for Sustainable Development, 2004[12]). Nevertheless, as acknowledged in some frameworks and in documentation by the GHG Protocol, measuring financed emissions accurately implies additional and robust methodologies for apportioning emissions from the underlying investees and borrowers (PCAF, 2019[14]).

Climate-alignment metrics are typically expressed as 'aligned' or 'not aligned' with a certain climate change mitigation scenario (see Box 2.3). In many cases, a specific implied temperature degree is calculated on that basis. Such metrics follow a climate-alignment assessment methodology that compares

the current climate target disclosed by the financial firm or underlying economic actor to the required performance level of a climate change mitigation scenario pathway (Noels and Jachnik, 2022[11]). The distance of the target to the climate scenario defines the implied temperature degree. Hence, this metric is sensitive to the choice of scenario, thereby highlighting the need for deeper understanding by financial market participants of the underlying assumptions as well as of uncertainties (Noels et al., 2023[17]).

While the use of carbon offsets[6] is mentioned in a number of frameworks, with one requesting explicit information, there are no clear and dedicated quantitative metrics proposed to measure the use of offsets.[7] Moreover, there is limited clarity as to good practices in how these should be reported and monitored. Ensuring that any use of carbon offsets is supported and limited by up-to-date climate science will be relevant along with having any use of such expressed in a clear unit value. Ideally both USD amount and GHG emission reductions (specifically CO_2 equivalent in tonnes, tCO_2e) should be reported, separately from net and gross GHG emission metrics for clarity and transparency.

Climate science literature treats offsets with clear caution, highlighting the risk that their aggregate use could pose to delaying or replacing of actual GHG emission reductions, as well as in relation to their environmental integrity (see Box 2.4). Therefore, transparency and accurate information on their use will be relevant to ensure that their use contributes to GHG emission reduction efforts, and to cover areas of relevance such as the extent to which carbon offsets represent a certain share of a target, and reductions over time and in the context of a financial institution's net-zero trajectory.

[6] Carbon credits are a broader concept which can be used for offsetting, among other things. In the financial sector, the most relevant form of carbon credits are carbon offsets. Hence, this study mainly refers to the latter.

[7] A number of frameworks note that carbon offsets should not be used in the short term as a net-zero strategy, however there is limited to no guidance in frameworks as to how the use of offsets should be considered in the medium to long term.

Box 2.4. Carbon offsetting: Definition, use in the financial sector, and risks

Carbon offsets typically refer to tradable 'rights' or certificates linked to activities that lower the amount of carbon dioxide (CO_2) in the atmosphere. By buying these certificates, a person, corporate or financial institution can fund projects that reduce GHG emissions, instead of taking actions to lower their own emissions. In theory, the certificates "offset" the buyer's GHG emissions with an equal amount of GHG reductions somewhere else. However, the three largest carbon credit ratings agencies estimate that around half of carbon credit-generating projects are of low quality. This means there is a substantial risk that carbon credits from these activities may not reduce or remove the equivalent amount of CO_2 (Wetterberg and Ellis, Forthcoming[20]).

In the context of supporting the tracking of net-zero commitments by financial institutions, it is important to have clear and comparable information not only on the use of carbon offsets, but also the extent to which the purchase of such relates to a credible, sustained and additional reduction in GHG emissions. In addition, considerations with respect to how such offsets should be used is important, which may differ by sector depending on the emissions intensity and/ or access to technology alternatives.

Carbon offset projects are typically grouped into four categories: (i) forestry and conservation (such as mangrove protection, reforestation, re-wilding, as well as technology for forestry); (ii) community based projects (such as solar cookstove, water and sanitation projects on a small scale); (iii) renewable energy (such as hydroelectric, wind, and photovoltaic solar renewable energy, solar hot water, and biomass power), and; (iv) waste to energy or carbon capture (such as biomass, methane or other carbon storage and carbon capture).

While carbon offsets may play a role in the achievement of net-zero commitments by a range of actors by 2050, recent climate science and literature treats offsets with clear caution, notably in terms of the risk they could pose of delaying or replacing actual GHG reductions, as well as in relation to their environmental integrity and additionally.

In the achievement of net-zero commitments, it will be important to understand the questions that arise around the integrity and additionality of offsets. For example, over half of the carbon offsets allocated in the Clean Development Mechanism (CDM) went to projects that would very likely have been developed anyway, i.e., lack of additionality (MIT, 2022[21]). Further, the subsequent sale of offsets in the CDM may in fact have significantly increased global emissions.

Source: MIT, (2022[21]), *Explainer: Carbon Offsets*, https://climate.mit.edu/explainers/carbon-offsets; Fankhauser et al., (2021[22]), *The meaning of net zero and how to get it right*, https://10.1038/s41558-021-01245-w; Calel et al., (2021[23]), *Do carbon offsets offset carbon?*, https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2021/11/working-paper-371-Calel-et-al..pdf,; Wetterberg and Ellis, (Forthcoming[20]), *The interplay between voluntary and compliance carbon markets: Implications for environmental integrity and government engagement*

The frameworks also propose metrics to clarify the coverage of GHG emission metrics, such as 'business activities in scope (sectors and/or lines of business) of GHG emission reduction target' and 'percentage of total assets under management (AUM) included in the financed emissions calculation'. Such metadata-type metrics could be extended to also identify the methodology and calculation approach used for any given metrics among other things. Clarifying the coverage and other metadata of metrics is needed to understand differences in metric values that are purely due to practical differences.

2.2.2. *Proposed portfolio composition information points and metrics*

The portfolio composition category serves to track the changes in a financial institution's investment or lending approach to change the composition of the portfolio. While frameworks propose several portfolio

composition metrics, they propose even more text-based information points with little or no overlap in naming, with a potential of overburdening for reporting institutions.

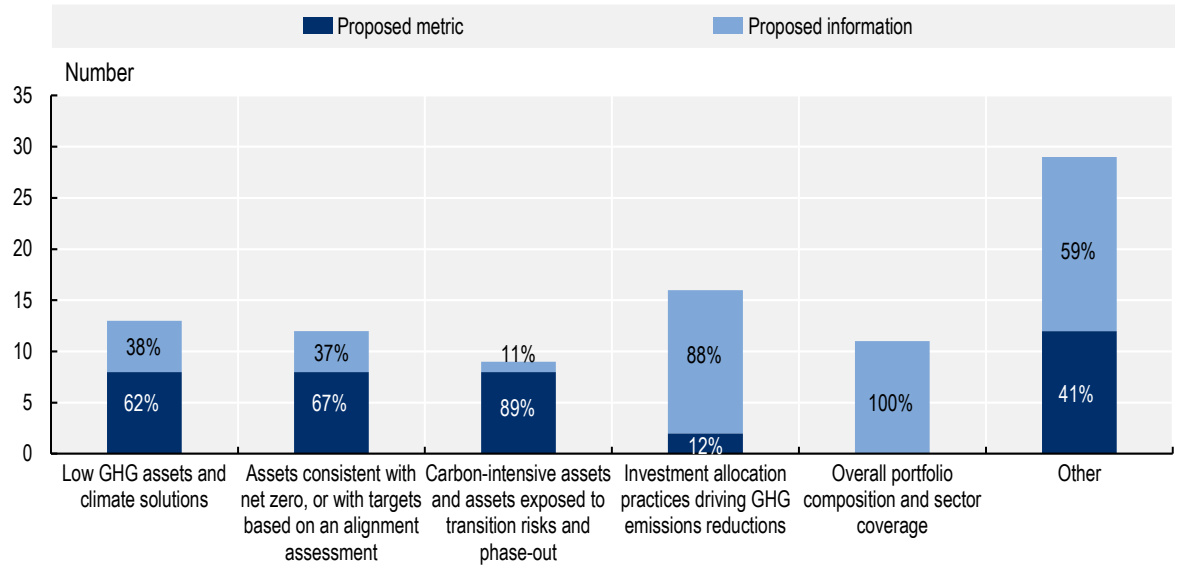
The frameworks concur that information points and metrics should be included on the portfolio share in low GHG emission assets and climate solutions, and assets that need to be phased-out but differ in how they express specific metrics. For instance, some frameworks refer to capital invested rather than portfolio shares. Frameworks propose a range of other information points and metrics, for instance on the proportion of the portfolio with net-zero targets. Another type of proposed information points and metrics relate to how investment allocation decisions drive GHG emission reductions or not.

