CONSULTATION

Index Guidance to Support Real-Economy Decarbonization

OCTOBER 2024

GFANZ
Glasgow Financial Alliance for Net Zero

Contents

Important Notice

*This consultation paper was developed by the Index Investing Workstream of GFANZ. It provides a voluntary guidance for "**transition-informed**" (including* "**transition-potential**", "**transition-engaged**", and "**net-zero**") *index construction to support real-economy decarbonization. For the avoidance of doubt, nothing express or implied in the consultation paper or the GFANZ publications referenced therein is intended to prescribe a specific course of action. This paper does not create legal relations or legally enforceable obligations of any kind.*

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Members of the financial sector-specific net-zero alliances comprising GFANZ have individually made commitments consistent with the high standards of their respective alliances and are not automatically expected to adopt the guidance communicated proposed within this consultation paper, although we expect all alliance participants to increase their ambition over time, so long as it is consistent with their fiduciary and contractual duties and applicable laws and regulations, including securities, banking and antitrust laws.

Acknowledgments

This paper was developed by the GFANZ Index Investing Workstream, co-led by LGIM, PKA, and SGX Group. This does not imply that every finding included herein is endorsed by every GFANZ sector-specific alliance participant firm, including the firms represented on the Principals Group. This document does not necessarily represent the full views of any individual workstream participant. The workstream was supported by the GFANZ Secretariat.

Participants of the workstream include representatives from:

WORKSTREAM CO-LEADS

Legal and General Investment Management (LGIM)
PKA
SGX Group

WORKSTREAM

Amundi
Aviva Investors
BancoEstado
Barnett Waddingham
BlackRock
Bloomberg LP
Cambridge Associates
Deutsche Bank
DWS
HSBC Global Markets
Lombard Odier
London Stock Exchange Group
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MSCI
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UN-supported Principles for Responsible Investment

The Glasgow Financial Alliance for Net Zero (GFANZ) would like to thank all those who have contributed to this consultation paper in the past year.

About GFANZ

The Glasgow Financial Alliance for Net Zero (GFANZ) is a global coalition of financial sector net-zero alliances working together to support the world's transition to net-zero emissions by 2050. Through the net-zero alliances, GFANZ has united over 675 institutions across the financial sector, including banks, asset owners, asset managers, financial service providers, and investment consultants, spanning 50 jurisdictions and representing 40% of global private financial assets. To help unlock transition investment in developing economies, GFANZ regional networks work to support capital mobilization, expand participation, and reflect the diverse needs of financial institutions around the world.

How to read this consultation paper

This consultation paper was developed by the GFANZ Index Investing Workstream and provides index providers, data providers, stock exchanges, asset managers, asset owners and other investors **(**collectively, **"index participants")** with voluntary guidance for **"transition-informed" indices** that may help facilitate real-economy decarbonization. The consultation paper does not prescribe a specific course of action but offers information and options to help index participants in developing and adopting "transition-informed" indices.

This consultation paper recognizes that different contractual and regulatory environments may impact individual index participants' approaches to the proposed guidance. The GFANZ Secretariat acknowledges that the voluntary development by individual index participants of new suites of "transition-informed" indices and subsequent adoption may vary by institution and jurisdiction, and will depend on the individual characteristics of financial institutions, including size, business model, sector coverage, fiduciary duty to their clients, and other factors.

The GFANZ Secretariat encourages index participants to use the information in this consultation paper and other GFANZ reports, where appropriate, alongside the guidance produced by their relevant net-zero alliance(s). Index participants should look to their net-zero alliance when considering how this information may be applied to support the implementation of their net-zero commitment and inform their institution-specific priorities and net-zero transition plans, consistent with client mandates, where applicable.

Voluntary guidance: This consultation paper presents voluntary guidance for index participants to apply when developing and adopting "transition-informed" indices and related products. Index participants are encouraged to use the voluntary guidance in conjunction with the voluntary recommendations and guidance in the GFANZ Net-zero Transition Plans framework[1] and GFANZ Secretariat Technical Review Note: Scaling Transition Finance and Real-economy Decarbonization.[2] However, index participants may choose to focus on a subset that they determine appropriate for their organization. They are encouraged to use this voluntary guidance wherever possible, but not superseding jurisdictional requirements where such requirements exist, or contractual requirements, including mandates with clients. Some types of index participants may also have unique legal or regulatory constraints that may differ by jurisdiction and that may impact the extent to which individual elements of this guidance should be considered.

