Asset Level Assessment and Targets

Introduction
This aims to help investors shift the alignment of underlying holdings (assets) to be consistent with net zero goals and objectives. Net zero target setting and implementation guidance is specific for each asset class, although the overall target structure remains the same and aggregation across asset classes remains possible.

Core action points
NZIF recommends the following actions for investors using the framework and considers them core:
- Define and disclose which sectors have been considered as high impact.
- Set and disclose short term targets and implement approaches to improve alignment of assets by asset class.
- Asset alignment target: A 5-year target for increasing the % of AUM (or financed emissions) in material sectors that are ‘aligning’ or ‘aligned’ to a net zero pathway, or achieving net zero (see below for visual demonstration).
- Engagement threshold target: A minimum proportion of assets (based on scope 1 and 2 of financed emissions) are assessed as ‘achieving’ or ‘aligned’ to a net zero pathway, or are subject to engagement, increasing gradually over time. This should be accompanied by a description of the investor’s approach or strategy regarding engagement with assets with material scope 3 emissions, at least for high impact material sectors.

The graphs below show how setting and achieving alignment targets can vary dependent on the metric chosen using a dummy portfolio. The left graph shows a growing portfolio that is assessing alignment based on AUM. The right graph shows the same portfolio but uses financed emissions to assess alignment.
Advanced action points
NZIF recommends the following advanced actions. These may initially be difficult when beginning to set and implement net zero targets (when attention is likely to be placed on implementing core action points), but would likely prove beneficial over the long term:

- Disclose portfolio construction approaches implemented and/or products developed to facilitate allocation to products aligned with net zero objectives.
- Disclose engagement, stewardship, and/or direct management actions undertaken in relation to the engagement threshold target, and key outcomes achieved.
- Disclose where divestment or exclusion has been used, the rationale, and the extent to which this has been the means to achieve targets.
- In addition to the engagement threshold based on scope 1 and 2 of financed emissions, disclose a ‘shadow’ engagement threshold metric for material scope 3 of financed emissions, to indicate the proportion of assets (based on material scope 3) that are assessed as ‘achieving’ or ‘aligned’ to a net zero pathway or are subject to engagement.

Performance expectations
It is expected by 2040, that 100% of assets are, as a minimum, aligned to a net zero pathway. This applies across all asset classes set out below. This expectation aims to enhance the probability that 100% of assets are consistent with the global goal to achieve net zero by 2050 and thus consistent with investors transitioning their individual portfolios in a manner consistent with global net zero goals.

Within the engagement threshold target it is expected that investors set an engagement threshold target which immediately ensures that at least 70% of scope 1 and 2 financed emissions in material sectors are originating in assets that are either categorised as achieving net zero, aligned to a net zero pathway, or are subject to engagement and stewardship actions. This threshold should increase at least to 90% by 2030 at the latest.

These expectations are not requirements of NZIF itself, they serve as a guide. Investors should seek to determine what these precise figures should be for themselves based on their individual strategies, circumstances, and definitions. They should also decide what assets and asset classes should be in scope of these expectations.

Investors utilise a range of approaches and face a number of constraints, some of which they do not have full agency to address. Consequently, generic industry wide performance expectations are not generally considered possible. However, investors can disclose their individual performance against these generic performance expectations, explaining the reasons for any divergence.
Selective divestment
As a general rule, NZIF does not recommend divestment from secondary equity markets as an approach to drive alignment in individual portfolios, especially when primary market issuances such as bonds are more associated with new production capacity. However, investors could consider divestment or exclusion based on their own strategies and client/beneficiary needs and:

- As a consequence of climate financial risk assessment.
- As a consequence of escalation following engagement.
- For companies whose primary activities and expansion plans are incompatible with a credible net zero pathway, with exclusions identified over relevant timeframes.

NZIF recommends investors develop a deforestation and energy investment policy to inform strategies and activities, as associated transition risks may become more acute in the future as the likelihood of a disorderly transition increases.

Alignment assessment methodology
NZIF’s asset level assessment and targets methodology is based upon a common framework of criteria and categories. It provides a consistent and seamless conceptual base between the assessment of assets and the improvement of their alignment to a net zero pathway. The framework is consistently applied across all approaches to realising targets (across asset selection, management, and engagement).

Alignment categories
NZIF consistently uses five categories of alignment, representing progressive steps towards alignment with a net zero pathway. Investors can use these to evaluate where investments are on this progression and by extension, a forward-looking nuanced understanding of their portfolio alignment (when investments are aggregated). The five categories are:

1. ‘Not aligning’
   Refers to assets without a commitment to decarbonise in a manner consistent with achieving global net zero.

2. ‘Committed to aligning’
   Refers to assets with a long term decarbonisation goal consistent with achieving global net zero by 2050.

3. ‘Aligning to a net zero pathway’
   Refers to assets with emissions performance not equal to a contextually relevant net zero pathway. However, importantly they have science-based targets and a decarbonisation plan, and are thus ready to transition.

4. ‘Aligned to a net zero pathway’
   Refers to assets which have science-based targets, a decarbonisation plan, and current absolute or emissions intensity at least equal to a relevant net zero pathway. This category broadly signifies that transition risk is being managed at an asset level.

5. ‘Achieving net zero’
   Typically, this refers to when assets meet all relevant criteria and have an emissions performance at net zero which can be expected to continue.
Criteria underpinning NZIF asset alignment

NZIF uses a set of ten backwards, current, and forward-looking criteria to assess assets, but only a subset to determine alignment. The subset differs across each asset class due to specificities and whether assets are in high impact material sectors.

A subset is used because data availability and/or quality can be problematic (e.g., within emerging markets). High impact material sectors require more attention and thus criteria as they underpin economies via their inputs, and are vital to wider decarbonisation efforts. Other material sectors use fewer criteria to reduce the data dependency of the alignment process because they are expected to decarbonise as inputs into economies decarbonise.

The set of ten backwards, current, and forward-looking criteria used by NZIF to assess assets are set out below. These are specified in more detail under each asset class to ensure they are contextually specific.

- Ambition
- Targets
- Emissions performance
- Disclosure
- Decarbonisation plan
- Capital allocation alignment
- Climate policy engagement
- Climate governance
- Just transition
- Climate risk and accounts

The criteria laid out above provide a high-level framework for the alignment assessment of investments. Indicators for each criterion are purposefully unspecified to allow investors the flexibility to determine what indicators and data sources suit their circumstances. The criteria and subsequent assessment should cover scope 1, 2 and material scope 3 emissions. Investors should explain and justify the materiality approach taken.

Information on alignment criteria and indicators should be found within the transition plans of investments and should be chosen until decisions on the alignment of an asset can be adequately made. Investors should disclose, as appropriate, the indicators and data sources used to determine the fulfilment of alignment criteria.

**Material sectors**

NZIF considers sectors covered by NACE codes A-H and J-L as material and should be covered at a minimum by net zero objectives and targets:

- A) Agriculture, forestry and fishing
- B) Mining and quarrying
- C) Manufacturing
- D) Electricity, gas, steam and air conditioning supply
- E) Water supply; sewerage; waste management and remediation activities
- F) Construction
- G) Wholesale and retail trade; repair of motor vehicles and motorcycles
- H) Transporting and storage
- I) Information and communication
- J) Financial and insurance activities
- K) Consumer goods & services
- L) Real estate activities

Sectors which are not considered material are not the recommended subject of NZIF net zero objectives and targets. This is so that investor net zero efforts are channelled to material sources of GHG emissions.

**High impact material sectors**

Certain material sectors are deemed high impact based on GHG emissions in their value chain. Transition of high impact material sectors are critical to achieving net zero and are those linked to the company focus lists of Climate Action 100+ and TPI, plus banks, real estate, agriculture, forestry, and fishing. Currently these sectors equate to:

- Agriculture, forestry, and fishing
- Airlines
- Aluminium
- Automobiles
- Banking
- Cement
- Chemicals
- Consumer goods & services
- Coal and diversified mining
- Electric utilities
- Food producers
- Industrial gases
- Oil and gas (plus distribution)
- Paper
- Real estate
- Steel
- Transportation Investments in listed and unlisted corporates that are within high impact material sectors must satisfy more criteria to be classified as ‘aligned to a net zero pathway’ (typically decarbonisation plan and capital allocation alignment), as exposure to transition risk will be especially prevalent in these sectors and they are key to decarbonising the wider economy.
Listed Equity & Corporate Fixed Income

Alignment target
- Asset alignment target: A 5-year target for increasing the % of AUM in material sectors that are ‘aligning’ or ‘aligned’ to a net zero pathway, or achieving net zero.
- Engagement threshold target: A minimum proportion of financed emissions are assessed as achieving or aligned to a net zero pathway, or are subject to engagement.