In summary, the following common sub-categories can be identified (see Figure 2.10):

- Portfolio share in low GHG assets and climate solutions;
- Portfolio share in assets consistent with net zero, or with targets based on an alignment assessment;
- Portfolio share in carbon-intensive assets and assets exposed to transition risks and phase-out;
- Investment allocation practices driving GHG emission reductions;
- Overall portfolio composition and sector coverage; and
- Other metrics (specific to a framework).

Figure 2.10. Frameworks put forward few specific portfolio composition metrics

Proposed information points and metrics by frameworks, number by portfolio composition sub-categories



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

There is currently no common metric across metrics proposed by frameworks that fit under the portfolio composition category. Some metrics are related but expressed differently with different unit values. For example, under the "Portfolio share in carbon-intensive assets and assets exposed to transition

risks and phase-out" subcategory, the following metrics are related to portfolio shares in carbon-intensive activities, but capture different elements:

- Capital invested, deployed, or committed toward managed phase-out schemes that accelerate the retirement of high-emitting assets;
- Amount and percentage of carbon-related assets relative to total assets.

In many cases, guidance simply expresses that financial institutions should describe significant concentrations of credit exposure to carbon-related assets or outline their progress toward planned retirements of financed assets under managed phase-out schemes or for specific emissions reduction goals of transition assets. While this information is very valuable, it may not be sufficient to monitor and track progress by financial institutions against their net-zero commitments.

Similar challenges arise for other sub-categories. For example, metrics on "Portfolio share in low GHG emission assets and climate solutions" that emerge are as follows:

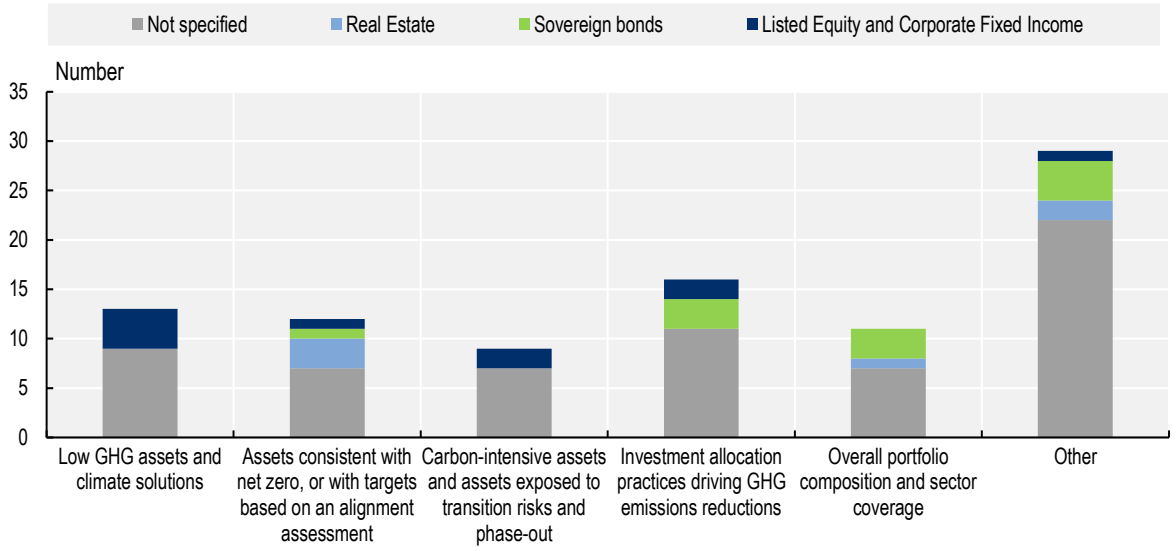
- Capital invested, deployed, or committed toward climate solution businesses and projects as defined in industry guidance; and
- A <10-year goal for allocation to climate solutions representing a percentage of revenues or capex from AUM, increasing over time, in line with investment trajectories based on a net-zero pathway.

Some metrics that are highly insightful may be difficult to calculate, requiring more guidance and consensus across framework providers. For example, one framework proposes a metric on the proportion of GHG portfolio emission reductions allocated between those driven by changes in portfolio composition and those driven by changes in the performance of underlying investees and borrowers within the portfolio. While this metric may be difficult to calculate based on current disclosure it has the potential to provide insight on the extent to which the decarbonisation strategy of a financial institution relates to actual GHG emission in the real economy rather than (only) changes in the composition of the portfolio.

Additional guidance on asset class-tailored metrics would be beneficial to capture the complexity and granularity required to inform progress tracking. While frameworks acknowledge the need for tailored metrics for specific asset classes, most of the proposed metrics are not specific to an asset class (see Figure 2.11). Additionally, only certain asset classes are identified, generally excluding others such as private equity, private debt, real assets (other than real estate), and commodities. Furthermore, additional guidance on the underlying calculation methodology could provide additional clarity on how the proposed metrics apply to different types of financial institutions or asset classes.

Figure 2.11. Frameworks rarely specify an asset class for portfolio composition metrics

Proposed information points and by frameworks, number by portfolio composition sub-categories and asset class



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

Portfolio composition metrics, as with other metrics including GHG emissions- and engagement-related, can be both backward- and forward-looking. In most information proposed by frameworks, the focus is on backward-looking historical data, but the metrics can equally be applied to include a forward-looking target-type element.

2.2.3. *Proposed engagement information points and metrics*

Information points and metrics that support the effective tracking of engagement activities can help understand the extent to which steps are taken to support the reduction of clients' emissions. While many information points are proposed by frameworks, metrics on engagement are particularly rare.

Most information points and metrics on engagement proposed by frameworks relate to the overall and climate-specific engagement and stewardship practices of a financial institution (see Figure 2.12)**.** Major frameworks also propose information that sheds light on decisions along the chain of engagement strategies, such as how they: identify and escalate engagement activities; engage in dialogue; present and vote on actions; and undertake phase-out engagement. Information points and metrics on engagement can be grouped into the following sub-categories:

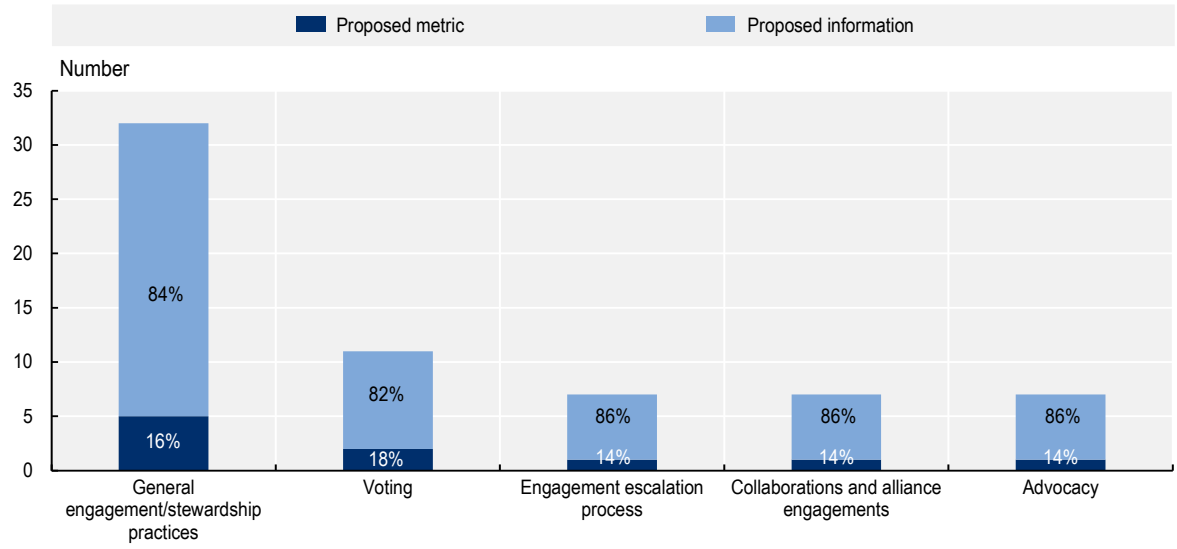
- General engagement/stewardship practices;
- Voting procedures and practices;
- Engagement escalation process;
- Collaborations and alliance engagements; and
- Advocacy-based activities.