Living guidance: The workstream acknowledges that supporting pathways, tools, and methodologies may not yet be available for all situations and policy, regulation, technology, and science are evolving, often at a rapid pace. As time evolves, we anticipate the necessary tools, methodologies, and datasets to further develop.

[1] GFANZ. Recommendations and Guidance on Financial Institution Net-zero Transition Plans, November 2022.
[2] GFANZ Secretariat. Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization, December 2023.

How to participate in this consultation

GFANZ has launched a public consultation on this proposed voluntary guidance for “transition-informed” index construction.

The consultation paper and feedback received will inform the final paper to be released in Q1 2025. Feedback from all stakeholders will be considered.

To provide feedback, please respond to the survey available here. If you wish to preview the questions before starting the survey, a PDF version is available here. The survey will be open from 9 October 2024 to 9 January 2025.

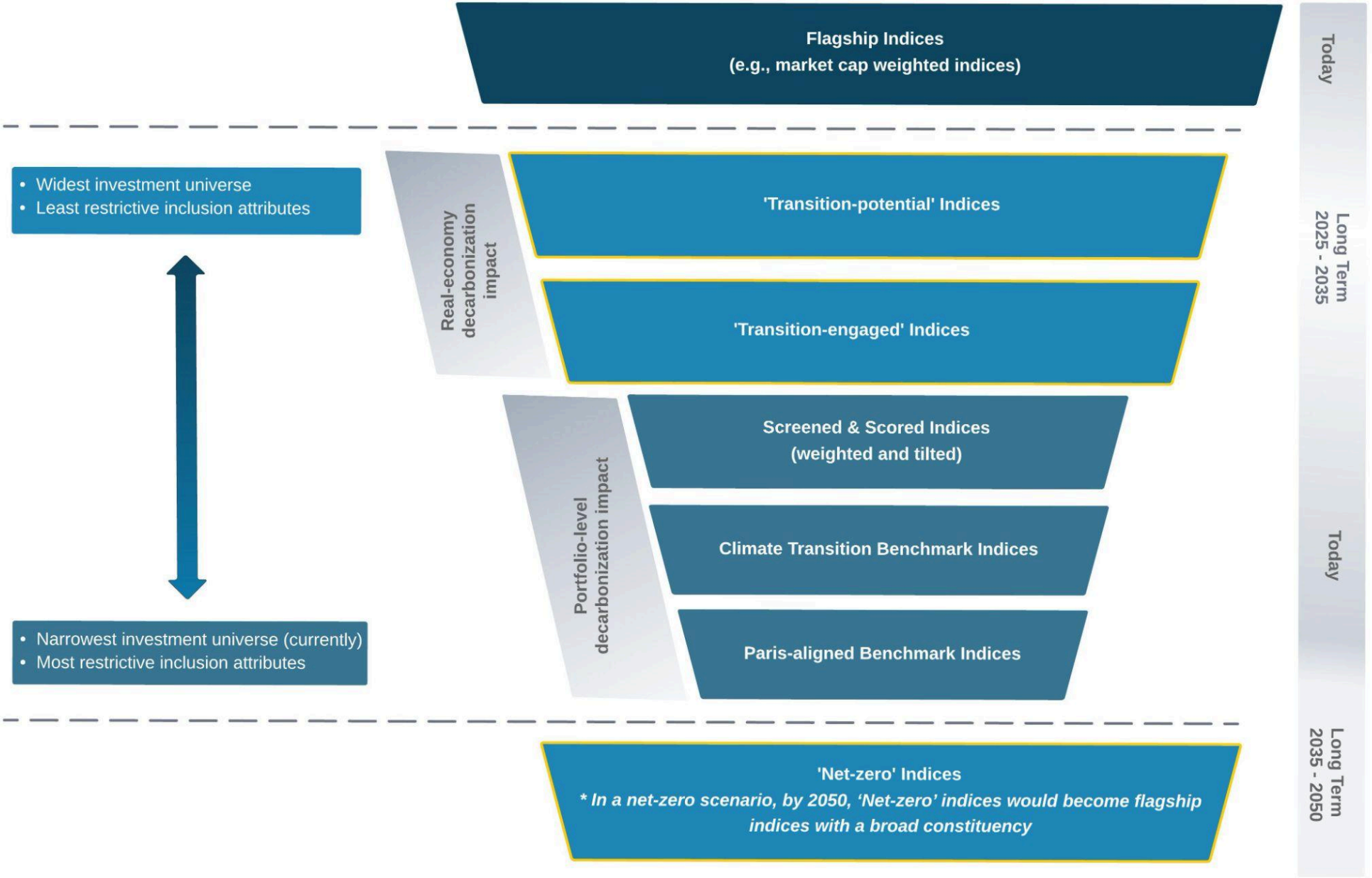
Multiple individuals from a single organization may complete the survey; however, we ask that you do not complete the survey until after you have read the paper.