Scope
- At a minimum it is recommended that material companies are those covered by sectors in NACE code categories: A–H and J–L.

Criteria underpinning alignment assessment

| Key | Green ticks represent when a criterion is required to be fulfilled for a particular alignment category to be obtained. |

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Committed to aligning</th>
<th>Aligning to a net zero pathway</th>
<th>Aligned to a net zero pathway</th>
<th>Achieving net zero</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset with emissions intensity required by the sector and regional pathway for 2050 and whose operational model will maintain this performance.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Emissions performance: Current absolute or emissions intensity is at least equal to a relevant net zero pathway.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>* Capital allocation alignment: A clear demonstration that capital expenditures are consistent with a relevant net zero pathway.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>* Decarbonisation plan: A quantified set of measures exists to achieve short and medium term science-based targets by reducing GHGs and increasing green revenues, when relevant.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Disclosure: Disclosure of operational scope 1, 2 and material scope 3 emissions.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Targets: Short and medium term science-based targets to reduce GHG emissions.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>Ambition: A long term goal consistent with the global goal of achieving net zero by 2050.</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
</tr>
</tbody>
</table>

* Additional alignment criteria that a corporate within a high impact material sector needs to meet.

Data sources that investors may especially wish to consider, and which are publicly available for this asset class, are:

- The Climate Action 100+ Net Zero Company Benchmark and associated net zero standards.66
- Transition Pathway Initiative Carbon Performance and Management Quality Indicators.67
- Science Based Targets Initiative (for assessing criteria: science-based targets, emissions performance68, and disclosure69).
- Carbon Tracker (for assessing capital allocation alignment70).

Investors can use a mixture of data sources to make as much of an informed judgement as possible. Investors using private data vendors should disclose the provider and product when appropriate.71 To represent best practice, data vendors providing assessments consistent with the alignment criteria should ensure and disclose their consistency with the latest detailed guidance on indicators from the Climate Action 100+ Net Zero Company Benchmark.

We anticipate continued evolution of indicators under each criterion, including subsequent enhanced guidance notes on indicators (current resources are identified within the ‘High impact material sectors’ section above).
Company emissions reporting for Derivatives and Hedge Funds
Neither derivatives nor hedge fund holdings are considered to constitute an asset class. Derivatives are considered to be financial instruments that offer indirect exposure to an underlying asset class, a portion of the market, or a specific security. Hedge funds are considered as vehicles that offer a variety of investment strategies across different asset classes.

Although indirect exposure to assets through derivatives may not directly contribute to GHG emissions, it is tied to underlying assets, such as stocks or bonds, which do have associated emissions. IIGCC guidance recommends investors report the following separately:22

- **Financed emissions** – Attributed emissions from companies where the investor owns securities directly and can influence, whether purchased through secondary or primary markets.
- **Long associated emissions** – Associated emissions from companies where long exposure is gained via prime brokers or derivatives.
- **Short associated emissions** – Associated emissions from companies where short exposure is gained via prime brokers or derivatives.

Notably, long and short emissions should not be reported aggregated and/or netted, for financed emissions or associated emissions.

Asset managers and hedge fund managers can choose to additionally report the aggregate of the direct and indirect long exposures, but they should ensure they also report them separately.

Classification and measurement

**Step 1**
Solutions classification: Identify and classify activities, products and services that contribute to emissions reductions using net zero scenarios and/or local taxonomies.

**Step 2**
Contribution type: Assess the type of contribution those activities make to decarbonisation (transition of own performance and/or enabling).

**Step 3**
Corporate indicators: Assess contribution of a corporate using revenue and capex data.

**Step 4**
Portfolio/fund metrics: Aggregate corporate green activity up to portfolio or fund level, using “green ratio” or “financed green” metric.

Climate solutions
Investors looking to increase allocation to climate solutions in listed equity and corporate fixed income may consider adopting IIGCC’s four-step approach to classifying and calculating allocation to climate solutions for Listed Equity and Corporate Fixed Income, and utilise the disclosure template shown below.73
Investors can use a dashboard of climate solutions classifications and metrics to measure and communicate allocation to climate solutions and inform corporate transition plan analysis, stewardship and engagement, as well as policy advocacy and industry engagement.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Classification</th>
<th>Activity type</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green revenue ratio</td>
<td>Technical screening</td>
<td>Transition of own performance</td>
<td>Recommended disclosure if setting climate solutions targets under NZIF, in line with EU Taxonomy Regulation.</td>
</tr>
<tr>
<td>($m and/or %)</td>
<td>Taxonomy-aligned</td>
<td></td>
<td>Disaggregation of metrics by activity type is optional.</td>
</tr>
<tr>
<td></td>
<td>Taxonomy-equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taxonomy-plus</td>
<td>Enabling</td>
<td></td>
</tr>
<tr>
<td>Financed green revenues</td>
<td>Taxonomy-eligible</td>
<td>Transition of own performance</td>
<td>Recommended disclosure if setting climate solutions targets under NZIF.</td>
</tr>
<tr>
<td>($m/$m invested)</td>
<td>Taxonomy-aligned</td>
<td></td>
<td>Disaggregation of metrics by activity type is optional.</td>
</tr>
<tr>
<td></td>
<td>Taxonomy-equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taxonomy-plus</td>
<td>Enabling</td>
<td></td>
</tr>
<tr>
<td>Data coverage</td>
<td>N/A</td>
<td>N/A</td>
<td>Minimum required if setting climate solutions targets under NZIF.</td>
</tr>
<tr>
<td>% of AUM where revenue data is unavailable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of AUM with no revenues from climate solutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green capex ratio</td>
<td>Taxonomy-eligible</td>
<td>Transition of own performance</td>
<td>Recommended disclosure, as data availability improves, in line with EU Taxonomy Regulation.</td>
</tr>
<tr>
<td>($m and/or %)</td>
<td>Taxonomy-aligned</td>
<td></td>
<td>Disaggregation of metrics by activity type is optional.</td>
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<td></td>
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</tr>
<tr>
<td>Financed green capex</td>
<td>Taxonomy-eligible</td>
<td>Transition of own performance</td>
<td>Recommended disclosure, as data availability improves.</td>
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<td>($m/$ invested)</td>
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<tr>
<td></td>
<td>Taxonomy-plus</td>
<td>Enabling</td>
<td></td>
</tr>
</tbody>
</table>

Source: IIGCC’s Climate Solutions Guidance.

**Reporting and disclosures**

To support clear and transparent disclosures and protect the integrity of climate solutions classifications, two core disclosure principles for investors using this guidance can be used:

- **Transparency**: Disclose assumptions and methodologies in a clear, fair and non-misleading manner when using a taxonomy-plus approach.
- **Standardisation**: Use a disclosure template to enhance standardisation of green revenue and green capex disclosures across the industry.

**Approaches to achieve asset level targets**

The approaches below can be used to achieve asset alignment targets. They are presented agnostically (regarding their efficacy) as their utility will depend on the context an individual investor operates within.
Asset selection / portfolio construction
• Active. Screening and/or weighting new investments within a sector based on alignment criteria and climate solutions metrics, with particular attention given to primary market issuances of equity and debt.
• Invest in specialist products/funds (alignment/use of proceeds/climate solutions focused), that are consistent with regulatory labels when available.
• Passive and index investing. Apply benchmark with positive weightings for alignment criteria and climate solutions revenue.

