

Improving net zero data provision: Six asks of data vendors



IIGCC

Executive summary

This document is a guide for investors engaging with private data vendors, to help increase the overall quality and usability of net zero data used in alignment assessments and target setting.

IIGCC members have developed six core expectations to help data vendors understand investors' needs. This guide also provides a set of disclosure templates in [Annex 1](#) that investors can use with data providers to streamline information required to evaluate data products offered by vendors.

Six investor expectations of net zero data and private vendors:



The six expectations are not presented in order of importance and should be seen as a package. Investors would like vendors to improve their net zero data offering across all six expectations.

These expectations complement IIGCC's recent [Net Zero Data Catalogue](#), which reviewed net zero alignment data offered by sixteen private vendors.

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Glossary

Data

Generic term that includes all types of data.

Raw data

Data that is one dimensional and does not rely on any calculation. For example, “presence of a climate strategy (Y/N)”. Indicators are made of raw data.

Indicator

Builds on raw data and integrates a calculation element to combine them. For example, a scoring on the climate strategy of a company.

Criteria level indicator

Indicator that relates to one of the asset alignment criteria of the Net Zero Investment Framework (NZIF).

Composite indicator

Indicator made of several criteria level indicators.

Alignment indicator

Indicator that seeks to measure the gap between the climate performance of an asset or portfolio, and what it would be expected to be under a pathway to achieve net zero by 2050. Given that few usable net zero pathways by 2050 exist at this stage, the definition includes pathways that limit temperature rise to well-below 2°C.

Implied Temperature Rise indicator (ITR)

One type of alignment indicator where the result is expressed in temperature.

Science Based Targets initiative (SBTi)

An initiative that defines and promotes best practice for science-based targets, offers resources and guidance to reduce barriers to adoption, and independently assesses and approves companies' targets.

Transition Pathway Initiative (TPI)

A global, investor led initiative which assesses companies' preparedness for the transition to a low carbon economy, providing independent research which allows investors to evaluate the alignment of their portfolios with the goals of the Paris Agreement.

The Net Zero Investment Framework

A practical guide that provides a common set of recommended actions, metrics and methodologies through which investors can transition their portfolios and maximise their contribution to achieving global net zero emissions by 2050 or sooner.

CA100+ Net Zero Company Benchmark

A set of indicators to measure business alignment with the Paris Agreement goal to limit temperature rise to 1.5°C. The Benchmark presents a key measure of corporate progress on climate action.

Introduction

Background

This document sets out the expectations investors have of private data providers with the aim of improving the overall quality and usability of data used in net zero alignment assessments and target setting. Over the past couple of years, a growing number of investors have set out their net zero ambitions and strategies, committing to manage their assets in line with the attainment of net zero global emissions by 2050, or sooner. As investors integrate climate change considerations into investment processes, the availability of reliable net zero alignment data is increasingly imperative to support investors with setting robust, credible targets that are in line with climate science.

The [Net Zero Investment Framework \(NZIF\)](#) provides a methodological basis for investors to establish their net zero ambitions and strategies, measure the alignment of assets within their portfolios to net zero pathways, and transition their portfolios over time.

Purpose

This guide supports investors' assessment of net zero data to foster better engagement with data vendors. It translates the NZIF principles into specific expectations for vendors, complementing IIGCC's recent [Net Zero Data Catalogue](#), which reviewed alignment data offered by sixteen private vendors. The data catalogue analysed the net zero data landscape today, highlighting the limits and shortcomings of alignment metrics currently on offer.

According to NZIF, investors can source data using endorsed publicly available data sources (Climate Action 100+ Net Zero Benchmark, the Transition Pathway Initiative, GermanWatch Climate Change Performance Indicator, the Carbon Risk Real Estate Monitor) directly from companies and other financial assets; via engagement and reporting; or by buying data from private vendors. NZIF emphasises the need for alignment metrics that can feed into methodologies aligned with its five key principles: impact, rigour, practicality, accessibility, and accountability.

Summary

Investors expect private data providers to:

- 1. Offer data that allows a multidimensional assessment of an asset.**
- 2. Deliver granular data to facilitate investor action, such as engagement and target setting, as well as monitoring and reporting.**
- 3. Build climate and net zero alignment methodologies in line with recognised best practice and available standards.**
- 4. Disclose information on data quality assessment and update their approaches regularly.**
- 5. Increase coverage through time, to include additional asset classes without compromising on quality.**
- 6. Assist investors in attributing year-on-year climate and alignment performance changes.**

This guide sets out the six expectations in more detail. Investors can also use the disclosure templates in [Annex 1](#), designed for data vendors to complete, to assess the extent to which data vendors and/or specific data products are aligned with the six expectations.