All responses will remain confidential and will not be attributed to you or your organization. GFANZ may compile and release anonymized survey results, along with a summary of comments that will not identify individual respondents. Please do not include any information in your comments that could be considered commercially or competitively sensitive. GFANZ will only ask for your contact details if you are willing to discuss survey responses in more detail.

Thank you for your engagement and participation.

Categories and Potential Timeline of "Transition-Informed" Indices

Indices may continue to evolve to support transition to net zero objectives. This consultation paper acknowledges index approaches that currently exist in the market and those that may be introduced over the long term. Existing indices may focus on portfolio-level decarbonization impact, including Flagship, Screened and Scored, Climate Transition Benchmark, and Paris-aligned Benchmark indices. The consultation paper also describes three example categories of "transition-informed" indices that may be introduced over the long-term with a focus on real-economy decarbonization, including "transition-potential," "transition-engaged," and "net-zero" indices. The six index categories may exist concurrently but at different scales as the market evolves.



Part A: Laying the foundation: The evolution of transition-informed index construction

Overview

Index providers, data providers, stock exchanges, asset managers, asset owners, and other investors **(**collectively, **"index participants"**[3]**)** are facing various challenges when looking to integrate transition considerations into index solutions. While there is a full spectrum of existing and potentially new indices that investors may consider, it is important to understand potential risks associated with each of them. One of the biggest hurdles index providers are facing is the lack of consistent, high quality, and comparable data, adding to the complexity of decision making on index constituency. Importantly, both inaction and action may lead to potentially complex conundrums for all index participants – and potentially unintended consequences.

This consultation paper aims to support the development and adoption by interested investors of "transition-informed" indices (described in Box 1), including "transition-potential," "transition-engaged," and "net-zero" indices, by:

1. Setting the **rationale for "transition-informed" indices** that consider the transition to net zero (with a particular focus on "transition-potential" and "transition-engaged" indices, given their near- to medium-term application);

2. Proposing **voluntary guidance for index participants** in the development and adoption of "transition-potential" and "transition-engaged" indices. This guidance recognizes differences between (1) fixed income and equity indices, (2) primary and secondary markets, and (3) companies' readiness for potential inclusion in a "transition-potential" or "transition-engaged" index, including based on sector variations and differences in regional climate trajectory; and

3. Identifying **areas of further work**, especially with data providers such as the Net Zero Data Public Utility (NZDPU), around improving the availability, quality, and comparability of company climate data, which will ultimately support introduction of credible indices that contribute to a long-term real-economy[4] transition to net zero by 2050.

Box 1. Defining "transition-informed" indices

In this consultation paper, "transition-informed" indices are designed by index providers to align with the global goal of achieving net-zero greenhouse gas emissions by 2050. With improved availability,

[3] See Appendix 6 for a description of the index participants categories. When referred to in this consultation paper, "index participants" may include one or more actors listed in Appendix 6.

[4] Real-economy refers to economic activity outside of the financial sector.

quality, and comparability of climate data, these types of indices go beyond the goal of reducing the carbon footprint of an investment portfolio; they support the real-economy transition to a low-carbon economy over time. The indices may include companies at early stages of aligning with the transition to net zero, and support companies to reduce real-economy emissions through targeted financing and escalated engagement. Companies are assessed by index providers for potential phased non-inclusion through historical and forward-looking GHG emissions and other data.

The GFANZ Index Investing Workstream supports progress over perfection, recognizing the challenges of the transition, and looks forward to reviewing the feedback gathered through the consultation process.

Due to the nuances of certain markets, **this consultation paper's scope is limited to public equities (Equities) and corporate bonds (Fixed Income).**[5]

Background and rationale

Governments and private-sector firms around the world have committed to achieving net zero with the goal of limiting global warming to 1.5 degrees C. Nearly 200 countries signed the Paris Agreement in 2015,[6] and commitments have subsequently been strengthened including through the Glasgow Climate Pact 2021, where countries resolved to "pursue efforts to limit the temperature increase to 1.5 degrees C."[7] As of 2023, 93% of global GDP and 87% of global greenhouse gas (GHG) emissions are covered by a national net-zero commitment.[8] In addition, over 14,500 organizations have made voluntary net-zero commitments, including financial institutions, real-economy companies, cities, regions, and universities.[9,10]

[5] Future scope may include broadening this work to include sovereign debt, municipal bonds, securitized bonds, private equity, and private debt.