Asset engagement
NZIF does not provide a definition for ‘engagement’. This is for clients and their investment managers to discuss and perhaps formalise (e.g. via investment management agreements, investment policy statements, and fund prospectus material). However, NZIF does recommend the following actions for investors in relation to engagement:74
• Set and publish an engagement strategy (including definitions, prioritisation process, clear milestones and an escalation process) which links to investment, weighting, and divestment decisions.
• Publish a NZIF-aligned voting policy and communicate this to relevant stakeholders.75
• Publish voting actions and records (including rationale for policy deviation).
• Engage with companies, including on a value chain basis, to improve performance against alignment criteria and climate solutions activities (including announcing and explaining broad voting intentions).
• Join and actively participate in engagement initiatives, such as Climate Action 100+, IIGCC’s Net Zero Engagement Initiative, and the Asian Utilities Engagement Program.76

Additional engagement actions for listed corporate assets
Listed Equity
• Utilise routine votes, shareholder resolutions and other means when the corporate is insufficiently progressing towards ‘aligned’ status.78
• Co-file and/or support shareholder resolutions in line with the criteria.80
• Implement an escalation approach, including a time-bound escalation strategy.
• Consider alignment criteria when voting on mergers and acquisitions, including whether the post company meets or can be expected to meet the criteria within a reasonable period.81
• Ensure voting rights exist, including with external investment managers, to undertake the above actions.

Corporate Fixed Income
• Engage issuers to secure agreement to alignment criteria and climate solutions activities, including the potential use of covenants and verified labelled bonds (e.g. GS5+ issuances) as mechanisms to ensure alignment criteria are met during the lifetime of the bond.82
• Commence engagement in advance of the primary issuance process itself and continue engagement across the financing lifecycle.
• Set clear expectations of companies in relation to alignment criteria and climate solutions activities that should be demonstrated to secure financing.
• Assess how issuances are aligned with the net zero objectives and targets of the issuer.
Sovereign Bonds

Alignment targets
- Asset alignment target: Set a 5-year target for increasing the % of sovereign bonds allocation to issuers that are categorised as ‘aligned’ to a net zero pathway, or ‘achieving’ net zero.83
- Engagement threshold target: A threshold of financed emissions from sovereign bonds in a portfolio and undertake engagement actions with the relevant countries and territories.

Scope
- Include sovereign bonds of all maturities issued in domestic or foreign currencies.
- All sovereign issuance from national governments is considered in scope, including holdings required for liability matching, regulatory purposes, and cash management. However, inevitable restrictions likely exist that will affect the practical extent these assets can be aligned. Any restrictions should be disclosed.
- Sub-sovereigns, municipal or state authorities and supra-nationals that issue bonds are not explicitly covered, although investors may apply similar concepts on a best effort basis. As data availability improves, these will be considered in future workstreams. However, labelled and climate-related instruments issued by these entities may be considered under the climate solutions objective.
- Where the issuer is a publicly (majority) owned company (i.e., state-owned enterprises), investors should follow the guidance for corporate fixed income and include it in targets associated with this asset class.
- It is acknowledged that investors face limitations specific to this asset class, some of which they do not have full agency to address. Consequently, a singular performance expectation is not considered possible. However, investors are invited to use all the levers they have at their disposal to achieve their maximum contribution towards real-economy decarbonisation and transparently disclose where limitations apply.

Asset Level Assessment and Targets continued
### Criteria underpinning alignment assessment

**Key** ✓ Green ticks represent when a criterion is required to be fulfilled for a particular alignment category to be obtained.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Committed to aligning</th>
<th>Aligning to a net zero pathway</th>
<th>Aligned to a net zero pathway</th>
<th>Achieving net zero</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget / capital / allocation alignment:</strong> A clear demonstration that the budgeting actions of the country are consistent with global net zero goals (e.g. climate budget tagging, where an ambitious share of the budget is green).</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Emissions performance:</strong> Current absolute GHG emissions trend is at least equal to a relevant net zero pathway, or converging in a manner that is satisfactory.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Decarbonisation plan:</strong> A robust quantified plan setting out the measures that will be deployed to deliver GHG targets (LT-LEDS), and how the sovereign is enacting the policies necessary to deliver against its NDCs.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Disclosure:</strong> Comprehensive and timely disclosure of emissions (e.g. data quality, historical data, LULUCF, etc.).</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Targets:</strong> Short and medium term emissions reduction targets aligned with global net zero goals. These are set at the production emissions level (scope 1) and should be consistent with the Paris Agreement (NDCs).</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Ambition:</strong> A long term goal consistent with the global goal of achieving net zero by 2050, as well as interim goals and targets that are coherent with it (NDCs absolute emissions targets).</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

To account for ‘fair share’ considerations, investors can relax some of the criteria for the countries they classify as EMDEs.

The alignment criteria apply to issuers exclusively; hence labelled bonds should not be allocated an alignment status. Providing that they meet external validation and safeguards, labelled bonds and other climate related issuance are to be considered under the climate solutions objective.

Further guidance may qualify these criteria for some countries, based on principles of fair share and common but differentiated responsibilities and respective capabilities.

The criteria laid out above provide a high level framework for the alignment assessment of sovereigns, and their net zero transition plans. Methodologies used to assess the alignment of assets should include the above features.

The recommended existing data sources which are publicly available and can be used in the assessment of this asset class are: ASCOR, CAT, and CCPI. Investors can use a mixture of data sources, to make as much of an informed judgement as possible.

However, whilst these are recommended sources, investors are free to choose the source of data that they wish to use and are not expected to use all to form an assessment. Additionally, it is not guaranteed that these sources of information allow an investor to make a comprehensive judgement on alignment.
Approaches to achieve asset level targets

The approaches below can be used to achieve asset alignment targets. However, they are presented agnostically (regarding their efficacy) as this will depend on the context an individual investor operates within.

Portfolio construction
- Tilt portfolios towards higher performing issuers based on the alignment criteria and climate solutions.
- Explore allocations to climate solutions, such as verified labelled bonds, when possible, taking measures to assess their credibility.
- For indexed-based strategies, utilise a benchmark incorporating tightening alignment criteria requirements to inform portfolio weights that improve portfolio alignment over time.

While these actions are theoretically available to support alignment efforts, the limited issuer universe creates limits to the extent to which they can be practically used without exacerbating material risk factors (e.g. concentration risk).

Asset engagement
- Active engagement with highest impact sovereigns or largest exposures, based on % financed emissions, that do not perform well against the criteria.
- Participate in engagement efforts, both directly with governments or indirectly through investor network initiatives.
- Engage with issuers, investment banks and development agencies to increase issuance of labelled bonds, including sustainability-linked bonds (SLBs) with Paris-aligned KPIs.
- Commence engagement well in advance of the issuance process itself and seek opportunities to shape bond characteristics, such as KPIs for SLBs, in a manner that enhances climate ambition.

Stewardship
Broader stewardship is likely required for this asset class as currently several impediments to alignment exist. Some examples of stewardship topics are listed below:

- Advocate for data providers to develop and continuously improve indicators to assess criteria set out by the asset alignment target methodology.
- Advocate for the enhancement and standardisation of pathway tools to incorporate and make explicit the assessment of fair share principles within national level assessments.
- Advocate for governments to enhance and standardise national disclosures based on the alignment criteria set out.
- Advocate for issuers to improve land use, land use change, and forestry (LULUCF) and methane emissions reporting.
- Advocate for issuers to improve consumption emissions disclosures.
- Advocate for issuers to increase the issuance of labelled bonds.
Real Estate

Alignment targets
- **Asset alignment target:** A 5-year target for increasing the % of AUM (or financed emissions) in material sectors that are ‘aligning’ or ‘aligned’ to a net zero pathway, or achieving net zero.
- **Engagement threshold target:** A minimum proportion of financed emissions are assessed as achieving net zero or ‘aligned’ to a net zero pathway, or are subject to engagement.

Scope
- Include individual direct investments, investments in assets pooled through a fund or trust structure, investments in listed real estate companies, and real estate debt.
- Include all types of real estate: retail, office, industrial, residential, hotel, lodging, leisure & recreation, education, and technology/science.
- Include existing real estate assets and those in development.