Very few engagement metrics are proposed, with only one proposed metric for some sub-categories (Figure 2.12). As such, the information points and metrics proposed by the frameworks may lack the level of detail needed to accurately assess engagement activities, for example they often only demand yes, or no answers based on whether elements are disclosed. Moreover, engagement metrics tend to focus on the number of engagement activities. Therefore, metrics on the quality of engagements are underdeveloped, partially reflecting challenges in capturing outcomes of engagements. Examples of proposed metrics by the frameworks include:

- Different metrics on general engagement/stewardship practices are proposed. Examples include types of climate-related engagement activities (by portfolio and by topic/theme) as well as climate resolutions voted on to support net-zero strategies among others;
- Two similar metrics are proposed on voting: i.e., proportion of climate resolutions voted on, and number of voting engagements;
- A metric on engagement escalation activities proposed to disclose the number of non-responsive companies facing conditions, restrictions, or exclusion; and
- On advocacy, a metric on the number of advocacy engagements with governments and policymakers on climate-related policies and outcomes is proposed.

Figure 2.12. Frameworks put forward few engagement metrics

Proposed information points and metrics by frameworks, number by engagement sub-categories



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

2.2.4. *Proposed strategy and governance information points and metrics*

Strategy and governance information points and metrics could support an assessment of internal changes to a financial institution's strategy and shifts in internal processes to incentivise the net-zero transition. **Frameworks propose a large variety of information points on the integration of climate considerations in strategic decision-making and investment strategies, with few metrics proposed**

(see Figure 2.13). Information points and metrics on strategy and governance can be grouped into the following sub-categories:

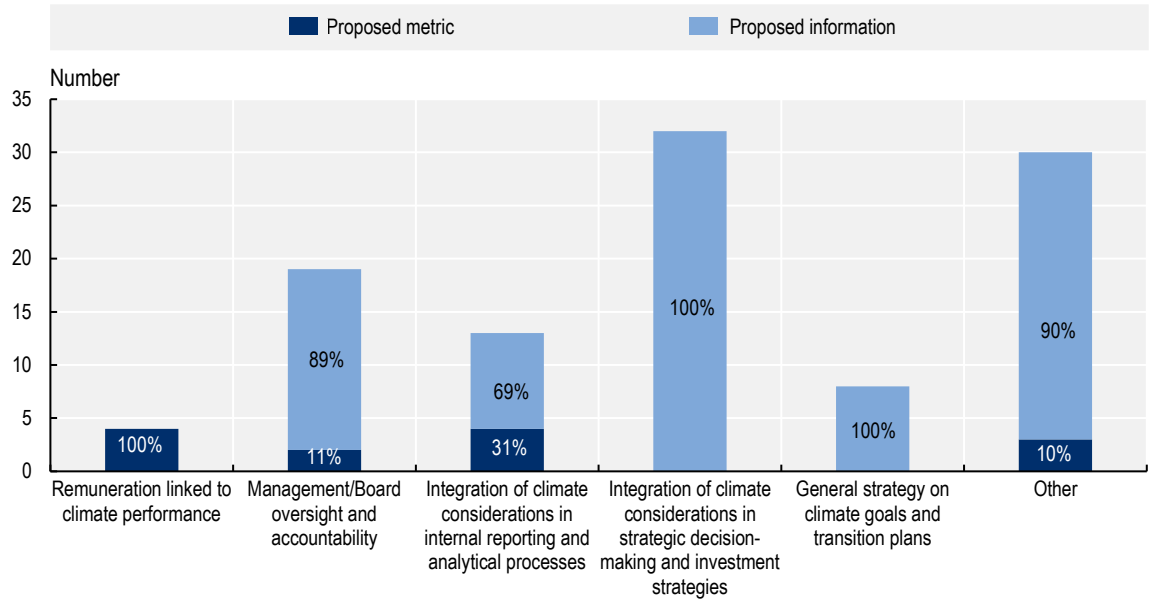
- Remuneration linked to climate performance;
- Management/Board oversight and accountability;
- Integration of climate considerations in internal reporting and analytical processes;
- Integration of climate considerations in strategic decision-making and investment strategies;
- General strategy on climate goals and transition plans; and
- Other.

Although frameworks propose a wide range of information points, they propose very few metrics on strategy and governance (see Figure 2.13), and information points proposed are almost exclusively of a qualitative nature. As a result, similarly to what is observed for the engagement category, proposed metrics relating to strategy and governance may lack the level of detail needed to accurately understand strategies or governance activities, as they are often only demanding a yes or no answer (for example based on whether elements are disclosed rather than a measurement of quality related to the information disclosed). As a counterexample, the following quantitative metrics proposed by some frameworks for remuneration are more specific and could provide comparable evidence:

- Proportion of individuals with remuneration linked to progress against and achievement of targets;
- Proportion of senior management remuneration covered by net-zero commitment targets, and;
- Proportion of executive management remuneration linked to climate considerations.

Figure 2.13. Frameworks put forward few strategy and governance metrics

Proposed information points and metrics by frameworks, number by governance and strategy sub-categories



Note: Given challenges around metric names and methodologies, the figure does not account for duplication across the frameworks for the same of similar metrics.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

2.3. Assessment of data availability and challenges

The previous section assessed information points and metrics proposed in frameworks. To complement this, this section looks at available data by a third-party data provider to better understand how the guidance in frameworks translated into quality and comparable data for financial institutions that can be used by market participants to assess financial institutions' progress against their net-zero commitments. The resulting analysis, which aims to provide examples of how metrics are being reported, covers the largest 50 banks and 50 asset managers by market capitalisation in OECD countries[8] as of April 2023. This analysis is based on data from the MSCI ESG Research.[9]

Where there are gaps in data by the third-party provider, the OECD has complemented this with a detailed assessment of information points and metrics within the transition plans produced by the largest 20 banks and 20 asset managers within the sample. While a relatively representative analysis could be conducted on that basis for GHG emissions as well as portfolio composition metrics, the analysis on engagement as well as strategy and governance metrics was limited and made more complex by the lack of existing disclosure regarding the metrics identified in these categories.

2.3.1. There is limited available data for GHG emission metrics proposed by frameworks

While frameworks encourage the disclosure of a wide range of GHG emission metrics, as outlined in Section 2.2, actual data availability by a third-party data provider at the level of financial portfolios and institutions is limited and varies widely depending on the disclosure of the individual financial institutions. Available data tends to reflect listed corporate equity, not the complete portfolio of financial institutions. Also, additional complexities emerge for GHG scope 3 emissions for the financial sector given the difficulties in measuring them and the fact that they represent a large or majority share of a financial institutions' total GHG emissions. Across the sub-categories of metrics, available data is either lacking or not sufficiently comparable:

- Where financial institutions have set GHG emission targets, the data is not always comparable. There is limited clarity on the scope and coverage of such targets;
- Current scope 3 GHG emissions, or financed emissions, are not consistently reported, at least partially due to differences in data coverage and underlying estimation assumptions, and;
- Current disclosure on the reliance on offsets is very limited.

All analysed frameworks suggest the disclosure of scope 1, 2 and 3 emissions, but proposed calculation methodologies and input data are limited. There is very limited guidance on methodological considerations, as well as proposed tailored metrics for measuring scope 3 GHG emissions of financial institutions. Moreover, enhanced availability of scope 1 and 2 emissions of investees and borrowers is critical for financial institutions' emissions reporting. Additional data on these aspects could help increase the rate of reported scope 3 emissions and reduce the gap between reported and estimated emissions, which would translate into more reliable and more robust disclosure.