[6] The Paris Agreement signified a global effort to limit global warming to well below 2 degrees C and to pursue efforts to limit warming to 1.5 degrees C above pre-industrial levels (UNFCCC. The Paris Agreement). Global warming has already reached ~1.1 degrees C above pre-industrial levels, and each incremental overshoot of the 1.5 degrees C is expected to bring more severe consequences — from more intense flooding and heat waves, to greater biodiversity loss and food insecurity. The Intergovernmental Panel on Climate Change (IPCC) concludes that while warming can still be limited to 1.5 degrees C, this would require immediate and substantial efforts to cut emissions almost in half by 2030 as compared with 2019 levels.

[7] UNFCCC. Glasgow Climate Pact 2021, 2021, p. 3.

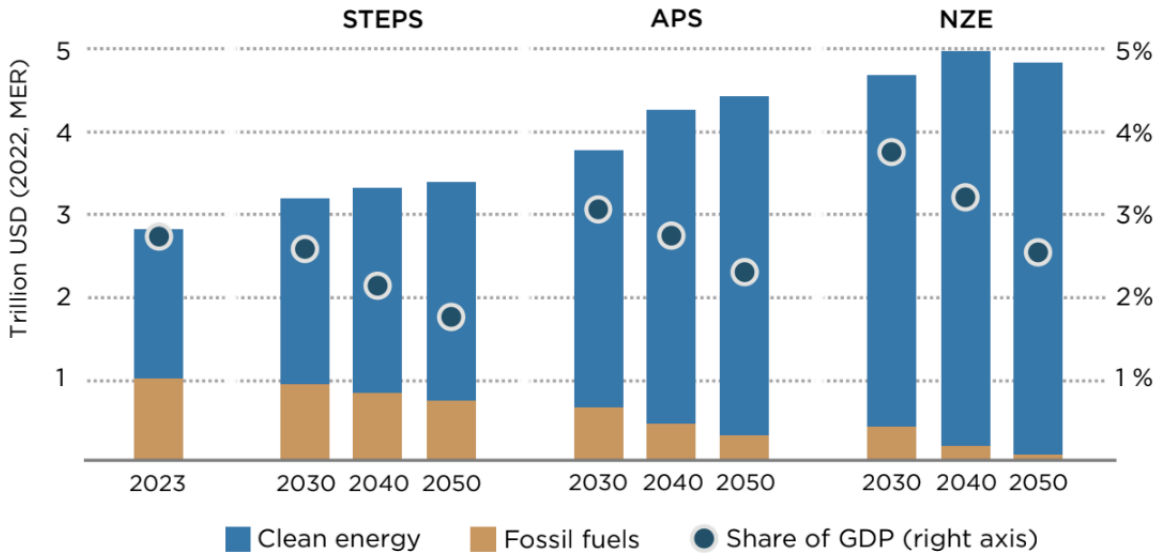
[8] NewClimate Institute, Oxford Net Zero, Energy & Climate Intelligence Unit and Data-Driven EnviroLab. Net Zero Stocktake 2024, September 2024.

[9] Illustrative, not exhaustive sources include the 2023 Net Zero Stocktake from Net Zero Tracker. Also see individual campaigns including: We Mean Business Coalition, Net Zero Futures, and the UN Net Zero Coalition

[10] NewClimate Institute, Oxford Net Zero, Energy & Climate Intelligence Unit and Data-Driven EnviroLab. Net Zero Stocktake 2024, September 2024.

Rapid scaling of **Transition Finance**[11] is crucial to meet Paris Agreement commitments to combat climate change and harness the financial and economic opportunities created by the transition to net zero.[12] The IPCC estimates that a three-fold to six-fold increase (from 2023 levels) in mitigation investments are needed by 2030 in scenarios that limit warming to 1.5 degrees C or 2 degrees C.[13] The IEA[14] estimates that to remain on track to limit warming to only 1.5 degrees C, global investment in energy infrastructure alone must increase from US$2.8 trillion to US$4.7 trillion by 2030, with an increasing portion allocated to clean energy. In 2023 the ratio of investment in clean energy technology to fossil fuels was 1.8:1 and by 2030 the ratio needs to rise to about 10:1.[15] Climate-informed investors can harness opportunities in clean energy and other sectors requiring Transition Finance.