Expectation 1:

Offer multidimensional data



Data providers should offer data that allows a multidimensional assessment of an asset to establish its net zero alignment beyond current GHG emissions and decarbonisation targets.

Summary

Investors expect private vendors to offer data on a range of criteria, such as CAPEX alignment, transition plans and net zero ambition, and not to limit their alignment offerings to GHG emissions and decarbonisation targets.

In relation to NZIF, investors expect vendors to cover at least the full range of the six NZIF core criteria for corporates, and if possible, the additional criteria.

1. Data covering additional criteria should be integrated into an alignment metric. Vendors should disclose which specific dimensions the metric captures, the data sources and the methodology.
2. If the data is distributed as part of an alternative dataset, vendors are expected to:
 - a. explain why integration within an alignment metric was not relevant or feasible,
 - b. appropriately market or flag the alternative dataset to their clients, and
 - c. commercially package the alternative dataset with alignment metrics as part of an alignment solution.
3. Vendors should develop their offering for less well-supplied criteria, such as just transition and CAPEX alignment.

Investors can request that vendors complete Disclosure template A in Annex I to provide information related to expectation 1.



1. Offer multidimensional data

Context

A recent [CDP report](#) concluded that amongst the 13,100+ companies disclosing in 2021, most companies reported a decarbonisation target. However, only one third of companies had developed a low-carbon transition plan and less than 1% reported on all 24 key indicators recommended by CDP to assess a transition plan.

The [IIGCC Net Zero Data Catalogue](#) found that no alignment indicator distributed by the 16 vendors overlap with all NZIF core criteria, let alone the additional criteria. The data availability for NZIF-recommended criteria is inconsistent; ranging from multiple options for well-covered criteria (e.g. decarbonisation targets) to scarce for more innovative criteria (e.g. CAPEX alignment, just transition). Therefore, the lack of data offerings for some criteria requires investors to aggregate multiple datasets and assess an asset's performance internally, which is especially problematic for investors with constraints on resources and technical expertise.

While a range of approaches exist to assess the alignment of an asset with a 1.5°C decarbonisation pathway, IIGCC believes that alignment should be assessed **based on a range of criteria that is not limited to GHG emission levels and decarbonisation targets**. Additional criteria, such as decarbonisation plans, governance, and energy use, are necessary to assess the robustness and credibility of an asset's projected trajectory. The additional information (e.g. just transition) can also help investors judge an asset's transition plan more accurately and inform engagement and stewardship.

NZIF's approach to net zero alignment is also promoted by other initiatives in the industry, such as the [CA100+ Benchmark](#), the [Transition Pathway Initiative](#) and the [ACT Initiative](#) that integrate it as part of their core philosophy. The United Nations High Level Expert Group recognises the approach in its [report on the net zero emissions commitments of non-state entities](#).

Drawing on NZIF, the Glasgow Financial Alliance for Net Zero (GFANZ) also released [guidance on measuring portfolio alignment](#) with net zero goals, which encourages assessing the credibility of a company's stated emissions reduction targets based on a range of criteria, rather than taking reduction targets on face value when forecasting an asset's emissions or applying a generic emissions trend.

This range of criteria can feed into different types of alignment metrics currently used by financial institutions, such as the NZIF maturity scale metrics ("net zero", "aligned", "aligning", "committed to aligning" etc), but can also input into benchmark divergence and Implied Temperature Rise (ITR) metrics.

Expectation 2:

Improve data granularity



2. Improve data granularity

Data providers should deliver granular data as part of alignment assessments to facilitate investor action, such as engagement and target setting, as well as monitoring and reporting.

Summary

Investors expect data vendors to deliver granular input data alongside an asset's final net zero alignment assessment.

In relation to NZIF, investors expect input data to be disclosed on the indicators/sub-indicators of the recommended public data sources, when relevant.