Differences in data coverage and underlying estimation assumptions challenges the comparability of GHG emissions data. The discrepancy between estimated and reported scope 3 emissions are particularly challenging for tracking the emissions of financial institutions given that scope 3 accounts for 99% of the financial services' sector total emissions (including scope 1, 2 and 3 emissions) (CDP, 2022[15]).

[8] The geographic distribution of the 50 largest banks is North America (44%), Europe (38%), Asia (10%), and Oceania (8%); and 50 largest asset managers is North America (58%), Europe (34%), Asia (4%), and Oceania (4%).

[9] The choice to use a single data source for the largest 50 banks and 50 asset managers was determined by the relative better coverage of the chosen provider with respect to the others, and limitation in access to data by the OECD. Additionally, discrepancies of data would have made more complex the use of multiple providers.

Third-party data providers have developed estimation methodologies to fill current data gaps to derive and report the metrics. Such a situation is particularly evident while analysing GHG scope 3 emissions, where total emissions calculated by a third-party data provider are significantly higher for both banks and asset managers when compared to reported emissions.

Even though scope 3 emissions are particularly relevant for financial institutions, data availability for scope 3 differs widely between banks and asset managers. Over 20% of banks and over 50% of asset managers do not disclose scope 3 emissions. These numbers may be even larger among smaller financial institutions. Data gaps in scope 3 emissions by financial institutions might be partially due to remaining data gaps in scope 1 and 2 emissions of non-financial corporates that make up the underlying portfolio assets of financial institutions. As a consequence, the ability of financial institutions to report on GHG emissions is highly dependent on the availability of GHG emissions data from their investees and borrowers.

Table 2.2. While a number of data providers provide metrics of scope 3 emissions, these can be subject to interpretation or vary in terms of coverage and definitional boundaries

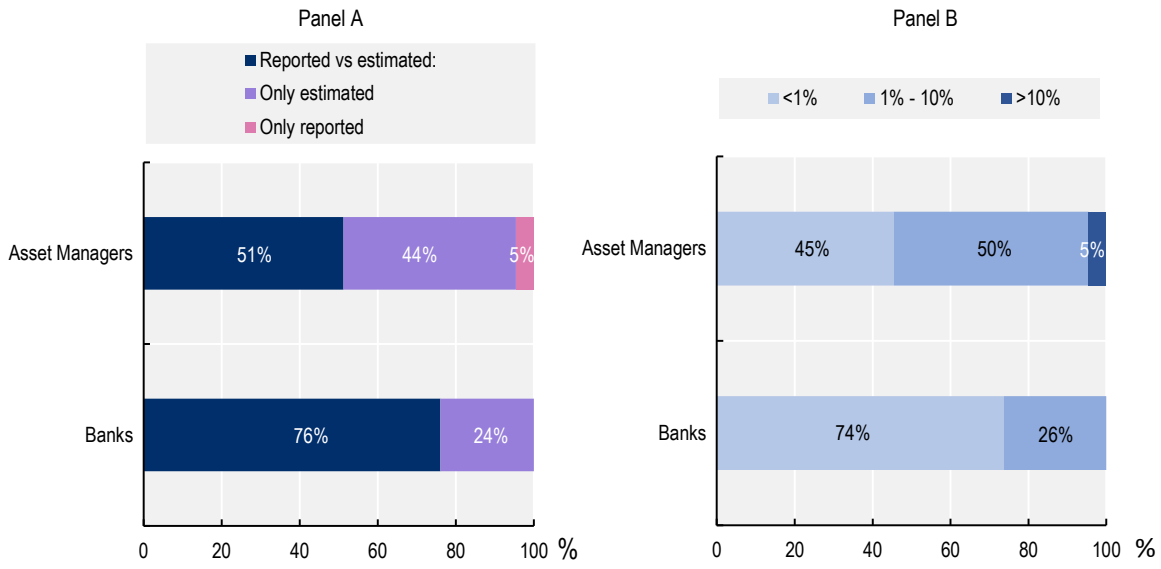
Definitions for selected scope 3 emissions metrics for a range of data providers

Data provider	Metric	Definition
Bloomberg	Scope 3 GHG emissions	Indirect GHG emissions for companies with a sufficient amount of available data - Oil & gas and mining sectors (around 4 000 companies)
MSCI	Scope 3 - Category 15: Investments (all)	Estimated emissions from investments as defined by the Greenhouse Gas Protocol [tCO_2e/yr]. This category includes both emissions associated with the types of investments required to be accounted for by the GHG Protocol guidance (debt investments with known use of proceeds) as well as those types that companies may optionally report (debt investment without known use of proceeds, managed investments)
	Scope 3 - Category 15: Investments (required only)	Estimated emissions from investments as defined by the Greenhouse Gas Protocol [tCO_2e/yr]. This category only includes emissions associated with debt investments with known use of proceeds required to be accounted for by the GHG Protocol guidance
	Carbon Emissions - Scope 3 Reported (metric tons)	This figure represents the company's scope 3 greenhouse gas emissions, as reported. Scope 3 emissions include an array of indirect emissions resulting from activities such as business travel, distribution of products by third parties, and downstream use of a company's products (i.e. by customers). Most reports of scope 3 emissions include only some portion of these [tCO_2e]
	Scope 3 - Total Emissions Estimated	Estimated scope 3 emissions (total) as defined by the Greenhouse Gas Protocol [tCO_2e/yr]
LSEG (formerly Refinitiv)	Scope 3 - Reported	Reported CO_2 emissions data from the company
	Scope 3 - Estimated	Estimated CO_2 emissions data from the company

Note: Based on available definitions within third-party data provider platforms
Source: MSCI ESG Research, Bloomberg Terminal, and LSEG (formerly Refinitiv)

Figure 2.14. Data providers' estimated scope 3 emissions are significantly higher than bank reported scope 3 emissions

Share of financial institutions that disclose scope 3 emissions and/or for which scope 3 are estimated (panel A), and reported scope 3 emissions as a share of estimated scope 3 emissions for banks and asset managers where both are available (panel B)



Note: Data presented here covers the 50 largest banks and 50 largest asset managers by market capitalisation [USD] in OECD countries [as of April 2023]. The left-side of graphs in Panel A and B show those that have both reported and estimated scope 3 emissions, whereas the right-side of graphs in Panel A and B show those that only have an estimated scope 3 emissions. The figure excludes asset manager 4's reported emissions due to outlier value. The scale of each panel differs.
Source: OECD analysis based on MSCI ESG Research (2022).

Difference in scope and coverage of disclosed emissions targets make it difficult to make sense of the data available for a single financial institution, and even more so to draw comparisons or overarching conclusions across institutions. Available data for metrics relating to targets can cover a wide range of activities, such as portfolio wide (expressed as company-wide by the data provider) or country specific targets. In addition, different methodological approaches (as outlined in Table 2.1) make it more complicated to compare underlying emission metrics and related targets. While Sectoral Decarbonisation Approaches may be cited as more credible by market participants, they also raise that data to construct these are more difficult to obtain.

Differences in the data analysed, in terms of name, type, or unit value, make it difficult to properly compare net-zero targets for financial institutions. A number of challenges are identified, particularly on the wide number of targets set by financial institutions. Evidence suggests that further recommendations and guidance contributing to the robustness of GHG emission target metrics is required, especially on the harmonisation of the base and target year. According to some studies, the baseline year should be harmonised to 2015 because it would allow to capture emission reductions both prior and after the adoption of the Paris Agreement in 2020 (Rekker et al., 2022[24]).

Challenges are more evident in instances in which banks withdraw and replace GHG emission targets. In line with this, available data also shows that there are cases in which the timeframes of the initial targets are changed. The landscape for asset managers is less clear given that data for asset managers is more limited. In comparison to banks, asset managers are more likely to have targets that are not specified. These differences can make it difficult to compare data for different institutions, thus

highlighting the need for improved data availability on core metrics as a pre-condition for understanding financial institutions' commitments.