Figure 1. IEA investment projections as share of global GDP by scenario, 2023 – 2050 [16]



Note: *MER = market exchange rate; STEPS = Stated Policies Scenario; APS = Announced Pledges Scenario; NZE = Net Zero Emissions by 2050 Scenario.*[17]

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[11] Transition Finance refers to investment, financing, insurance, and related products and services that are necessary to support an orderly, real-economy transition to net zero as described by the GFANZ four key financing strategies that finance or enable 1) entities and activities that develop and scale climate solutions; 2) entities that are already aligned to a 1.5 degrees C pathway; 3) entities committed to transitioning in line with 1.5 degrees C-aligned pathways; or 4) the accelerated managed phaseout of high-emitting physical assets. For further detail, see the GFANZ Recommendations and Guidance on Financial Institution Net-zero Transition Plans, November 2022.

[12] GFANZ Secretariat. Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization, December 2023.

[13] IPCC. AR6 Synthesis Report: Climate Change 2023, March 2023.

[14] IEA. World Energy Outlook 2023, October 2023, p. 49

[15] IEA. World Energy Outlook 2023, October 2023, p. 49

[16] IEA. World Energy Outlook 2023, October 2023, p. 49

[17] The Stated Policies Scenario (STEPS) provides an outlook based on the latest policy settings, including energy, climate and related industrial policies. The Announced Pledges Scenario (APS) assumes all national energy and climate targets made by governments are met in full and on time. Yet much additional progress is still required to meet the objectives of the Net Zero Emissions by 2050 (NZE) Scenario, which limits global warming to 1.5 °C.

Investors are making their own commitments to align their activities with the transition to net zero. More than 675 financial institutions, representing 40% of global private financial assets, independently committed to the goal of net zero by 2050 through membership in one of the sector-specific financial alliances comprising GFANZ.

As global markets move toward aligning with the Paris Agreement objectives, the use of "transition-informed" indices may offer a strategy to support real-economy decarbonization across all sectors. Global investors depend on indices for various purposes: index and active investment strategies, fund construction, investment decisions, and performance attributes. Additionally, the growth of index investing across Equities and Fixed Income underscores the potential scale of opportunity and market for "transition-informed" indices.[18] Net-Zero Asset Owner Alliance (NZAOA) asset owners with over US$9.5 trillion of assets,[19] Paris Aligned Asset Owners (PAAO) with over US$3.3 trillion of assets,[20] and asset managers with $57.5 trillion in AUM are committed to achieving the goal of net-zero emissions.[21]

In 2023, GFANZ identified the development and use of "transition-informed" indices as an important strategy for interested investors to integrate climate-related risks and support investment strategies to deliver real-economy decarbonization. Through this consultation paper, GFANZ aims to add to the growing dialogue on index investing for three reasons. First, index investing has seen a significant and growing amount of total AUM in recent years with many participants involved in the ecosystem. Second, "transition-informed" indices may play a critical role in scaling transition finance. Third, indices may help market participants identify where a company sits on its transition journey by applying taxonomies or defining attributes such as those described in this paper.

As investors look to implement their individual net-zero commitments and finance the transition, "transition-informed" indices may help support those commitments and real-economy decarbonization. Index participants may need to consider how the market treats issuers that are considered to have high transition risks and/or opportunities today, but are in the process of developing or executing transition plans and/or capital expenditure (CapEx) plans to reduce those risks and seize opportunities.

"Transition-informed" indices offer an inclusive approach in an evolving and diverse market of indices showcasing a significant commitment to climate-informed investments. Other index approaches include Screened and Scored approaches; European Union Climate Transition Benchmarks (CTBs); the European Union Paris-aligned Benchmarks (PABs); and other low carbon indices[22] (see Appendix 4 for further discussion on these concepts). However, these approaches often leave out high-emitting companies and sectors in the index composition, which may lead to unintended consequences. For example, some high-emitting companies may be looking to finance long-term projects crucial to driving their transition to net zero, such as projects for business model diversification or adoption of new technologies. Index construction approaches that exclude these companies may not recognize their forward-looking

[18] Morningstar. It's Official: Passive Funds Overtake Active Funds, January 2024.
[19] UNEP FI. Net-Zero Asset Owner Alliance Members, accessed on 1 August 2024.
[20] PAAO. Paris Aligned Asset Owners 2023 Progress Report, 2024.
[21] The Net Zero Asset Managers initiative, accessed on 3 September 2024.
[22] See Table 4 within IIGCC's paper 'Enhancing the Quality of Net Zero Benchmarks' for additional examples of net zero offerings by index providers.

decarbonization potential and, therefore, risk the financial marginalization of high-emitting companies with credible transition plans.