Criteria underpinning alignment assessment

<table>
<thead>
<tr>
<th>Criteria</th>
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<th>Aligned to a net zero pathway</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Asset with emissions and energy intensity required by the sector and regional pathway for global net zero by 2050 and whose operational model will maintain this performance.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Emissions performance: Current absolute or emissions and energy intensity is at least equal to a relevant net zero pathway.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Decarbonisation plan: Development and implementation of a quantified plan setting out a decarbonisation strategy for scope 1, 2, and material scope 3 emissions.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Governance: Governance/management responsibility for targets and/or decarbonisation plan.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Disclosure: Disclosure of scope 1 and 2 emissions, and disclosure of material scope 3, in line with regulatory requirements where applicable or the PCAF Standard.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Targets: Short and medium term targets for scope 1, 2 and material scope 3 emissions in line with science-based ‘net zero’ pathway. These may be absolute, or intensity based: a) where available, a sectoral decarbonisation/ carbon budget approach should be used; b) minimum for other assets is a global or regional average pathway.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Ambition: A long term goal consistent with the global goal of achieving net zero by 2050.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

Over time funds or assets may move between ‘aligned’ and ‘aligning’ on the maturity scale, depending on a fund’s or asset’s decarbonisation plan (for example, undertaking renovation at future lease expiry).
Additional notes on alignment
Carbon reduction pathways should include scope 1, 2 and material scope 3 emissions. When assessing the alignment of assets, investors should consider:

- Current and forward-looking alignment based on carbon emissions and energy intensity in line with net zero pathways.
- For projections of future alignment, investors should account on a best-case basis:
  - Assumptions about the energy mix and demand in different buildings and locations.
  - Potential for, and plans relating to, retrofit, renovations, refurbishments and other investments to address emissions and energy use.
  - Fugitive emissions and transmission losses associated with the relevant energy system.

Methodologies used to assess the alignment of assets should include the above features. Currently, the recommended methodology for the assessment of this asset class is:

- The Carbon Risk Real Estate Monitor (CRREM).

In regions or countries where CRREM is currently less applicable due to market-specific differences, investors may use other equivalent 1.5°C aligned methodologies or tools, but should disclose when this has occurred, explaining what tool has been used and how it is suitable.86

Embodied carbon
Investors may consider setting targets for and disclosing embodied carbon emissions of new construction and major retrofits and include this in their decarbonisation plan.87 Embodied carbon emissions performance against a net zero pathway should be accounted for when methodologies become available.
Approaches to achieve asset level targets
The approaches below can be used to achieve asset alignment targets. However, they are presented agnostically (regarding their efficacy) as this will depend on the context an individual investor operates within.

Portfolio construction
• Collect necessary data to assess a portfolio using the relevant decarbonisation pathway, e.g. CRREM tool or equivalent standard, using estimations and approximations for missing data.
• Screen all new investments (direct, listed, and non-listed) using the CRREM methodology or equivalent standard to assess current and future asset alignment and incorporate into decision-making in order to achieve targets over time.
• Consider real estate impact investments where changes in governance, ownership or management can drive swift decarbonisation actions.

Management
• Develop a clear timebound management and investment strategy supported with strong decarbonisation plan and commitments that, over time, achieves a portfolio consistent with CRREM pathways, or equivalent standard.
• Develop strategies to address and manage whole life carbon emissions across the property life cycle.\textsuperscript{88}
• Translate strategies and plans adopted and implemented by all relevant stakeholders into agreements with relevant parties involved in the management of real estate assets.
• Align direct investments (and own buildings) via investment/management plans to improve energy efficiency and increase renewable energy use.

Engagement and stewardship
• Prioritise engagement based on transition risk and exposure.
• For listed real estate companies, follow the Listed Equity and Corporate Fixed Income engagement guidance\textsuperscript{89} and for unlisted real estate funds, use either the listed equity and corporate fixed income or private equity engagement guidance.
• For directly held assets, engage with tenants, prioritising engagement based on the level of alignment and size of exposure to assets, in order to:
  • Improve the data collection process for energy use by encouraging or even requiring tenants to share energy use data with building owners (where possible).
  • Facilitate actions and investments that reduce energy costs for tenants and owners and reduce emissions in line with net zero pathways.
  • Address any split incentive between building owners and tenants and allow the costs of retrofits to be shared through building service charges.
  • Encourage corporate tenants to adopt corporate emissions reduction targets consistent with net zero.
  • Strengthen the role of green leases.
  • Strengthen cooperative policy engagement to improve the policy framework around investments in building retrofits.
• Report and disclose on GRESB tenant engagement indicators related to climate and energy use, with the objective of achieving a positive scoring.

Real Estate continued

\textsuperscript{88}CRREM: Carbon Real Estate Risk and Evaluation Model
\textsuperscript{89}IIGCC NZIF 2.0
Infrastructure

Alignment targets

- **Asset alignment target**: A 5-year target for increasing the % of AUM (or financed emissions) in material sectors that are ‘aligning’ or ‘aligned’ to a net zero pathway, or achieving net zero.10
- **Engagement threshold target**: A minimum proportion of financed emissions are assessed as ‘achieving’ or ‘aligned’ to a net zero pathway, or are subject to engagement. NZIF recommends that for new assets where the general practitioner has significant influence, 100% of operational assets are to be classified as ‘aligned’ or ‘net zero’ by 2030, or, for acquisitions after 2025, within five years of investment. Additionally, for fund of funds, the asset owner or asset managers should aim, by 2030 at the latest, to only invest with firms or fund managers who themselves are setting asset alignment targets.

Given the scale and impact of energy intensive infrastructure assets, it is additionally recommended that, for infrastructure investments, 100% of carbon-based energy and transport assets are the subject of collective or direct engagement.

Scope

- Infrastructure as an asset class should be broadly defined to incorporate equity and debt exposure held through direct or co-investments, listed and unlisted infrastructure funds, project finance or passive investments. It typically includes greenfield and brownfield investments in economic and social infrastructure.
- Potential crossover with other asset classes is high, which is why investors will need to assess which guidance methodology is most appropriate to their individual circumstances.91

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### Criteria underpinning alignment assessment

**Key**
- Green ticks represent when a criterion is required to be fulfilled for a particular alignment category to be obtained.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Committed to aligning</th>
<th>Aligning to a net zero pathway</th>
<th>Aligned to a net zero pathway</th>
<th>Achieving net zero</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset with emissions intensity required by the sector and regional pathway for 2050 and whose operational model will maintain this performance.92</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Emissions performance: Current and forecast emissions performance (scope 1, 2 and material scope 3) relative to a net zero benchmark/pathway or an asset’s science-based target. An aligned asset would need to see emissions decline consistent with targets set to converge an asset with a net zero pathway.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Decarbonisation plan: Development and implementation of a quantified plan setting out a decarbonisation strategy for scope 1, 2, and material scope 3.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Governance: Governance/management responsibility for targets and decarbonisation plan.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Disclosure: Disclosure of scope 1 and 2 emissions, and disclosure of material scope 3, in line with regulatory requirements where applicable or the PCAF Standard.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Targets: Short and medium term targets for scope 1, 2 and material scope 3 emissions in line with science-based ‘net zero’ pathway. These may be absolute, or intensity based: a) where available, a sectoral decarbonisation / carbon budget approach should be used; b) minimum for other assets is a global or regional average pathway.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ambition: A long term goal consistent with the global goal of achieving net zero by 2050.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Greenfield assets

For greenfield assets, the highest status that can be achieved is ‘aligning’. For this, operational criteria for ambition, targets, decarbonisation plan and climate governance must all be met along with the following:

- The asset will be, or is being, constructed in a way that is designed to deliver an asset that can be aligned to a net zero pathway, including consideration of whole lifecycle emissions to minimise embodied emissions and avoid carbon lock-in.\(^3\)
- There is a decarbonisation or management strategy to minimise emissions in the construction phase.

In transitioning from greenfield to operational status, an investor should ensure scope 1, 2 and 3 emissions data is compiled and disclosed, as well as a target set to maintain aligning status. The most advanced status a greenfield site can reach is aligning. As an asset becomes operational, beyond meeting the required criteria for a greenfield asset to be aligning, an investor should ensure that scope 1, 2 and 3 emissions data is compiled and disclosed as well as a target set.