- **Access to input data for engagement:**
 - Input data should be accessible, alongside its source, and include the detail of any subsequent manipulation performed by vendors on "raw data" (e.g. estimating missing GHG disclosures). Estimated data should be clearly flagged and when relevant data providers should provide a link to the source of the input data.
- **Access to input data for target setting:**
 - Where relevant, additional information on the chosen decarbonisation pathways should be provided (source, year, sectoral and geographical granularity, unit, extra manipulation performed by the vendor) to assess each asset's alignment. These pathways should be made available to investors and allow for the aggregation at portfolio-level to ensure that asset- and portfolio-level targets are harmonized.
 - Vendors should make forecasted emissions as used in alignment assessments available to clients on a standalone basis.
- **Access to input data to link asset-level and portfolio-level assessments and target setting approaches:**
 - Some investors use both asset-level and portfolio-level data to assess their alignment and set targets. Access to input data helps them understand if the approaches used at both levels can be reconciled or not. For example, asset-level assessments are sometimes performed using different scenarios than those used for portfolio-level assessment and target setting.
- **Possibility to overwrite input data:**
 - Ideally, vendors would offer clients the possibility to overwrite any input data used and recalculate the final assessment based on the updated data. This would allow investors to leverage their internal research and expertise, and ensure assumptions are aligned throughout the different tools they use.

Investors can request that vendors complete [Disclosure template B in Annex I](#) to provide information related to expectation 2.

2. Improve data granularity

Context

Net zero alignment and other composite metrics are often based on sophisticated methodologies that rely on numerous hypotheses and combine different datasets from a range of sources. Investors require access to transparent and granular data to better understand the methodologies, enabling them to clearly communicate their strategy and steer investments based on alignment assessments.

IIGCC's Net Zero Data Catalogue found that less than 50% (7/16) of the reviewed vendors distribute data (other than GHG emissions) as part of their alignment offerings. This makes it difficult for investors to set financed emissions targets on the same principles as their asset level ITR methodologies and reconcile asset level and portfolio level targets. This includes forecasted emissions (7/16) and 1.5°C or well below 2°C portfolio level pathways (6/16).

First, access to the detailed input data that influences the final assessment is essential for investors to build sound engagement strategies and transition plans. To have real world impact, investors need to go beyond investing in assets with highest ratings and divesting from assets with lowest ratings. To engage credibly with assets and implement a transition plan, it is essential for investors to identify assets that can improve their ratings and understand the necessary course of actions to do so. Therefore, access to only aggregated assessments such as alignment metrics is likely to be insufficient for investors. For example:

- An efficient engagement strategy cannot rely solely on an alignment metric, such as Implied Temperature Rise (ITR). Investors need to understand what drives an asset's ITR and what an asset can do to be on the required trajectory. This can relate to input data (e.g. GHG emissions), forecasted emissions, decarbonisation pathway, other criteria, and output data e.g. deviation from decarbonisation pathway as a % or quantity above/below pathway (benchmark divergence).
- The rating or score for an asset's decarbonisation plan is an insufficient indicator for an investor to assess an asset's transition plan. Investors need to understand the criteria and methodology behind the decarbonisation plan rating or score.
- Access to detailed input data will make it easier for investors to extend their assessment universe and integrate the data with other tools and metrics they use internally.

Second, the required level of data granularity should allow investors to set (sub) portfolio-level targets, sector-level targets, and asset-class level targets consistently. This type of assessment requires access to the underlying decarbonisation pathways and asset-level projected emissions. Pathways can be aggregated at (sub) portfolio level to compute a portfolio-specific decarbonisation rate for target setting, taking into account sector and geographical exposures. Projected emissions can be used to calculate the baseline trajectory of the (sub) portfolio. This type of data usually feeds into asset-level alignment assessments but are not commonly distributed as standalone data by vendors.

Expectation 3:

Support converging methodologies

3. Support converging methodologies

Data providers should build climate and net zero alignment methodologies in line with guidance, recognised best practice and available standards where relevant to ensure the highest data quality.

Summary

Investors expect private vendors to disclose their methodological choices against guidance, recognised best practice and available standards and adopt these, where relevant, or indicate when their choices deviate and why.

- Net zero alignment assessment methodologies should include a section on the conditions for a financial asset to be rated 1.5°C, 2°C, “aligning”, “aligned”, “net zero”, etc so that investors can understand the conditions for an asset to be rated as such and to communicate this with corporates and other assets so they can understand their ratings.
- The conditions for an asset to be rated highly, under any methodology, should be clearly displayed and described in precise terms.
- Data vendors should be transparent on the divergence/ convergence with the main guidance, recognised best practice and available standards¹.

Investors can request that vendors complete Disclosure template B in (Annex I) to provide information related to expectation 3.

In relation to NZIF, investors expect vendors to disclose how their alignment definition deviates from its alignment approach, especially in relation to the recommended criteria and maturity scale, and how likely assets are to be classified into the same alignment buckets.