Conceptually, "transition-informed" indices may provide investors an avenue for allocating capital to support real-economy decarbonization, both as indices for active and index portfolio management. Yet there is a gap in the market for such indices that address real-economy impact while maintaining risk-adjusted return targets.

Scope and approach

This consultation paper informs index participants in the voluntary and independent development and adoption of "transition-informed" indices – to expand options for investors seeking to contribute to the broader goals of aligning financial flows with net-zero objectives, and supporting an orderly[23] and inclusive whole-economy transition.

This consultation paper sets out voluntary guidance for index participants in creating indices that support real-economy transition objectives (versus portfolio-level decarbonization approaches such as Screened and Scored, CTB and PAB indices). To do so, it outlines practical, voluntary **"transition-informed" index guidance** (Part B) to support index participants to **independently and voluntarily** develop and adopt suites of "transition-informed" indices. This guidance describes criteria that may be contemplated by index providers when assessing the constituent companies in "transition-informed" indices. The guidance is designed for global applicability, recognizing differences in speed of transition by sector and region, to encourage consistency in approaches as appropriate to "transition-informed" index construction for public equities and corporate bonds.

The voluntary guidance builds on the key principles developed under the NZAOA[24] report on Development and Uptake of Net-Zero-Aligned Benchmarks (Appendix 2) and the Institutional Investors Group on Climate Change (IIGCC) principles on Enhancing the Quality of Net Zero Benchmarks (Appendix 3), which both set out principles and guidelines for the construction of net-zero indices. In line with the NZAOA and IIGCC principles, index providers are encouraged to engage with stakeholders to create indices better aligned with net-zero ambition and targeted toward real-economy decarbonization. The

[23] GFANZ uses the term "orderly transition" to refer to a net-zero transition in which both private-sector action and public-policy changes are early and ambitious, thereby limiting economic disruption related to the transition (e.g., mismatch between renewable energy supply and energy demand). For reference, the Network for Greening the Financial System (NGFS), which develops climate scenarios used by regulators and others, defines "orderly scenarios" as those that assume "climate policies are introduced early and become gradually more stringent," as opposed to disorderly scenarios that explore "higher transition risk due to policies being delayed or divergent across countries and sectors". In an orderly transition, both physical climate risks and transition risks are minimized relative to disorderly transitions or scenarios where annual emissions do not decrease until 2030 or when net zero is achieved by 2050 but with higher costs due to divergent policies introduced across sectors leading to a quicker phase out of oil use." (NGFS. Climate Scenarios for Central Banks and Supervisors, 2022). The Paris Agreement, Article 4.1, highlights that achievement should be "on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty," and the agreement acknowledged that "human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity" are equally important.

[24] More information on NZAOA is available in the 2023 GFANZ Progress Report.

proposed guidance also draws on existing GFANZ voluntary guidance on Transition Finance and net-zero transition planning (Box 3), along with insights from various net-zero alliances and stakeholders. Index participants that have established their own net-zero transition plans may consider the proposed guidance as a lever for implementing such plans.

Box 2. Consultation survey: Relevant frameworks

1. Are there other initiatives and/or frameworks (such as the IIGCC and NZAOA) that should be highlighted and explored to help steer key concepts in this paper?

Box 3. GFANZ four key transition financing strategies

GFANZ has identified four key transition financing strategies that are essential to driving the real-economy transition. The strategies provide a lens through which investment, underwriting, lending, and other enabling activities may be viewed to consider how assets, activities, or entities may support and drive the transition. Financial institutions may articulate within their net-zero transition plans how they will support clients and companies across the four key transition financing strategies. The strategies include financing or enabling of:[25]

- **Climate Solutions**: entities and activities that develop and scale climate solutions;[26]
- **Aligned**: entities that are already aligned to a 1.5 degrees C pathway;
- **Aligning**: entities committed to transitioning in line with 1.5 degrees C-aligned pathways;
- **Managed Phaseout**: the accelerated managed phaseout of high-emitting physical assets.