Although this is a distinct requirement, the first criteria for greenfield assets to be aligning requires a plan for the lifecycle of the asset to be consistent with net zero. Providing the asset follows the expected trajectory for emissions in the plan, the correct disclosures and establishment of a target should be consistent with aligning status being maintained in operation.

For both operational and greenfield assets, achieving emissions disclosure (and several other indicators) may take a significant period. Investors should use the best available data or estimates to address gaps and engage with companies, users, regulators as relevant to improve disclosure. It will be possible, over time, to credibly benchmark embedded emissions related to steel and concrete with a 1.5\(^\circ\) scenario. It will be important for infrastructure investors to incorporate this into their assessment of the value chain.

Investors are recommended to work towards their assets achieving these indicators as soon as possible. However, it is expected that assets will achieve these indicators progressively and targets relating to alignment can be set to take account of the timeframes it may take to achieve these.

Third party verification of an asset’s disclosures associated with the criteria is recommended and should be annual if possible.
Positive screening: Investors should seek to increase exposure in assets that are climate solutions.

Conduct a Do No Significant Harm assessment: Where opportunities with credible strategies and/or pathways to address harm can be identified and implemented, investment is not precluded.

Management
- Define a net zero investment strategy and set portfolio/fund level objectives and targets.
- Assess and disclose current and ongoing scope 1, 2 and 3 emissions, net zero strategy and progress towards delivering against targets.
- For open ended funds, it is expected that emissions performance will be reported on an intensity basis. Where investors are setting portfolio level reference targets, a rebaseling policy for emissions intensity should take account of significant changes to fund exposure.
- For closed ended funds, where the end of fund date is sooner than the recommended target dates (2030, 2040), an appropriate shorter term end target should be set.

Engagement
- Investors should include infrastructure assets within the scope of the portfolio engagement goal; engagement targets should include 100% of carbon-based energy and transport infrastructure assets should immediately be the subject of collective or direct engagement, or management interventions.
- Direct engagement to establish timebound KPIs for emissions measurement and disclosure, target setting, development, and implementation of strategies, possibly including support through training and knowledge sharing.
- Ensure governance and management responsibilities for climate change are defined for each asset/operator, including establishing remuneration linkage.
- Undertake collaborative stewardship and engagement with escalation strategy, based on achievement of alignment indicators.
- For debt holdings, use change/waiver processes to introduce relevant ESG requirements.
- Monitoring and reporting on carbon performance and achievement of milestones and actions defined in company strategies.
- Engagement of employees, suppliers, regulators and community to ensure a just and effective transition process.
- Engagement with suppliers and greenfield developers to advocate for reducing emissions from purchased materials and assets’ embodied emissions.

Brownfield assets
The approaches below can be used to achieve an asset alignment target. However, they are presented agnostically (regarding their efficacy), as this will depend on the context an individual investor operates within:

Portfolio construction
- Negative screening:
  - Assess emissions intensity of the asset, including material scope 3 and facilitated emissions, and potential for the asset to align with a net zero pathway. For greenfield assets, this assessment should consider full lifecycle emissions; where assets cannot be aligned, new investment should not be considered.
  - For debt investments, given more limited ability to influence during the holding period, the screening test should be higher, including whether the asset has an alignment target and/or strategy, or the investor has a reasonable expectation that they can engage the issuer to achieve this.
  - Undertake climate risk assessment and, to the extent possible, assess marginal abatement cost curves, and forecast internal rate of return (IRR) in a net zero scenario and only invest in assets where forecast IRR hurdles can be achievable in these net zero scenarios.
- Positive screening: Investors should seek to increase exposure in assets that are climate solutions.

Brownfield assets
The approaches below can be used to achieve an asset alignment target. However, they are presented agnostically (regarding their efficacy), as this will depend on the context an individual investor operates within:

Portfolio construction
- Negative screening:
  - Assess emissions intensity of the asset, including material scope 3 and facilitated emissions, and potential for the asset to align with a net zero pathway. For greenfield assets, this assessment should consider full lifecycle emissions; where assets cannot be aligned, new investment should not be considered.
  - For debt investments, given more limited ability to influence during the holding period, the screening test should be higher, including whether the asset has an alignment target and/or strategy, or the investor has a reasonable expectation that they can engage the issuer to achieve this.
  - Undertake climate risk assessment and, to the extent possible, assess marginal abatement cost curves, and forecast internal rate of return (IRR) in a net zero scenario and only invest in assets where forecast IRR hurdles can be achievable in these net zero scenarios.
- Positive screening: Investors should seek to increase exposure in assets that are climate solutions.

Conduct a Do No Significant Harm assessment: Where opportunities with credible strategies and/or pathways to address harm can be identified and implemented, investment is not precluded.

Management
- Define a net zero investment strategy and set portfolio/fund level objectives and targets.
- Assess and disclose current and ongoing scope 1, 2 and 3 emissions, net zero strategy and progress towards delivering against targets.
- For open ended funds, it is expected that emissions performance will be reported on an intensity basis. Where investors are setting portfolio level reference targets, a rebaseling policy for emissions intensity should take account of significant changes to fund exposure.
- For closed ended funds, where the end of fund date is sooner than the recommended target dates (2030, 2040), an appropriate shorter term end target should be set.

Engagement
- Investors should include infrastructure assets within the scope of the portfolio engagement goal; engagement targets should include 100% of carbon-based energy and transport infrastructure assets should immediately be the subject of collective or direct engagement, or management interventions.
- Direct engagement to establish timebound KPIs for emissions measurement and disclosure, target setting, development, and implementation of strategies, possibly including support through training and knowledge sharing.
- Ensure governance and management responsibilities for climate change are defined for each asset/operator, including establishing remuneration linkage.
- Undertake collaborative stewardship and engagement with escalation strategy, based on achievement of alignment indicators.
- For debt holdings, use change/waiver processes to introduce relevant ESG requirements.
- Monitoring and reporting on carbon performance and achievement of milestones and actions defined in company strategies.
- Engagement of employees, suppliers, regulators and community to ensure a just and effective transition process.
- Engagement with suppliers and greenfield developers to advocate for reducing emissions from purchased materials and assets’ embodied emissions.
Managed in alignment with net zero

In addition to NZIF’s typical system for asset alignment, a concept called 'managed in alignment with net zero' is used to address the asymmetric information relationship between General Partners (GPs) and Limited Partners (LPs) with respect to underlying PCs. PCs should progressively achieve each alignment category within a time limit. For new funds raised after committing to net zero, a GP must establish and disclose a target percentage of invested capital that will be managed in alignment with net zero.

• Timelines and measurement of actions are based on a fund’s cycle, reflecting that an investor’s influence exists when the company is within their portfolio.
• When investments span multiple influence bands, the weighted average of invested capital based on the anticipated distribution should inform target setting.

Private Equity

Alignment targets

• Asset alignment target: A % of invested/committed capital or financed emissions to be managed in alignment with net zero by 2030 and an increased % by 2040; achieve 100% net zero by 2050. GPs can also set this target for each fund.
• Engagement threshold target: Complete the specified engagement actions for all (100%) applicable private equity investments.

Scope

• GP buyout fund
• GP growth fund
• GP continuation fund
• LP investments in buyout, growth or continuation funds
• LP co-investment
• LP fund of funds
• LP-led secondaries

Criteria underpinning alignment assessment

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Committed to aligning</th>
<th>Aligning to a net zero pathway</th>
<th>Achieving net zero</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambition: Long-term goal for the company to be net zero emissions by 2050 or sooner.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Governance: Board oversight for climate risk and execution of climate strategy. Climate risk management and strategy are discussed by the Board at least once a year.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Disclosure: Annual disclosure to investors of scope 1, 2, and material scope 3* absolute GHG emissions. Public disclosure is best practice but not an expectation.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Targets: 5– to 10–year Paris–aligned GHG emissions reduction target (scope 1, 2, and material Scope 3*)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Emissions performance: Cumulative YoY reduction meets or exceeds the linear annual reduction established as the target for Scope 1, 2, and material Scope 3 emissions.**</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Climate strategy: A proportionate plan is established that sets out the measures to deliver the target. For high impact sectors, the strategy should be quantified and include capex and opex required to achieve targets.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PCs meeting the portfolio alignment criteria listed above, within milestones established to the right, are considered ‘managed in alignment with net zero’ and the capital invested in them will count towards coverage targets established by GPs.