- Where relevant, vendors may disclose how their criteria-level assessment methodology overlaps or deviates from NZIF recommended public data sources (i.e. CA100+ Net Zero Benchmark, the Transition Pathway Initiative, GermanWatch CCPI and CRREM).
- Investors expect vendors to disclose how likely an asset is to be classified into the same alignment buckets as recommended by NZIF using their own approach.

¹ Including but not limited to the GHG Protocol, PCAF, GFANZ PAT Key Judgement Framework and Real-economy transition plans work, TCFD, Science-based target initiative, the CA100+ Benchmark, the Transition Pathway Initiative, ISSB Transition planning and the PAII Net Zero Investment Framework.

Context

IIGCC's [Net Zero Data Catalogue](#) echoed findings from [previous research](#) that the different approaches used by data providers would not result in the same conclusion on whether a particular asset is considered aligned or net zero. According to the Institut Louis Bachelier's [Alignment Cookbook](#), the main reason behind these inconsistencies is the range of definitions used to understand net zero alignment, which leads to a range of methodological choices in the face of incomplete data availability.

Datasets are often described in generic terms, which makes it difficult for users to understand why differences arise when comparing the results of two different metrics that are meant to assess the same thing, thereby creating confusion, and delaying investor action.

It is essential that the **assessment of an asset is based on a sound and transparent methodology that follows available standards and recognised best practice** to build convergence, facilitate implementation, and increase overall data quality.

Assessing an asset's alignment requires sophisticated metrics, if possible, with a multi-dimensional approach, building on a range of input data (see expectation 1). Recognised best practice and available standards often relate to specific metrics, datasets, or methodological aspects, making it difficult for vendors to identify which ones to follow and disclose against.

One possible solution is to disentangle and distinguish different areas that are addressed by recognised best practice and available standards.

For example, one can distinguish between:

- Which dimensions to capture or the methodological skeleton (see expectation 1).
- How to source data & assess quality, whether and how to estimate data when it is missing.
- How to combine data (calculation methodology).

Current levels of standardisation and emergence of best practice vary depending on the above area and the specific data point itself. While standards exist regarding GHG emissions, especially in terms of sourcing and quality assessment, best practice recommendations are only starting to emerge on how to build alignment metrics and calculation methodologies.

IIGCC's [Net Zero Data Catalogue](#) provides an accompanying excel which includes a mapping of 14 alignment products to key methodological choices based on industry best practice from the Institut Louis Bachelier's [Alignment Cookbook](#) and the Portfolio Alignment Team/TCFD Key Judgements ([updated](#) in November 2022 by GFANZ).

Expectation 4:

Enhance data quality



4. Enhance data quality

Data providers should disclose their process to source and assess data quality and seek to update their approaches regularly to ensure that the latest science is considered.

Summary

Investors expect private vendors to:

- Clearly describe the update management cycle and process, and make it available to clients, both for incorporating reported data and estimating data.
 - Clearly flag methodological updates, which should be traceable, including in database management (e.g. clear versioning methodology) and provide relevant details on the implications of the update.
 - Regularly update scenario and input data and disclose when each data point was updated and when they plan to update them next. Where possible, input data should be updated at least yearly. For tracking purposes, vendors should keep values for historical fields, indicating the year.
 - Ensure transparency of error discovery and corrections made to prior versions of datasets.
- Where possible, provide information on data quality.
 - On reported and estimated data, by using the [Partnership for Carbon Accounting Financials \(PCAF\) framework](#) to attribute a quality score to GHG emissions and disclosing the percentage of estimated data versus reported data within a given dataset. On projected data, by providing information on what was projected compared to what actually happened, ex-post.
 - Providers should offer transparent information on the data quality levels of all types of indicators and datasets. Ideally, a common approach to quality scoring at the indicator-level should be developed and applied by all the market.
 - Providers should disclose the source of the data, and the process to collect data. They should also check and, where necessary, modify disclosed quantitative data (e.g. digitally scraped from financial reports, requested directly from companies) and provide information on scoring methodology for qualitative data.

Investors can request that vendors complete [Disclosure template B in Annex I](#) to provide information related to expectation 4.