For Equity and Fixed Income index investing, the Climate Solutions, Aligned, and Aligning strategies would be most applicable as investors may assess issuers in terms of their progress towards alignment. The Managed Phaseout strategy is primarily asset project finance and generally would not be included in a "transition-informed" index. It is therefore omitted from the proposed "transition-informed" index alignment maturity scale.

Climate Solutions, Aligned, and Aligning are widely recognized by other leading frameworks as maturity assessment tools[27], and they delineate an entity's commitment and progress toward achieving operations that are consistent with a net-zero pathway.[28]

The GFANZ Secretariat acknowledges that there may be exposures that are not yet part of the key transition financing strategies but that may, after further engagement and decarbonization efforts, be included under transition finance. The GFANZ Secretariat encourages financial institutions to capture such exposures under "**In development**" and proposes potential sub-groups – e.g., entities that have

[25] The approach and attributes in this consultation paper are principles-based and intended to be globally applicable and sector agnostic. GFANZ acknowledges different regions have distinct economic dynamics, regulatory and policy environments, and other factors that may influence or delay commitment. Sectoral pathways may not yet be available at a granular level in a given sector or region.

[26] Climate Solutions include three sub-types: Solutions that directly reduce or remove emissions; Enablers that contribute indirectly; and Nature-based solutions that mitigate climate impacts and are an area of further work. These solutions include scaling up zero-carbon alternatives to high-emitting activities, such as a wind turbine manufacturer. Climate Solutions may be inherently low carbon themselves, but in other cases they are not, and so clarity on their identification and assessment is important.

[27] The GFANZ Secretariat Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization referenced select existing frameworks and recognizes the broad market reference to alignment maturity scales as tools used by index providers and institutional investors to assess and categorize the degree to which companies, investment portfolios, or indices align with net zero targets. These scales help investors understand and evaluate the progress of companies and funds in transitioning to a low-carbon economy. Appendix Table 1 within the Technical Review Note provides further details on select frameworks that reflect a wide range of approaches available, including high-level to granular maturity scales.

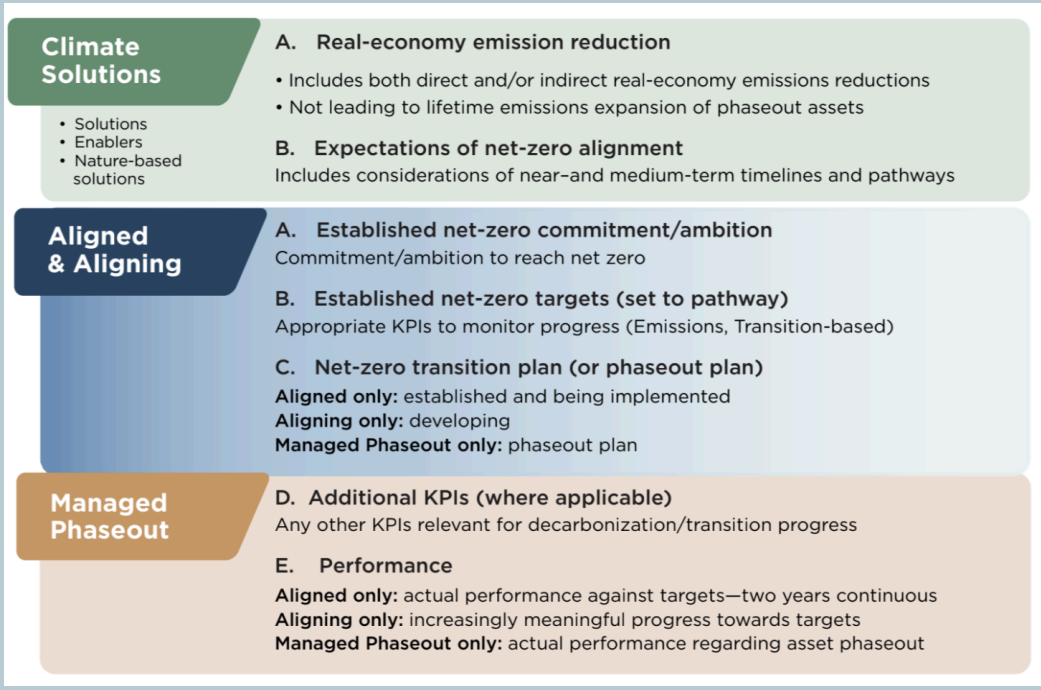
[28] GFANZ. Recommendations and Guidance on Financial Institution Net-zero Transition Plans, November 2022

not made a net-zero commitment (Not Aligned), are less mature (Committed to Aligning), or lack the data to appropriately assess exposures.[29]

The GFANZ Secretariat Technical Review Note on Scaling Transition Finance[30] provides a supplement to the GFANZ Net-zero Transition Plan (NZTP) framework by introducing **pan-sector, principles-based attributes** for identification of the four key transition financing strategies, as described in Figure 2.