<table>
<thead>
<tr>
<th>Fund vintage</th>
<th>1 year after deal close</th>
<th>2 years after deal close</th>
<th>By exit</th>
<th>Not required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds launched 2023–2029</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Funds launched 2030–2050</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* For the Committed to Aligning milestone the board should acknowledge the importance for the company to take action toward a net zero future and encourage the company to begin exploring pursuit of Aligning and Aligned criteria.
** Material Scope 3 as defined by leading guidance such as SBTi.
GPs and LPs have differing influence when encouraging PCs to decarbonise. Influence bands, each with objectives, account for these dynamics. They are ambitious yet reflective of practical conditions for each investment type. These affect the asset-level targets.

Each influence band has associated:

- Expectations for achieving alignment.
- Influence levels on asset alignment target to be set.
- Engagement actions designed around the influence levers available.

Direct bands apply to investments made directly into a PC and are specific to board voting seat rights.

Indirect bands apply to investments where a GP exists between the investor and the PC. Different bands reflect relative investment size and if they have been made after fund closure.

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>Band</th>
<th>Criteria</th>
<th>Influence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>1a</td>
<td>&gt; 50% of board voting seat appointments (usually the majority shareholder)</td>
<td>Strong (with PCs)</td>
</tr>
<tr>
<td></td>
<td>1b</td>
<td>≤ 50% of board voting seat appointments (usually a significant minority shareholder)</td>
<td>Moderate (with PCs)</td>
</tr>
<tr>
<td></td>
<td>1c</td>
<td>No board votes</td>
<td>Limited (with PCs)</td>
</tr>
<tr>
<td>Indirect</td>
<td>2a</td>
<td>Big ticket investors* and/or first close investors</td>
<td>Strong (with GPs)</td>
</tr>
<tr>
<td></td>
<td>2b</td>
<td>Investment made during fundraise not included in 2a; co-investment</td>
<td>Moderate (with GPs)</td>
</tr>
<tr>
<td></td>
<td>2c</td>
<td>Investment made through secondaries market</td>
<td>Limited (with GPs)</td>
</tr>
</tbody>
</table>
**Asset engagement (for GPs)**
Most GPs pursuing net zero may want to consider focusing their efforts on motivating and supporting PCs on net zero actions. GPs are encouraged to proactively engage directly with their portfolio companies.

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>Band</th>
<th>Criteria</th>
<th>Recommended Engagement Actions</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct</strong></td>
<td>1a</td>
<td>&gt; 50%</td>
<td>No engagement requirement. Engagement directly with PCs is expected in pursuing alignment targets or portfolio reference targets but is not covered under the Private Equity Engagement Threshold Target.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>votes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1b</td>
<td>≤ 50%</td>
<td>Universal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>board</td>
<td>• Inform other board members of your firm's net zero commitment.</td>
<td>Within 1 year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>votes</td>
<td>• Request that climate risks and opportunities be a regular agenda item for board meetings.</td>
<td>Within 1 year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Request that the PC be managed in alignment with NZ and that as a first step, management is asked to develop a net zero proposal that should be presented to the board of directors for a formal vote. The proposal should include:</td>
<td>Within 1 year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Importance of net zero and business benefits for the company</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Action plan for implementation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Estimates of cost and impact associated with the plan</td>
<td></td>
</tr>
<tr>
<td><strong>Conditional</strong></td>
<td></td>
<td></td>
<td>• If, prior to investment, the target company is in a high emitting industry and co-owners are not in agreement to manage the company in alignment with net zero, the investment’s potential mis-alignment with the net zero commitment should be explicitly raised at the investment committee.</td>
<td>Prior to investment</td>
</tr>
<tr>
<td><strong>Universal</strong></td>
<td>1c</td>
<td>No</td>
<td>Communicate with the largest co-owners/shareholders to share your net zero commitment and express your organization’s desire to have the portfolio company managed in alignment with net zero.</td>
<td>Within 1 year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>votes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LP approaches to achieve asset level targets

The approaches below can be used to achieve an asset alignment target. However, they are presented agnostically (regarding their efficacy) as this will depend on the context an individual investor operates within:

Manager and fund selection (for LPs)
- Seek to ramp up investment in funds managed in alignment with net zero as quickly as possible, to keep pace with the reductions that climate science states are necessary.
- Balance the need for fast action with an understanding that increased adoption of net zero practices across the private equity industry will be necessary to provide adequate investment options to LPs.
- Consider how existing GPs can be encouraged to take up net zero commitments.
- Anticipate differences in GP net zero uptake across relevant and specific markets and/or geographies in which investments are held; and
- Consider fund duration – if all investments need to be net zero by 2050, commitments made to a 12-year fund in 2038 should plan to be 100% managed in alignment with net zero.

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>Band</th>
<th>Criteria</th>
<th>Recommended Engagement Actions</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect</td>
<td>2a and 2b</td>
<td>Investment made during fund raise</td>
<td><strong>Universal actions after committing to net zero</strong>&lt;br&gt;Send a letter to all the following: the Chairman of the Board, the CEO, Investor Relations, and the ESG leader of every GP in which you invest. The letter should share your commitment to net zero, your expectation of GPs to adopt net zero practices in new funds, and how consideration of net zero could impact your investment decisions going forward. Request that the GP make their own net zero commitment and have Limited Partnership Agreements stipulate a commitment to net zero.</td>
<td>Within 6 months of making your net zero commitment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LP investments in buyout, growth or continuation funds</td>
<td><strong>Universal actions during fund selection</strong>&lt;br&gt;Engage with senior leaders of the GP, including Investor Relations, to request the fund include a commitment to net zero within the Limited Partnership Agreement. If that is rejected, propose a side letter with the GP that stipulates a commitment by the GP to manage a portion of the invested capital in line with net zero. The specific percent of invested capital can be negotiated.</td>
<td>Before making fund selection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LP co-investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GP fund of funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LP-led secondaries</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conditional actions during ownership**
- If you have an LPAC seat:<br>Request that climate-related performance is integrated into LPAC reporting for the fund.<br>If the GP is not meeting its net zero targets, request net zero performance as an LPAC agenda item.<br>
- If you don’t have an LPAC seat:<br>Engage with other LPs to discuss and seek to collectively push for net zero commitments at the GP level AND/OR when attending a GP’s annual investor day, raise net zero as a concern and share your expectation that the GP will commit future funds.<br>If the GP is not meeting its net zero targets, hold a meeting with ESG lead and relevant senior leader(s) at the GP to raise your concern and seek assurances the situation will be rectified.<br>
- Within 1 year<br>Within first 3 years<br>Within track to be met
### Manager engagement (for LPs)

Engaging GPs to adopt net zero practices is needed for LPs to meet their asset alignment target.93

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>Band</th>
<th>Criteria</th>
<th>Recommended Engagement Actions</th>
<th>Timing</th>
</tr>
</thead>
</table>
| Indirect      | 2c   | Investment made through secondaries market | **Universal actions after committing to net zero**  
- Send a letter to all the following: the Chairman of the Board, the CEO, Investor Relations, the ESG leader of every GP in which you invest. The letter should share your commitment to net zero, your expectation of GPs to adopt net zero practices in new funds, and how consideration of net zero could impact your investment decisions going forward. Request that the GP make their own net zero commitment and have Limited Partnership Agreements stipulate a commitment to net zero.  
- Within 6 months of making your net zero commitment
|               |      |                        | **Universal actions during fund selection**  
- Engage with senior leaders of the GP, including Investor Relations, to make clear your commitment to net zero, and how consideration of net zero will impact your investment decisions going forward. Request that the GP make their own net zero commitment.  
- LPs can choose to invest with GPs that refuse to align with net zero. But, over time, the proportion of capital that LPs can commit to GPs that don’t manage in alignment will diminish rapidly. LPs should make sure this dynamic is clearly understood by GPs that refuse to align.  
- Before making fund selection
|               |      |                        | **Conditional actions during ownership**  
- If you have an LPAC seat you should:  
  - Request that climate-related performance is integrated into LPAC reporting for the fund.  
  - If the GP is not meeting its net zero targets, request net zero performance as an LPAC agenda item.  
  - Within 1 year  
  - If targets are not on track to be met
- If you don’t have an LPAC seat you should:  
  - Engage with other LPs to discuss and seek to collectively push for net zero commitments at the GP level AND/OR when attending a GP’s annual investor day, raise net zero as a concern and share your expectation that the GP will commit future funds.  
  - Within first 3 years  
  - If targets are not on track to be met

Private Equity continued
Other private debt sub-asset classes have been excluded because specific NZIF guidance already exists for them (specifically real estate debt and infrastructure debt).