4. Enhance data quality

Context

Net zero alignment assessments are a novel area of research and methodologies are evolving relatively fast. **Methodologies should be updated regularly** to allow new developments to be considered and ensure that alignment assessments and target setting are based on the latest and most sound research. For example:

- Where scope 3 is not widely reported, vendors use various modelling approaches. These may be updated as soon as new data is published (e.g. EEIO updates), disclosed (e.g. production data) and new methodologies are being developed (e.g. leveraging AI).
- Frameworks to assess the robustness of transition plans are likely to evolve, as well as frameworks to set science-based targets. For example, the Fair Share Method to allocate a macro budget to micro budget is relatively new compared to other allocation approaches.

Net zero alignment assessments are built on input data that is not static. **Updating this data is essential to ensure that portfolios and assets assessed as net zero or aligned are not in reality surpassing their allocated budget**, thereby leading to a global budget overshoot. For example:

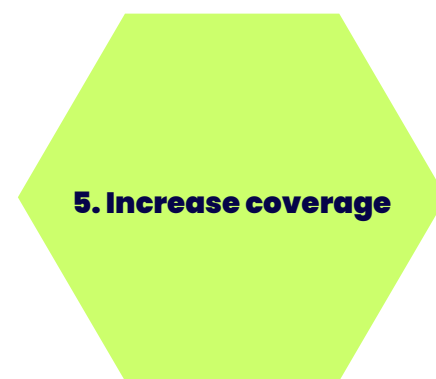
- Scenario data used in alignment assessments and target setting need to be updated annually, to account for the shrinking global carbon budget. As the world continues to overspend the global carbon budget, the decarbonisation rate necessary to limit temperature rise to a 1.5°C increases every year and assets considered net zero or aligned in 2022 may not be in the future.
- Changes in production, revenues, and enterprise value are inevitable, and the budget attributed to different actors should be adjusted accordingly, when these changes deviate from what was originally planned, to avoid overshooting the global carbon budget.

An indication of the data quality may help investors decide whether the data is sound and reliable.

PCAF offers a framework to attribute a quality score to GHG emissions data, which is also referenced in the TCFD guidance. Yet no data quality framework exists for other metrics, let alone alignment metrics. The GFANZ Portfolio Alignment Measurement framework can be seen as a data quality framework on alignment methodologies but does not yet offer a quality scoring methodology.

Expectation 5:

Increase coverage



Data providers should increase coverage through time, especially on additional asset classes such as sovereigns, real estate, private equity, and infrastructure, without compromising on quality.

Summary

Investors expect data vendors to clearly disclose the coverage of their datasets and gradually increase it. In particular:

- Disclose coverage in terms of asset classes and number of assets, especially on the main investment indices.
- Disclose plans to increase coverage through time.

Approaches should consider different asset class specificities while ensuring they are analysed based on consistent methodological principles. This requires, where relevant, ensuring the same underlying scenario is used. Where it is not possible, vendors are expected to clearly disclose why.

Investors can request that vendors complete Disclosure template A in Annex I to provide information related to expectation 5.

In relation to NZIF, investors expect vendors to offer datasets, at a minimum, related to the main asset classes covered by the framework.

Context

Most alignment assessment and target setting frameworks cover only a limited number of asset classes. This can be explained by a lack of available methodologies for other asset classes such as unlisted debt or derivatives.

In addition, data availability varies significantly between asset classes, company size, and region, with few off-the-shelf datasets covering infrastructure and private equity and little data available on SMEs compared to large caps.

IIGCC's Net Zero Data Catalogue found varying levels of coverage, both in terms of asset classes and number of assets covered within one asset class:

- All 16 vendors reviewed offer at least one corporate dataset relevant to NZIF, 13/16 offered a sovereign dataset and 4/16 offered a real estate dataset. Only 3/16 vendors offered GHG emissions across all three asset classes.
- Corporate coverage varies widely, from 2,600 to 40,000 listed companies. All sectors are generally covered, albeit with different levels of quality, particularly in lower impact sectors and those without agreed upon pathways. Only a small proportion of vendors cover private equity (3/16).
- Sovereign datasets cover most countries.
- Real estate datasets have varying levels of coverage both in terms of asset type and geography. In addition, a small number of vendors (3/16) offer the use of proxies, or averages, when building-specific data is not available or cannot be collected.

IIGCC's Net Zero Data Catalogue found little consistency in underlying data and hypothesis when different asset classes were covered by a vendor. This may decrease the robustness of multi-asset alignment assessments and targets. This is especially the case when considering the type of scenario used. Scenarios, and their associated decarbonisation pathways, reflect a specific worldview and are based on assumptions, such as future GDP growth. Inconsistencies resulting from the use of different scenarios for different asset classes will be reflected in the overall alignment result and is likely to lead to a carbon budget overshoot at portfolio or asset level.