Regarding carbon offsets, current disclosure and available data on their use by financial institutions is very limited. Given the environmental integrity risks related to carbon offsetting highlighted in the sections above, it is critical that improved and more comprehensive data becomes available to inform credible assessments of financial institutions' actual progress against decarbonisation objectives. Thus, it would be relevant for frameworks to consider metrics and further guidance that could contribute to improved data disclosure in this area.

2.3.2. There is very little available data for portfolio composition metrics proposed by frameworks

While frameworks encourage the disclosure of portfolio composition information points and metrics across common themes, there is limited available data in banks and asset managers' transition plans or sustainability reports. Large financial institutions in the sample do not tend to publicly disclose progress on their portfolio composition, limiting the available information to high-level observations from their progress at the portfolio level. For instance, financial institutions acknowledge the importance of aligning their portfolios to international benchmarks such as the Paris Agreement. However, there is limited disclosure on changes at the portfolio level on sustainable investments relative to their other investments. Similarly, official documents from asset managers disclose the total amount of assets under management, yet there is a limited granularity in terms of asset classes.

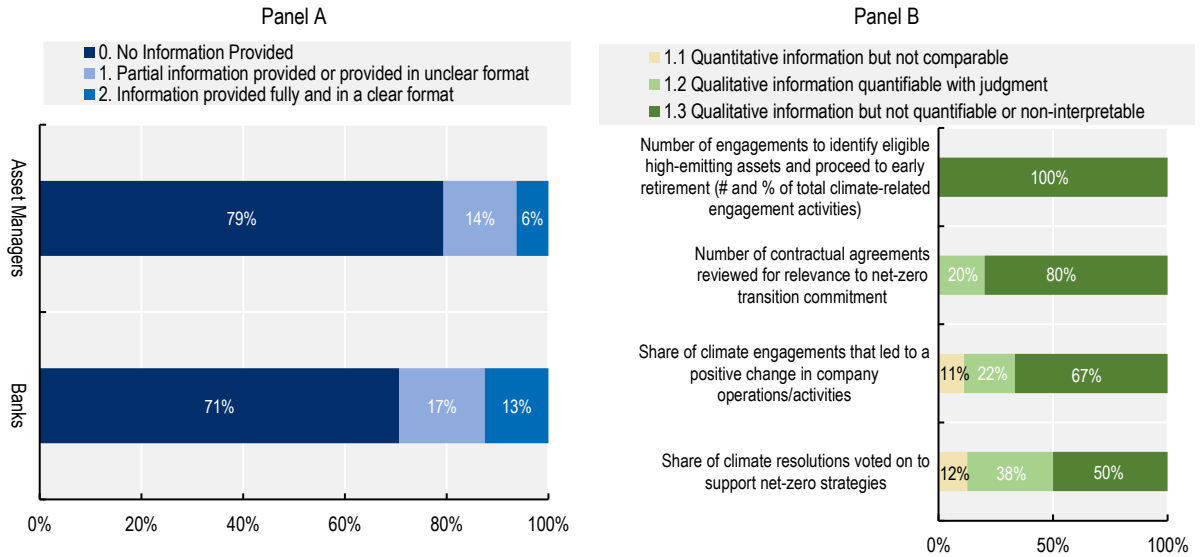
Additional challenges remain to measure the progress against net-zero commitments at the portfolio level based on transition plans and sustainability reports. Documents often focus on case studies or good sustainable investment examples instead of providing progress on the metrics proposed by framework providers. In some cases, financial institutions present their own metrics and proposed actions to change their portfolio composition such as phasing out investments in fossil fuels in investments with more than 5% revenue exposure by 2030. Even though this information could reflect some progress from financial institutions, the disclosed data does not suffice to provide a comprehensive overview of actual progress against net-zero commitments at the portfolio composition level nor to make relevant comparisons across institutions.

2.3.3. There is very little available data by data providers for engagement metrics proposed by frameworks

Data on engagement metrics and information is partial and challenges remain in terms of its quality, availability and granularity. As seen in Figure 2.15, Panel A, most financial institutions do not cover progress related to their engagement metrics. Transition plans and sustainability reports that cover these considerations tend to focus on anecdotal references to engagement with relevant parties (including corporates within financial institutions' portfolios and balance sheets). As seen in Figure 2.15, analysed financial institutions tend to cover similar dimensions on engagement metrics such as the number of engagements to identify eligible high-emitting assets or statements on voting resolutions to support net-zero strategies. Nevertheless, disclosed data is highly qualitative and anecdotal, and therefore, it would unlikely support tracking of progress against commitments given its limited comparability.

Figure 2.15. Financial institutions' transition plans do not include clear information on engagement metrics

Level of disclosure and quality of information for engagement metrics, % of information provided (panel A) and % based on quality of information (panel B)



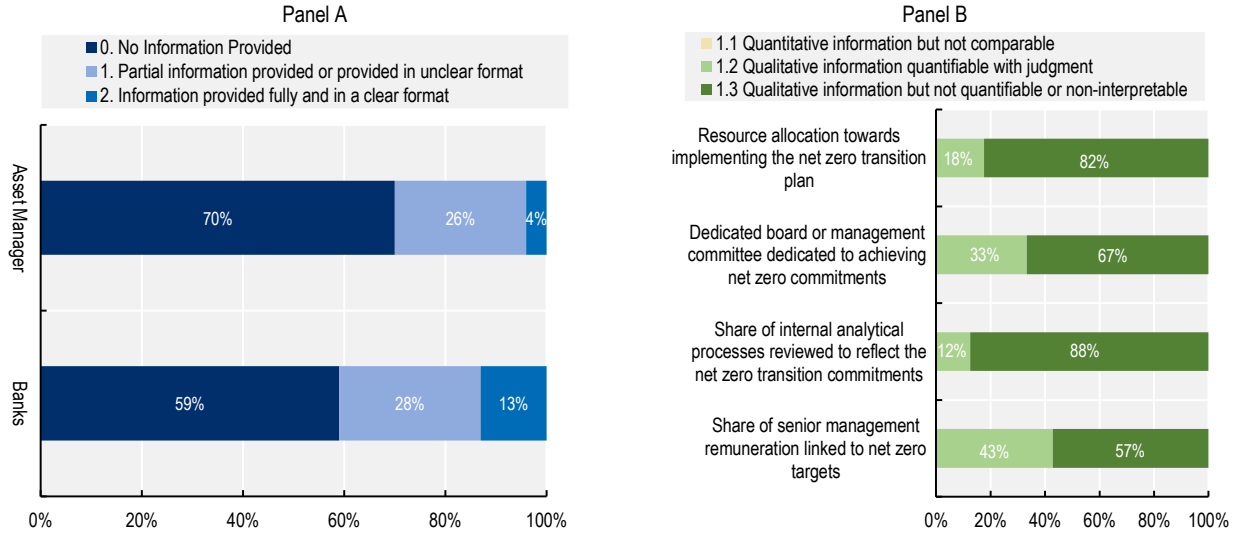
Note: Rationale for the defined categories for Panel A: 0 = No information provided, 1 = Partial information provided or provided in an unclear format, 2 = Information provided fully and in a clear format. Rationale for the defined categories for Panel B: When information is partial or provided in an unclear format, 1.1 = Quantitative information but not comparable, 1.2 = Qualitative information quantifiable with judgment, 1.3 = Qualitative information but not quantifiable or non-interpretable.
Source: OECD analysis based on financial institutions' transition plans, based on a selection of 20 banks and 20 asset managers by market capitalisation from financial institutions analysed.

2.3.4. There is very little available data for strategy and governance metrics proposed by frameworks

Limited data is available for strategy and governance metrics (see Figure 2.16, Panel A). Moreover, strategy and governance metrics disclosure can vary significantly, with the majority of banks and asset managers not reporting any information, while those who do disclose some information report it very partially or in unclear format.