Publicly listed and tradeable tranches of CLOs are excluded from this guidance as these investments fall under the Corporate Fixed Income methodology (see above). Likewise, the underlying collateral of CLOs (broadly syndicated loans) are excluded.

Broadly syndicated loans are loans where the bank is the lead arranger who underwrites the loan, initially finances it and then syndicates to a group of lenders (usually larger than a club of lenders in private debt). They are usually tradeable to some extent although liquidity may be limited.

There can be a degree of overlap between the definitions of syndicated loans and direct corporate lending as mentioned above, but to clarify; the general guidance is if a non-bank lender is originating, underwriting, structuring and executing the loan, this should be considered as a form of private debt and fall under the NZIF private debt framework. On the other hand, if a bank lender originates the loan with the borrower, structures and executes the loan (with the view to further syndicate this), This should be considered as a broadly syndicated loan. Broadly syndicated loans will fall under NZIF fixed income framework. Some syndicated loans have little or no secondary market liquidity, including commercial bank arranged debt syndicates in certain jurisdictions, as well as those offered by Multilateral Development Banks and Development Finance Institutions. These specific cases may be considered private debt and fall under the NZIF private debt framework.
Criteria underpinning alignment assessment

**Key**

Green ticks represent when a criterion is required to be fulfilled for a particular alignment category to be obtained.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Committed to aligning</th>
<th>Aligning to a net zero pathway</th>
<th>Aligned to a net zero pathway</th>
<th>Achieving net zero</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ambition</strong>: Long-term goal for the company to be net zero emissions by 2050 or sooner.</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Governance (HIGH IMPACT SECTORS ONLY)</strong>: Board oversight for climate risk and execution of climate strategy. Climate risk management and strategy are discussed by the Board at least once a year.</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Disclosure</strong>: Annual disclosure to investors of scope 1, 2, and material scope 3 absolute GHG emissions. Public disclosure is best practice.</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Targets</strong>: 5- to 10-year Paris-aligned GHG emissions reduction target (Scope 1, 2, and material Scope 3).</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Emissions performance</strong>: Cumulative YoY reduction meets or exceeds the linear annual reduction established as the target for Scope 1, 2, and material Scope 3 emissions.</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Climate strategy (HIGH IMPACT SECTORS ONLY)</strong>: A proportionate plan is established that sets out the measures to deliver the target. The strategy should be quantified and include capex and opex required to achieve targets.</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For the Committed to Aligning milestone, the board should acknowledge the importance for the company to take action toward a net zero future and encourage the company to begin exploring pursuit of Aligning and Aligned criteria.

GPAs are encouraged to assess each PCs current alignment status and get a commitment from and support the PC to move at least one step further to the right along the alignment criteria. Whilst this guidance only expects PCs to move one step further along the alignment scale, efforts to make multiple steps are strongly encouraged and will become more important from 2040 onwards when we anticipate that achieving the initial steps should become easier and faster; and the majority of the companies will already be well advanced (aligning or aligned) along the alignment scale with a clear path to net zero by 2050.
<table>
<thead>
<tr>
<th>Fund vintage alignment milestones</th>
<th>Committed to Aligning</th>
<th>Aligning</th>
<th>Aligned</th>
<th>Net Zero</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds launched after guidance published but before 2030</td>
<td>Expression of intent by PC to move to this category by end of grace period</td>
<td>PC is already ‘Aligning’</td>
<td>Not required</td>
<td>Not required</td>
</tr>
<tr>
<td></td>
<td>Achieve 'Committed to Aligning' by exit</td>
<td>Expression of intent by end of grace period to move to ‘Aligned’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Achieve 'Aligned' by exit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funds launched between 2030 – 2040</td>
<td>Expression of intent by PC to move to this category by end of grace period</td>
<td>PC is already ‘Committed to Aligning’</td>
<td>Expression of intent by end of grace period to move to ‘Aligned’</td>
<td>Not required</td>
</tr>
<tr>
<td></td>
<td>Achieve ‘Committed to Aligning’ by exit</td>
<td>Expression of intent by end of grace period to move to ‘Aligning’</td>
<td>Achieve ‘Aligned’ by exit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Achieve ‘Aligning’ by exit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funds launched between 2041 – 2045</td>
<td>Expression of intent by PC to move to this category by end of grace period</td>
<td>PC is already ‘Committed to Aligning’</td>
<td>Expression of intent by end of grace period to move to ‘Aligned’</td>
<td>PC commitment to achieve no later than 2050</td>
</tr>
<tr>
<td></td>
<td>Achieve ‘Committed to Aligning’ by exit</td>
<td>Expression of intent by end of grace period to move to ‘Aligning’</td>
<td>Achieve ‘Aligned’ by exit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Achieve ‘Aligning’ by exit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funds launched between 2046 – 2050</td>
<td>Achieve ‘Committed to Aligning’ before deal close</td>
<td>Achieve ‘Aligning’ before deal close</td>
<td>Achieve ‘Aligned’ by exit or 2050, whichever is sooner.</td>
<td>All PCs achieve net zero no later than 2050</td>
</tr>
</tbody>
</table>

Private Debt continued
Fund-level targets
For all new funds raised after committing to net zero, the GP should establish a target percentage of the fund’s invested capital that will be managed in alignment with net zero.

The fund-level net zero target should be shared with LPs during fundraising in the fund marketing materials, similar to how funds share forecasted financial returns. This will enable LPs to make asset allocation decisions in furtherance of their own net zero commitments and calculate their net zero committed capital.

Because of legal commitments made to LPs as part of legacy funds, it may be difficult to add a net zero commitment after capital has been committed and deployed. As a result, funds raised prior to the GP making their net zero commitment do not need to be included. Data on net zero alignment of existing funds can be reported to LPs and counted toward the LP’s own commitment on a voluntary basis.

Firm-level portfolio milestone targets
The second type of asset alignment target that GPs can commit to meet are firm-level portfolio milestone targets for 2030, 2040, and 2050 across their full private debt portfolio (excluding funds that launched prior to the GP committing to net zero).

Influence bands
GPs and LPs experience varying levels of influence in their ability to encourage underlying PCs to decarbonise. A GP that is the sole lender or lead arranger of the debt within a private debt deal can potentially exert greater influence on a company’s management when negotiating deal terms, while a GP that is a minority holder of the debt tranche may face more difficulty in positively influencing the direction of the company through the private debt deal terms. Particularly in competitive private debt deal environments, there can be limited or even no discussion with company management which further impacts the GP’s ability to influence deal terms pre-close. Also, certain types of private debt deals, particularly in structured credit for example, offer very limited scope to negotiate with underlying PCs or collateral, making it near impossible for GPs to influence any deal terms with PCs.

Similarly, an LP who invests while the fund is still being launched has a greater ability to influence GP actions than one that enters the fund following the first close or through the secondaries market.

To account for these dynamics, both the private debt asset alignment target and private debt engagement threshold targets use influence bands to establish objectives that are ambitious yet reflective of the practical circumstances that each investment type faces. There are seven influence bands in total that can be broadly grouped into two categories: 1) direct influence; and 2) indirect influence.

Expectations for the speed at which net zero alignment can be achieved vary across influence bands, and a GP’s or LP’s exposure to different bands will inform appropriate asset alignment targets. Each influence band also includes tailored engagement actions that are designed around the influence levers available, given the band’s dynamics.
### Asset engagement (for GPs)

The recommended engagement actions to be undertaken by GPs when engaging with PCs is set out below.