Expectation 6:

Ensure robust monitoring



6. Ensure robust monitoring

Data vendors should assist investors in attributing year-on-year climate and net zero alignment performance changes by developing robust monitoring frameworks and tools.

Summary

Investors expect data vendors to document and help their investor clients understand year-on-year changes (both positive and negative) in:

- Portfolio emissions
- Asset emissions
- Portfolio alignment assessment
- Asset alignment assessment

Investors are not prescriptive on the specific drivers to which changes may be attributed. However, these drivers should, at minimum, include:

- Portfolio composition
- Asset changes in emissions
- Decarbonisation due to closure of emitting assets
- Methodological changes
- Coverage
- Financial volatility

Investors can request that vendors complete Disclosure template C in Annex I to provide information related to expectation 6.

In relation to NZIF, investors expect vendors to develop tools to help their investor clients attribute year-on-year changes on all four NZIF targets. Changes in portfolio alignment should clearly identify changes at criteria level.

Context

Annual and reliable monitoring is a real challenge for investors that have committed to net zero. This requires devising monitoring methodologies and tools that accurately track asset and portfolio level alignment improvements and capture drivers of decarbonisation.

Changes in GHG emissions or an alignment status at asset or portfolio level may be the result of a range of decarbonisation drivers, such as changes to the portfolio composition, the asset's activity structure, or modifications in the estimation approaches and methodologies (including scenario updates). Some decarbonisation drivers may not be linked with emissions reductions in the "real world" yet appear to reduce the emissions associated with an individual asset or portfolio or improve the alignment rating of an individual asset or portfolio.

For example, a decrease in a power company's emissions intensity may be a result of that company selling a fossil-fuel intensive plant to another company, rather than retiring the plant.

Changes in portfolio composition and an asset's activities occur regularly. In addition, methodological changes are often necessary to ensure that a methodological approach taken is the most robust, given changes in external conditions, and evolving standards and research (see expectation 4). Attribution analysis, therefore, is important to identify the underlying drivers of year-on-year changes and quantify possible impact in the "real world".

Figure 1 highlights a number of different drivers of change and their relevance to portfolio emissions and portfolio alignment assessment methodologies.

Key findings from IIGCC's [Net Zero Data Catalogue](#) in relation to expectation six include:

- Only one data vendor had developed an approach to attribute year-on-year changes of portfolio financed emissions beyond changes in sector allocation and stock selection.
- No vendor has developed, to date, an approach that does the same for alignment metrics (e.g. ITR metrics).
- No cross-sector methodology exists to date to define and calculate the difference between "virtual" and "real world" asset level decarbonisation.

6. Ensure robust monitoring

Figure 1: Examples of drivers of climate performance changes.

Drivers of climate performance	Relevance of drivers to...	
	Portfolio emissions	Portfolio alignment
Portfolio composition		
Reweighting (sector allocation)	Y	Y
Reweighting (stock selection within an industry)	Y	Y
New investments	Y	Y
Divestment	Y	Y
Other	Y	Y
Methodological changes		
Data coverage	Y	Y
Modelled emissions	Y	Y
Scenario data (yearly update of the remaining carbon budget) against which alignment is assessed		Y
Changes in EVIC/ financial volatility	Y	Y
Difference in actual production or revenue data vs. forecasted		Y
Other methodological changes		Y
Changes in emissions profile of underlying assets		
Decrease in emissions	Y	Y
Decarbonisation due to closure of emitting assets	Y	Should be but not included in any current alignment approaches

Annex I:

Disclosure templates for data vendors

Disclosure template A

Covering expectations 1 (multidimensional data) and 5 (increase coverage)

1. Asset class coverage

	Coverage included (Yes/No)	Coverage (# of assets)
Listed equity		
Corporate bonds		
Real estate		
Private equity		
Infrastructure		
Other (please specify/add rows)		

2. Asset sector classification

a. Where relevant, do you disclose each asset's sector classification (e.g. material or high-impact sector)?

- Yes
- No

b. Please specify whether the classification is consistent with NZIF's interpretation of material sectors as those in NACE code categories A-H and J-L.