Figure 2.16. Financial institutions' transition plans do not include clear information on strategy and governance metrics

Level of disclosure and quality of information for strategy and governance metrics, % of information provided (panel A) and % based on quality of information (panel B)



Note: Rationale for the defined categories for Panel A: 0 = No information provided, 1 = Partial information provided or provided in an unclear format, 2 = Information provided fully and in a clear format. Rationale for the defined categories for Panel B: When information is partial or provided in an unclear format, 1.1 = Quantitative information but not comparable, 1.2 = Qualitative information quantifiable with judgment, 1.3 = Qualitative information but not quantifiable or non-interpretable.
Source: OECD analysis based on financial institution's transition plans, based on a selection of 20 banks and 20 asset managers by market capitalisation from financial institutions analysed.

Where data on strategy and governance is available, it is not comparable and often not quantifiable (see Figure 2.16, Panel B)**.** Based on the disclosure quality of partial data provided, banks and asset managers in the sample do not specify the resource allocation towards implementing their net-zero transition plans, or simply provide qualitative descriptions that are not quantifiable. Second, banks and asset managers' boards or management committees dedicated to net zero typically lack clear definitions, time bound objectives and links to the performance in relation to targets. Third, data provided on the internal analytical processes are partial and not comparable among different banks and asset managers because they are not quantifiable. Fourth, banks do not provide a clear definition of net-zero targets linked to the percentage of the senior management remuneration, preventing a comparison among different banks in this area.

2.4. Findings from the assessment

In conclusion, there is a lack of available data on proposed information points and metrics to assess financial institutions progress against their net-zero commitments. Data availability is especially limited for engagement, and strategy and governance, reflecting gaps in metrics. Data providers have almost no data on these two categories. Some additional data can be found in company reports, but it is typically not provided in a consistent and machine-readable way.

When data is available for proposed metrics, it is not always comparable. This can be due to differences in scope and coverage, as well as in underlying calculation methodologies and estimation assumptions. For the GHG emissions category where data is more available than in other categories,

available data is often complemented with estimations and analysis by third-party providers. Large differences are found between reported and estimated scope 3 (financed emissions) data is observed.

Across the four thematic metric sub-categories, there are gaps in metrics proposed by major frameworks (Table 2.3). Overall, the assessment of guidance on proposed net-zero information and metrics by frameworks shows a high reliance on qualitative text-based information rather than quantitative unit-based metrics. Across the four metric categories, metrics are more frequently proposed for GHG emission and portfolio composition metrics, while there is a focus on information for engagement, and strategy and governance.

Table 2.3. Summary of proposed information points and metrics by frameworks

M*	Proposed metric with calculation method
M	Proposed metric
I	Proposed information
N	No information or metric proposed

	GFANZ	IFRS ISSB	IIGCC	NZAOA	TCFD
GHG emission metrics					
Historic and current GHG emissions	M	M*	M	M*	M*
GHG emission targets (short, medium and long term)	M	M	M	M	I
Alignment assessment with a benchmark, inc. Paris Agreement	N	N	M	M*	M
Use of offsets (current and future)	N	I	N	N	N
Portfolio composition metrics					
Portfolio share in low GHG assets and climate solutions	M	I	M*	M*	N
Portfolio share in assets consistent with net zero, or with targets based on an alignment assessment	M	N	M*	M	M
Portfolio share in carbon-intensive assets and assets exposed to transition risks and phase-out	M	M	M	N	M
Investment allocation practices driving GHG emission reductions	M	N	I	N	M
Overall portfolio composition and sector coverage	I	I	I	I	I
Other	M	M	I	N	M
Engagement metrics					
General engagement/stewardship practices	M	I	M	I	I
Voting procedures and practices	M	M	I	I	N
Engagement escalation process	M	I	I	I	N
Collaborations and alliance engagements	M	N	I	I	N
Advocacy-based activities	M	N	I	I	N
Strategy and governance metrics					
Remuneration linked to climate performance	M	M	N	N	M
Management/Board oversight and accountability	M	I	I	N	M
Integration of climate considerations in internal reporting and analytical processes	M	I	I	N	I
Integration of climate considerations in strategic decision-making and investment strategies	N	I	I	I	I
General strategy on climate goals and transition plans	N	I	I	I	I
Other	M	M	I	I	I

Note: M means the framework proposes at least 1 metric, I means the framework proposes at least one point of information but no metric. N means no information or metric is proposed by the frameworks.
Source: OECD analysis based on public reports from GFANZ, (2022[1]), Recommendations and Guidance on Financial Institution Net-zero Transition Plans; IFRS ISSB, (2023[2]), Sustainability Disclosure Standard: Climate-related Disclosures; IIGCC, (IIGCC, 2021[3]), Net Zero Investment Framework, Institutional Investors Group on Climate Change; NZAOA, (2023[4]), Target Setting Protocol: Third Edition; TCFD, (2021[5]), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

While there are commonalities in the themes (subcategories) covered by frameworks, there is limited agreement on specific metrics with calculation methods to analyse financial institutions' progress towards their net-zero targets. Specific commonalities and gaps in metrics across the four metrics categories are as follows:

- GHG emissions: Frameworks tend to agree on metrics for absolute scope 1, 2 and 3 GHG emissions. Frameworks also agree that target metrics need to include elements clarifying boundaries and coverage. There is a clear gap in metrics clarifying the use of offsets.
- Portfolio composition: There is currently no common metric across metrics proposed by major frameworks that fit under the portfolio composition category. On the other hand, several possible metrics are proposed across common themes in terms of investments in climate solutions, assets with net-zero targets, and exposure to carbon-intensive assets. Some target metrics related to such themes are also proposed.
- Engagement: Very few metrics are proposed for engagement. Most metrics and information relate to general engagement and stewardship practices, proposing disclosure on number and types of engagement activities on climate action with investees.
- Strategy and governance: A large quantity of information is proposed, with very few specific metrics. A large variety of information is proposed on the integration of climate considerations in decision-making and investment strategies. One metric common across two frameworks relates to the proportion of executive management remuneration linked to climate performance.

Many of the metrics and information proposed can benefit from metadata-type metrics, clarifying the coverage, time dimension, methodology and calculation approach among other things. For example, absolute scope 1, 2, and 3 emissions data should clarify the asset classes of a financial institutions portfolio that it covers. Similarly, many metrics, such as for 'portfolio share in low GHG assets and climate solutions', can be both disclosed for the recent past as well as with a future target.

There are gaps and a lack of clarity in the coverage of asset classes by and applicability to different types of financial institutions of proposed metrics. The majority of proposed metrics and information are not linked to a specific asset class or are implicitly associated with corporate equity and bonds. Further, the majority of information and metrics are cited as relevant for asset owners and asset managers, and few for other financial organisations.

Additional analysis may be warranted by the OECD to further assess the credibility and integrity of metrics, as well as data availability across third-party data providers and national sources. In considering this, the OECD will pay attention to the following metrics:

GHG emission metrics

- Current level of and recent reductions in GHG emissions scope 1, 2, 3 ($mtCO_2e$ [reported and estimated], intensity);
- GHG emission targets (short, medium and long term):
  - Scope and coverage of targets;
  - Baseline year;
  - Value (reduction) for target ($mtCO_2e$);
  - Year of target;

  - Target expressed in absolute and intensity values;
  - Alignment assessment based on a benchmark or consistency with Paris Agreement based on internationally recognised methodologies (1,0);
- Use of offsets (USD and $mtCO_2e$);
  - Planned use of offsets in future (USD and $mtCO_2e$).

Portfolio composition metrics

- Portfolio share in low GHG assets and climate solutions (%);
- Portfolio share in assets consistent with net zero, or with targets based on an alignment assessment (%);
- Portfolio share in carbon-intensive assets and assets exposed to transition risks and phase-out (%);
- Share of investees and borrowers (assets) consistent with institution's net-zero target (USD and %);
- Share of investees and borrowers (assets) that have set their own net-zero target (USD and %);
- Share of clients or portfolio companies that have set their own science-based targets (%);
- Current and recent (annual) changes in share of assets exposed to transition risks (%);
- Current share of portfolio in companies with activities in coal (and other fossil fuels) (%);
- Proportion of GHG portfolio emissions reductions allocated between those driven by changes in portfolio composition and those driven by changes in the underlying companies (%);
- Green asset ratios showing proportion of loans/capital/insurance written on green assets (%).