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>Band</th>
<th>Private Debt Criteria</th>
<th>Recommended Engagement Actions</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• GP direct corporate lending</td>
<td>1a</td>
<td>Sole lender or lead arranger of the debt and/or holder of 50%+ of the debt tranche and/or board seat and/or any form of significant equity holding in the deal</td>
<td>Engage with PC management with decarbonisation and climate risk as key engagement priorities. This could include correspondence, meetings, webinars and/or training. It is important to engage on the PC's ambition, disclosures, targets and emissions performance. Governance and climate strategy should also be engagement priorities for PCs in high impact sectors.</td>
<td>Post Deal Close/Grace Period until Exit</td>
</tr>
<tr>
<td>• GP venture and/or growth debt</td>
<td>1b</td>
<td>Significant minority holder of the debt tranche (have blocking or veto rights). Between 25-50% of the debt tranche</td>
<td>Best practice: climate-related ESG margin ratchet loans / sustainability-linked loans and/or language in loan documentation requiring climate disclosure. The climate related KPIs included may vary across loans. For high impact sectors, in addition to meeting all the recommended alignment criteria, managers should (1) actively use selection as a tool to identify and/or avoid and/or select them; (2) use climate-related ESG margin ratchets and / or covenants in related legal documentation; (3) ensure such investments have a clear path to net zero by exit from 2040.</td>
<td></td>
</tr>
<tr>
<td>• GP private structured credit</td>
<td>1c</td>
<td>Small participant of tranche – less than 25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• GP fund/NAV financing</td>
<td>1d</td>
<td>Any % tranche holding where limited scope to negotiate directly with underlying company / collateral</td>
<td>It may not be possible to access underlying PCs. As such, GPs are encouraged to engage with the issuer and consider, if possible, the issuer’s firm level attributes instead of portfolio companies’ characteristics.</td>
<td>Post Deal Close/Grace Period until Exit</td>
</tr>
</tbody>
</table>
The recommended engagement actions to be undertaken by GPs when engaging with PE sponsors where appropriate are set out below.

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>Band</th>
<th>Private Debt Criteria</th>
<th>Recommended Engagement Actions</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP Direct corporate lending</td>
<td>1a</td>
<td>Sole lender or lead arranger of the debt and/or</td>
<td>Identify PE sponsors across debt portfolio. Engage with investment leads and/or sponsor’s ESG personnel on the PC’s ambition, disclosures, targets and emissions performance. Governance and climate strategy should also be engagement priorities for PCs in high impact sectors.</td>
<td>Within first 12 months of deal close</td>
</tr>
<tr>
<td>GP venture and/or growth debt</td>
<td>1b</td>
<td>Holder of 50%+ of the debt tranche and/or</td>
<td>Notify all PE sponsors of Net Zero ambition and targets and introduce NZIF PE framework if they are not already committed to that.</td>
<td>Within first 12 months of deal close</td>
</tr>
<tr>
<td></td>
<td>1c</td>
<td>Less than 25%</td>
<td>Provide them with standardised data request for all deals going forward.</td>
<td>Annually thereafter</td>
</tr>
<tr>
<td>GP private structured credit</td>
<td>1d</td>
<td>Any holding</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GP fund/NAV financing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LP approaches to achieve asset-level targets

While LPs sit two—sometimes three—steps away from the actual operations of PCs, they may have an opportunity to influence the practices of GPs through the commitment of their capital. Because most LPs engage with many GPs, their potential to catalyse and encourage real economy decarbonisation is substantial. In fact, many LPs have already committed to net zero and they are encouraged to lean into appropriate engagement actions that may rapidly shift GP behaviour in future funds. This guidance establishes two target types that LPs can set below.

Manager and fund selection (for LPs)

For the milestone years of 2030, 2040, and 2050, LPs should seek to increase the amount of committed capital that GPs plan to manage in alignment with net zero. In practice, this means that LPs should focus on selecting funds and managers who have committed to net zero and who will implement net zero investment strategies. This will facilitate LP’s investments to meet the recommendations outlined by this Guidance. GPs should also regularly report on the progress of the net zero alignment criteria of PCs to LPs. This Guidance also encourages LPs to avoid investments in industries whose primary activity is no longer considered permissible within a credible net zero pathway.

By 2050, 100% of committed and invested capital across the indirect bands should be net zero.

The 2030 and 2040 targets are based on committed capital and vary based on influence band.

LPs should consider the following principles:

- Seek to ramp up investment in funds managed in alignment with net zero as quickly as possible to keep pace with the reductions that climate science says are necessary;
- Balance the need for fast action with an understanding that increased adoption of net zero practices across the private debt industry will be necessary to provide adequate investment options to LPs;
- Consider your organisation’s ability to influence existing GPs to take up net zero commitments;
- Anticipate differences in GP net zero uptake across specific markets/geographies in which your organisation invests; and
- Consider fund duration; if all investments need to be net zero by 2050, commitments made to a 10-year fund in 2040 should plan to be 100% managed in alignment with net zero.

The LP’s milestone target and calculation of performance should consider the percent of invested capital that the GP plans to manage in alignment with net zero. Especially in early years, many GPs will set fund-level targets to manage less than 100% of invested capital in alignment with net zero. LPs should apply the GP’s fund-level commitment percentage (based on final invested capital) to the capital they are committing to the fund.

Calculation of progress toward the LP’s targets should include all committed capital that was committed after the LP made a commitment to achieve net zero or this Guidance was released (whichever came later). Committed capital that was committed prior to this point can be omitted.

On an annual basis, LPs should also calculate and disclose the percent of invested capital being managed in alignment with net zero, as this reflects the reality of how investments are actually being managed. These calculations should be based on actual performance reported by GPs and not assumed to be equivalent to a fund’s target. As above, investments that were made prior to the LP’s net zero commitment or the release of this guidance release can be excluded.
Manager engagement (for LPs)

For LPs to meet their asset alignment target, they will need to be successful at engaging and influencing GPs to adopt net zero aligned practices. As such, LP private debt engagement threshold targets are arguably one of the most important elements of this Guidance.

LPs are asked to complete the recommended engagement actions specified below for 100% of investments. The intention is that LPs build these practices into their standard operating procedures.

<table>
<thead>
<tr>
<th>Asset classes</th>
<th>Band</th>
<th>Private Debt Criteria</th>
<th>Recommended Engagement Actions</th>
<th>Timing</th>
</tr>
</thead>
</table>
| Indirect      | 2a   | Big ticket investors and/or first close | Universal actions after committing to net zero:  
• Send a letter to all the following: the Chairman of the Board, the CEO, Investor Relations, and the ESG leader of every GP in which you invest. The letter should share your commitment to net zero, your expectation of GPs to adopt net zero practices in new funds, and how consideration of net zero could impact your investment decisions going forward.  
• Request that the GP make their own net zero commitment and have Limited Partnership Agreements stipulate a commitment to net zero. | During fund selection |
|               | 2b   | Investment made during fund raising, not 2a. Coinvestment | Universal actions during fund selection:  
• Engage with senior leaders of the GP, including Investor Relations, to request the fund include a commitment to manage the portfolio in alignment with net zero within the Limited Partnership Agreement. If that is rejected, propose a side letter with the GP that stipulates a commitment by the GP to manage a portion of the invested capital in line with net zero. The specific percent of invested capital can be negotiated.  
• LPs can choose to invest with GPs that refuse to align with net zero. But, over time, the proportion of capital that LPs can commit to GPs that don’t manage in alignment with net zero will diminish rapidly. LPs should make sure this dynamic is clearly understood by GPs that choose not to align. | Throughout life of fund |
|               | 2c   | Investment via secondaries | Conditional actions:  
• If you have an LPAC seat:  
  • Request climate-related performance integrated into LPAC reporting for the fund.  
  • If the GP is not meeting its net zero targets, request net zero performance as an LPAC agenda item.  
• If you don't have an LPAC seat:  
  • Engage with other LPs to discuss and seek to push for net zero commitments at the GP level AND/OR when attending a GP’s annual investor day, raise net zero as a concern and share your expectation that the GP will commit future funds.  
  • If the GP is not meeting its net zero targets, hold a meeting with ESG lead and relevant senior leader(s) at the GP to raise your concern and seek assurances the situation will be rectified. | |