- Consistent
- Inconsistent

3. Please specify the type of alignment metric you offer using the table below.

	Offered (Yes/ No)	Details of coverage (asset class/ geography/# of assets etc)
Net zero alignment score/ maturity scale metric		
Implied temperature rise		
Benchmark divergence		
Binary metric		
Climate score that includes a comparison with a decarbonisation trajectory		
Climate score that does not include a comparison with a decarbonisation trajectory but may still be used as a proxy – specify why		
Other (please specify)		

4. Dimensions taken into account as inputs into the metric calculation (i.e. data inputs that influence the overall asset alignment assessment)

a. Please complete the table below to indicate your offering

Dimension ²	Is this dimension taken into account and influences the overall alignment assessment of an asset? (Y / N / Partial) – please explain	
	Yes / No / Partial	Explanation / further information
Corporates		
Net zero ambition		
Decarbonisation targets		
Performance vs. targets		
GHG disclosure		
Decarbonisation plans & green revenue plan		
CAPEX alignment		
Climate lobbying		
Climate governance		
Just transition		
Climate risks and accounts		
Use or planned use of offsetting to meet targets		
Other (please specify)		
Sovereigns		
Past trends of GHG emissions		
Current GHG emissions alignment		
GHG reduction target alignment		
Current share of renewable alignment		
Renewable energy target alignment		
Past trend of energy use		
Current energy use alignment		
Energy use target alignment		
Fossil fuel economic dependency		
National climate policy strength		
International climate policy strength		
Other (please specify)		

2 These dimensions are the recommended criteria of NZIF. These build on recommended public data sources, such as the CA100+ Benchmark, the Transition Pathway Initiative, the GermanWatch Climate Change Performance Index (CCPI) and the CREEM. A mapping of the public data sources to NZIF criteria can be found in [IIGCC's Net Zero Data Catalogue](#).

Real estate

Current energy intensity compared to its 2050 target level as per a 1.5°C scenario		
Current emissions intensity compared to its 2050 target level as per a 1.5°C scenario		
Future energy intensity compared to its 2050 target level as per a 1.5°C scenario (including retrofits)		
Future emissions intensity compared to its 2050 target level as per a 1.5°C scenario (including retrofits)		
Decarbonisation targets		
Decarbonisation strategy to achieve target		
Other (please specify)		

b. Do you distribute other datasets that capture one or several of the above dimensions that could be used *alongside the alignment metric*?

- Yes
- No

c. If yes, please complete the table below and add rows where necessary.

Name of the dataset/ product offering where it can be found	Dimension(s) covered (see list in 4a above)	Type of metric (e.g. score)

Disclosure template B

Covering expectations 2 (data granularity), 3 (converging methodologies) and 4 (data quality and regular updates)

Current GHG emissions

1. Does asset specific current GHG emissions data feed into the alignment metric?

- Yes - reported only
- Yes - modelled only
- Yes - reported and modelled
- Yes - reported, partially reported, and modelled
- No

2. Do you follow the GHG Protocol, PCAF, GFANZ and/or other guidance, best practice or available standards recommendations for any of the below.

a. Gathering reported GHG emissions.

- Yes
- No

a. Estimating GHG emissions at asset-level.

- Yes
- No

3. Do you give access to current GHG emissions data, at asset-level, used in the metric?

- Yes
- No

a. Do you clearly flag and provide the link to its source?

- Yes
- No

b. Do you give a data quality score, for example based on PCAF's data quality scoring?

- Yes
- No

c. Please describe your data quality process, both for modelled and reported data.

a. Do you disclose disaggregated scope 1, scope 2, and scope 3 data for each asset per category?

- Yes
- No

4. How often is the data updated and what is the update process?

Forward-looking GHG emissions:

5. Do you project forward-looking asset specific GHG emissions? If yes, please tick the below factors included in the projection.

- No
- Historical extrapolation (company-average)
- Historical extrapolation (sector and/or geography average)
- Decarbonisation targets
- CAPEX
- Revealed plans
- Scenario-based future trend (sector and/or geography-specific)
- Scenario-based future trend (sector and/or geography-agnostic)
- Other: please specify

6. Do you follow the GFANZ and/or other guidance, best practices, and available standards recommendations on projecting GHG emissions?

- Yes
- No

7. Can your client access the projected data for each asset and time period, alongside its source?

- Yes
- No

8. Do you disclose, ex-post, the difference between projected data and what actually happened?

- Yes
- No

9. How often is the data updated and what is the update process?

Scenario(s) and decarbonisation pathway(s):

10. Do you use decarbonisation pathways in building your alignment metric?

Yes

No

• Name of scenario(s) _____

• Name of pathway(s): _____

11. How do you distribute the macro budget to micro actors to build asset-specific decarbonisation benchmarks? (Tick those that apply and specify sectors)

Sectoral decarbonisation approach

Absolute contraction

Fair share

GEVA

Other: please specify:

12. How does your approach follow or deviate from SBTi, GFANZ and/or other guidance, best practices, and available standards recommendations?