Engagement metrics

- Share of portfolio companies' targets subject to third-party verification (%);
- Number of escalation activities, such as non-responsive firms facing conditions, restrictions, or exclusions (Absolute);
- Share of climate resolutions voted on to support net-zero strategies (%);
- Share of climate engagements that led to a positive change in company operations/activities (%);
- Number of contractual agreements reviewed for relevance to net-zero transition commitment (Absolute);
- Number of engagements to identify eligible high-emitting assets and proceed to early retirement (Absolute and % of total climate-related engagement activities);
- Capital invested, deployed, or committed toward managed phase-out schemes (USD).

Strategy and governance metrics

- Share of senior management remuneration linked to net-zero targets (%);
- Share of staff with remuneration linked to net-zero targets (%);
- Share of internal analytical processes reviewed to reflect the net-zero transition commitment (%);
- Dedicated board or management committee dedicated to achieving net-zero commitments (1,0);
  - Board or management committee with time bound and performance related targets (1,0);
  - Integration of climate considerations in internal reporting and analytical processes (1,0);
  - Integration of climate considerations in strategic decision-making and investment strategies (1,0);
- Resource allocation towards implementing the net-zero transition plan (USD).

3 Implications and policy considerations

While the landscape of frameworks that propose information points and metrics has developed in the last decade, as a whole these frameworks do not yet converge on clear guidance to support the disclosure of consistent, comparable and verifiable metrics. Frameworks justifiably aim to serve different stakeholders or purposes. For example, some focus more on financial risk assessment and management, whereas others focus on supporting global goals on net-zero emissions. These differences in perspectives should be considered when interpreting guidance put forward in frameworks. While this variation is beneficial to provide guidance that supports a range of strategies, framework providers and other stakeholders should support improved clarity, comparability, and credibility of net-zero metrics for financial institutions.

3.1. Implications

The OECD assessment finds a number of challenges that may have implications for financial market efficiency and environmental integrity, which could hinder assessments of and by the financial sector:

- **In aggregate, the current landscape of frameworks shows a reliance on qualitative information points rather than quantitative metrics to be disclosed.**
  - For example, and notably for engagement, and strategy and governance categories, very few quantitative metrics are proposed for disclosure. Information points largely require unstructured text-based responses from financial institutions.
  - The result of this is that disclosures can vary significantly, so that little comparison can be made across financial institutions, and any attempt to do so would require time-consuming consideration of data within transition plans or other resources.
- **When quantitative metrics are proposed by frameworks, there is a lack of explicit guidance on underlying methodologies to calculate metrics.**
  - For example, differences in methodologies can range from the use of a different denominator for intensity metrics (such as revenue versus a level of production), or the use of different definitions or accounting boundaries for calculating certain types of GHG emissions (such as scope 3 emissions).
  - The result of this is that financial institutions will provide inconsistent data for the same metric and thus make comparison across financial institutions difficult, and would require data users to harmonise this using their own methodologies.
- **There is limited consistency in the language frameworks used to refer to the same information points and metrics (most notably for categories beyond GHG emissions), and frameworks propose a plethora of information points and a range of metrics with little overlap and no clear prioritisation of more pertinent metrics.**

- For example, metrics with the same name can measure different things and metrics with different names can measure the same thing. For metrics on the portfolio share in carbon-intensive assets and assets exposed to transition risks and phase-out, guidance can range from language such as "financial institutions should describe significant concentrations of credit exposure to carbon-related assets" to "financial institutions should outline credit exposures across equity and debt holdings, or trading positions", with little additional explanation on how this should be disclosed.
- The result of this is that financial institutions need to spend significant time and make judgements to understand what they need to disclose, and that the outcomes of this disclosure are often difficult to interpret (as additional explanation is required) and incomparable across financial institutions.

- **There remain gaps in metrics proposed by frameworks that will be relevant to assess financial institutions' progress against their net-zero commitments.**
  - For example, none of the frameworks assessed put forward a quantitative metric to assess the use of carbon offsets, with only one asking for information on their use. In addition, there are very few metrics proposed that look at specific asset classes.
  - The result of this is that any assessment of financial institutions' progress against their net-zero commitments will be incomplete or difficult to understand at a financial system level, as information that is necessary to assess decarbonisation pathways could be missing.
- **Notwithstanding gaps in metrics, the number and range of proposed metrics and information indicates the complementarity of different types of metrics, however, this should be balanced with considerations on limiting the disclosure burden.**
  - For example, input-based metrics such as engagement and portfolio composition metrics complement outcome-focussed metrics such as GHG emission metrics. Furthermore, within a specific metric subcategory, such as for general engagement/stewardship practices, disclosure on different proposed information and metrics can complement each other. For instance, disclosure on the 'process for reviewing the climate objectives and policy positions of its most relevant trade associations' can complement disclosure on 'number and types of climate-related engagement activities'.
  - The result is that financial institutions may need to disclose a large amount of data to be consistent with any given framework. However, disclosure requirements for large amounts of new data may impose large administrative costs.
- **The lack of methodologically mature metrics, and consensus thereon, challenges metric prioritisation.**
  - For example, even in the GHG emission metric category where there is more agreement on metrics, there is no consensus on an alignment assessment metric and different calculation approaches for scope 3 emissions.
  - The result is that financial institutions may not currently be able to disclose data on specific metrics in a consistent way. Data providers may aim to resolve this heterogeneity for specific metrics, by collecting data on the different elements of a metric and making further assumptions and calculation choices to provide more consistent data, but this may not always be possible. Metric prioritisation therefore needs to be supported by further work on metric development and methodological deep dives.

- **There is little consideration on how to interpret the necessary heterogeneity of interim and overall targets, and resulting trade-off between the credibility of approaches and standardisation of decarbonisation target metrics.**
  - Available data for decarbonisation targets metrics are difficult to compare due to, for example, different baseline years or multiple targets for segments of a financial institution's portfolio. However, different portfolio segments and financial institution activities follow different speeds of decarbonisation in cost-minimising transition scenarios, as well as in scenarios with fairness considerations to the extent possible. Hence, heterogeneity in targets is needed.
  - The result of this is that while this heterogeneity may be necessary to reflect different to science-based transition scenarios and pathways, it makes it complex to compare financial institutions and hinders any attempt to aggregate data to show trajectories at the financial system level. Similar trade-offs with standardisation also exist for alignment metrics.
- **Overall, there are significant data gaps for proposed metrics, which can in cases give rise to the use of heterogeneous estimation methodologies by third parties.**
  - For example, not all financial institutions assessed report a number for scope 3 (financed) emissions, with third-party data providers using different estimation assumptions or accounting methodologies to fill these gaps.[10]
  - The result of this is that data users and policymakers will have incomplete or unreliable data from which to assess progress of financial institutions, and may underestimate the scale of emissions from the activities of and needed climate action by financial institutions.

3.2. Policy considerations

Stakeholders (including financial authorities, financial institutions, civil society, framework providers, and other market participants) need improved information, metrics and data to strengthen the integrity and transparency of products, practices and tools related to financial institutions' voluntary net-zero commitments:

- Relevant stakeholders, as appropriate, should consider ways to encourage quantitative metrics where possible, in addition to qualitative information. This is particularly important for metrics in categories such as GHG emissions (including decarbonisation targets) and portfolio composition. Further, stakeholders should support the development of specific metrics on engagement, and strategy and governance.
- Relevant stakeholders, as appropriate, should encourage framework providers to define or refer to specific methodologies for metrics and consider options for coordinating guidance that proposes good practices for such methodologies to support comparability. In addition, policymakers may consider technical deep dives by coalitions and international organisations to assess the quality and methodological maturity of proposed metrics.
- Framework providers and civil society should further coordinate to harmonise the language used to refer to similar information points and metrics. As developments at the international level support the emergence of good practices, these should be reflected within frameworks in a clear and concise way. In addition, considerations should be given to the establishment of a key set of core

[10] Filling such gaps may also require further exploration and understanding of the extent to which underlying data is needed for financial institutions to report scope 3 emissions, namely the scope 1 and scope 2 emissions of corporates within financial institutions' portfolios and balance sheets.

yet complementary metrics that consider those identified by the OECD in section 2.4 for further exploration.