13. For each asset, do you disclose:

a. The approach used to calculate its required decarbonisation rate/ fair share budget/ target emissions

Yes

No

b. The expected decarbonisation rate required to be considered aligned/ net zero

Yes

No

c. The absolute emissions target required to be considered aligned/ net zero

Yes

No

d. The emissions intensity target required to be considered aligned/ net zero

Yes

No

14. How often is the data updated and what is the update process?

Other input data

15. Do you use other input data to assess other dimensions as part of your alignment metric (see the question on dimensions outlined in question 4.a. above)? If yes, please specify data input type and whether it follows guidance, best practices and other available standards in the table below.

- Yes
- No

16. Do you give access to the underlying data?

- Yes
- No

17. How often is the data updated and what is the update process?

- Yes
- No

18. Do you assess data quality?

- Yes
- No

Dimension ³	Please reference any particular guidance, standard or best practice that you follow in integrating this dimension	Is access given to underlying data?
Corporates		
Net zero ambition		
Decarbonisation targets		
Performance vs. targets		
GHG disclosure		
Decarbonisation plans and green revenue plan		
CAPEX alignment		
Climate lobbying		
Climate governance		
Just transition		
Climate risks and accounts		
Other (please specify)		
Sovereigns		
Past trends of GHG emissions		
Current GHG emissions alignment		
GHG reduction target alignment		
Current share of renewable alignment		
Renewable energy target alignment		
Past trend of energy use		
Current energy use alignment		
Energy use target alignment		
Fossil fuel economic dependency		
National climate policy strength		
International climate policy strength		
Other (please specify)		
Real estate		
Current energy intensity compared to its 2050 target level as per a 1.5°C scenario		
Current emissions intensity compared to its 2050 target level as per a 1.5°C scenario		
Future energy intensity compared to its 2050 target level as per a 1.5°C scenario (including retrofits)		
Future emissions intensity compared to its 2050 target level as per a 1.5°C scenario (including retrofits)		
Decarbonisation targets		
Decarbonisation strategy to achieve target		
Other (please specify)		

³ These dimensions are the recommended criteria of the PAI NZIF. These build on recommended public data sources, such as the CA100+ Benchmark, the Transition Pathway Initiative, the GermanWatch Climate Change Performance Index (CCPI) and the CREEM. A mapping of the public data sources to the NZIF criteria can be found in the [IIGCC Net Zero Data Catalogue](#).

Final output calculation

19. How is your metric built?

20. Are other GFANZ PAT Key judgement recommendations relevant to your alignment metric (beyond the ones already mentioned above)?

Yes

No

a. If yes, please describe how you deviate or align with GFANZ recommendations.

21. Is NZIF's maturity scale methodology relevant to your alignment metric?

Yes

No

a. If so, report how your approach aligns or deviate from it.

22. Are any other guidance, best practices, available standards, or frameworks relevant?

Yes

No

a. If yes, please name the relevant guidance/standards?

b. How does your approach align or deviates from it?

23. How often is your methodology updated and what is the update process?

Disclosure template C

Covering expectation 6 (robust monitoring frameworks and tools)

1. Do you offer your investor clients a methodology and/or a tool to attribute and understand year-on-year changes for any of the following:

	Attribution methodology available
Portfolio emissions	Yes / No
Asset emissions	Yes / No
Portfolio alignment	Yes / No
Asset alignment	Yes / No

a. If yes, please tick the categories of drivers you use for each.

	Portfolio emissions	Asset emissions	Portfolio alignment	Asset alignment
Portfolio composition				
Reweighting (sector allocation)		N/A		N/A
Reweighting (stock selection within an industry)				
New investments				
Divestment				
Other: please specify				
Methodological changes				
Data coverage				
Modelling emissions				
Scenario (yearly update of the remaining carbon budget) against which alignment is assessed	N/A			
Changes in EVIC/ financial volatility				
Difference in actual production or revenue data vs. forecasted	N/A			
Other methodological changes. Please specify				
Changes in emissions profile of underlying assets				
Decrease in emissions				
Decarbonisation due to closure of emitting assets				

2. Do you have a methodology for determining real-world decarbonisation?

- Yes
 No

a. If yes, please describe this methodology.



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