- Relevant stakeholders, as appropriate, should work together to consider ways in which greater comparability of the formulations of decarbonisation trajectories and the target metrics underlying such trajectories can be fostered. This could include guidance on methods to interpret different approaches and good practices to support the maturity of alignment approaches, including their reliance on climate mitigation scenarios as input.
- Relevant stakeholders, as appropriate, should encourage financial institution communication in line with recognised frameworks such as the International Financial Reporting Standards Foundation's International Sustainability Standards Board, among other initiatives, and explore additional and voluntary tools available to provide investors with additional climate-related data (OECD, 2022[25]). Importantly, data and metrics used by market participants should seek to support market integrity through core metrics that can be measured using the same methodology across financial institutions and allow for more precision in financial market alignment with climate transition pathways, and to reduce the risk of greenwashing.

The OECD aims to support these efforts through further analytical and policy work on approaches, metrics and data to monitor and assess financial institutions' progress towards their commitments and targets. Such work could take different complementary forms, ensuring synergies and complementarity with international initiatives on metrics and data for financial institutions. In particular, future work could focus on data analysis at an aggregate level across countries from third-party (commercial) data providers, with the objective to identify data gaps, methodological approaches, and data restrictions. Broader OECD work will continue to assess metrics and methodologies needed to safeguard environmental integrity in the monitoring of financial institutions' net-zero commitments.

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Annex A. Existing and related analytical research by the OECD

Existing analytical research by the OECD finds that financial institutions and market participants are beginning to consider climate-related risks and opportunities, but a number of challenges limit the ability of financial markets to effectively mobilise and reallocate capital in response to such risks (OECD, 2021[26]). Notably, ensuring comprehensive and consistent data, accurate metrics, methodologies, and analytical tools to measure and manage climate transition risks remain critical constraints for financial institutions, which calls for greater attention (OECD, 2021[27]). Additional academic and industry studies explore the role of financial markets in supporting a net-zero transition, further strengthening the need for better data and understanding of the role of financial markets:

- The European Central Bank (ECB) finds that increased equity financing may positively contribute to lowering emissions (ECB, 2019[28]), while the Climate Policy Initiative (CPI) finds that financing for new high-emission assets and activities (through both equity and debt) could lock in carbon-intensive processes and raise the expected level of emissions in future years (CPI, 2020[29]).
- Some academic studies suggest that current risk management practices are siloed at the sector level rather on a portfolio level (due to limited data), which limits effective pricing and capital allocation towards a net-zero transition (Greig C., 2023[30]). Other studies suggest that where data exists, improved intermediation spreads and reduced risk of default can be observed for loans and lending activities that integrate climate considerations (Chen, 2022[31]).
- McKinsey suggests that frameworks that define transition and green finance vary significantly, which gives rise to a need to reconcile definitions and guidelines – and undermines net-zero targets and timelines (McKinsey and Company, 2023[32]). They call for policymakers and financial institutions to define metrics and targets to assess and monitor progress toward net-zero commitments (McKinsey and Company, 2023[32]).
- MSCI suggests that currently the financial market products needed may not be available to support the reallocation of capital towards financing that supports innovative or alternative energy solutions (MSCI ESG Research, 2021[33]).
- OECD analysis on environmental, social, and governance (ESG) investing finds that financial market products and practices that use environmental (E) metrics to tilt or tailor them can in cases have an equivalent carbon emissions footprint to their traditional equivalent, with higher E score companies exhibiting on average higher carbon emissions than lower scoring companies (OECD, 2022[34])
- Additional OECD analysis on approaches to assess the alignment of financial assets and portfolios with climate mitigation policy goals highlights that a range of methodological choices, as well as current scope and data limitations, impact the environmental integrity and policy relevance of alignment or misalignment results. In turn, the research identifies the need for a series of indicators to assess progress and impacts that include but are not limited to GHG-based alignment assessments (Noels and Jachnik, 2022[11]).

Annex B. Background on frameworks included in the OECD assessment

The Institutional Investors Group on Climate Change (IIGCC)

The Institutional Investors Group on Climate Change (IIGCC), initially established in 2012, released a Net Zero Investment Framework in March 2021 with the participation of more than 275 members (mostly European pension fund managers and asset managers) (IIGCC, 2021[3]). It provides a set of suggested actions, metrics and methodologies, "*through which institutional investors can maximise their contribution to achieving global net-zero emissions by 2050 or sooner*". The main goal of the document is to support investors to decarbonise their investment portfolios, while scaling up the investment in climate solutions aligned to the Paris Agreement. In 2022, they launched their net-zero guidance for the infrastructure asset class.

The Task Force on Climate-related Financial Disclosures (TCFD)

The TCFD was established in 2015 by the Financial Sustainability Board (FSB) to develop climate-related disclosures that could promote better-informed investment, credit and insurance underwriting decisions. The climate-disclosures, according to the FSB, would enable relevant stakeholders to understand the exposure of the financial system to climate-related risks. Hence, the TCFD has developed an applicable framework to organisations across sectors and industries to fulfil such a purpose. In 2021, the Task Force delivered the *Guidance on Metrics, Targets, and Transition Plans,* in collaboration with the Portfolio Alignment Team (PAT) (TCFD, 2021[10]). The document was complemented with implementation guidance (TCFD, 2021[5]).[11]

The UN-convened Net-Zero Asset Owner Alliance (NZAOA)

The NZAOA was launched in September 2019 and, by 2023, covered 86 asset owners having publicly committed to decarbonising their investment portfolios and meeting global net-zero goals by 2050. The Alliance has published a *Target-Setting Protocol*, which aims to provide an approach for sound net-zero target setting and reporting (NZAOA, 2023[4]). The protocol recommends that its members focus on four aspects of target setting: engagement targets, sector targets, sub-portfolio/ portfolio emission targets and financing transition targets. Moreover, the Alliance has delivered further recommendations on *Aligning Climate Policy Engagement with Net-Zero Commitments: A foundation for asset owner engagement of asset managers* (NZAOA, 2023[35]).[12] The recommendations are expected to contribute to the transitioning

[11] This report focuses on the examination of the implementation guidance, given that it covers the metrics presented in the updated *Guidance on Metrics, Targets, and Transition Plans* documents, while it provides supplemental guidance as well as directions on the application of recommendations.

[12] Both the *Target-Setting Protocol* and *Aligning Climate Policy Engagement with Net-zero Commitments: A foundations for asset owner engagement of asset managers* are considered.

of investment portfolios to net-zero emissions by 2050, aligned to the 1.5-degree scenario presented by the Paris Agreement. Members of NZAOA are expected to comply not only to the Target-Setting Protocol but also with the position papers relevant to specific activities or sectors.

The Glasgow Financial Alliance for Net Zero (GFANZ)

GFANZ was launched in 2021 and is known for bringing together more than 550 firms belonging to eight sector-specific net-zero alliances from over 50 countries. Its Alliance members include banks, insurers, asset owners, financial service providers, asset managers, as well as investment consultants. In recognition that financial institutions are increasingly developing plans to meet their net-zero commitments, GFANZ published a Recommendations and Guidance on Financial Institution Net-zero Transition Plans (GFANZ, 2022[1]) in 2022. The report provides a common voluntary framework applicable to different financial institutions to deliver credible, comparable, and Paris-aligned transition plans. Its objective is not to supersede national or industry-specific guiding resources but to complement existing approaches and guidance.

The International Financial Reporting Standards (IFRS) Foundation's International Sustainability Standards Board (ISSB)

The Trustees of the IFRS Foundation created the International Sustainability Standards Board (ISSB) in 2021. Acknowledging that better sustainability information supports better economic and investment decisions, the ISSB has presented guidance reports on Sustainability Disclosure Standard: Climate-related Disclosures and related climate-related disclosures (IFRS ISSB, 2023[2]). It presents general and industry-based requirements for financial institutions to disclose information on climate-related exposures.

OECD