The voluntary guidance in Part B illustrates how index providers may reference and apply the index-applicable attributes (Climate Solutions, Aligned, and Aligning) listed in Figure 2, and incorporate 'In development' sub-groups when developing "transition-informed" indices.[31]

Figure 2. Attributes for identification of the GFANZ four key transition financing strategies



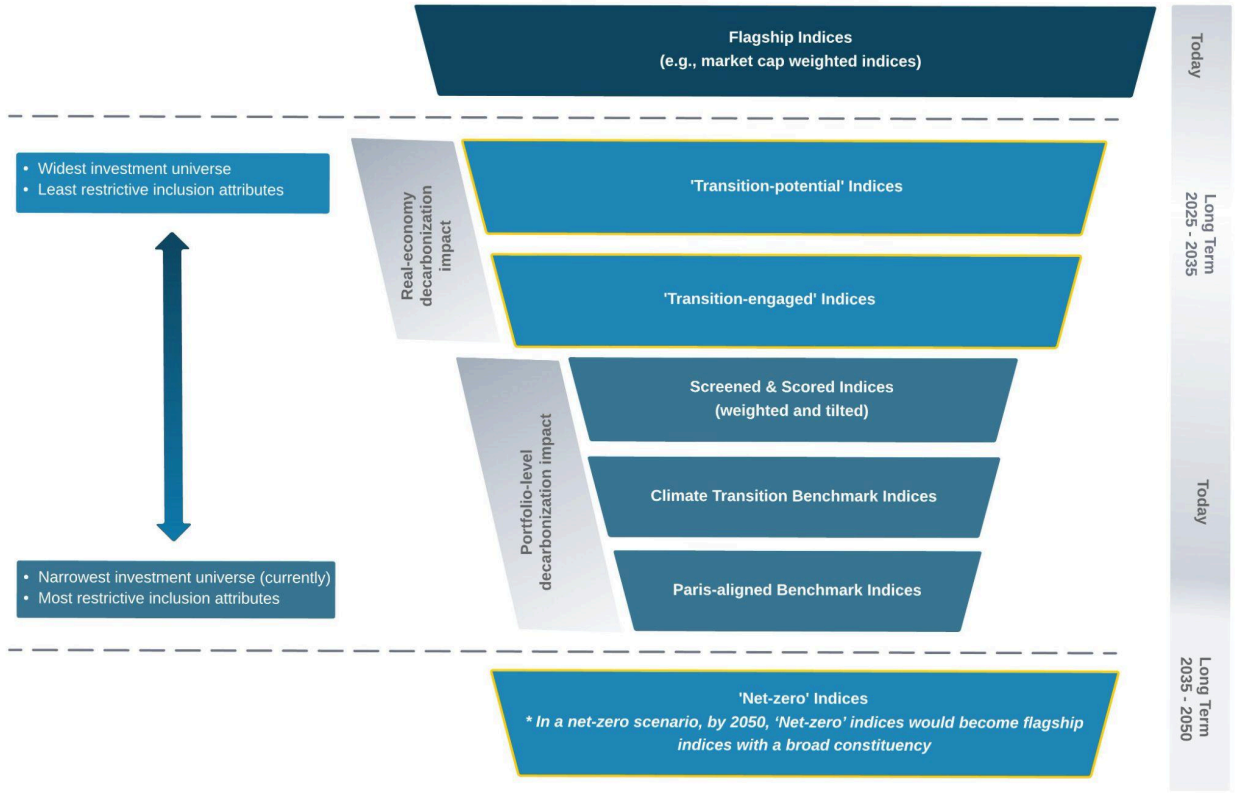
Other select frameworks, including those with relevant maturity scales and/or transition finance categories, were reviewed to inform the attributes in Figure 2. Each of these frameworks were developed for a range of applications, scope, audiences, and use cases that may differ from one another and from this consultation paper. It is at the discretion of the index provider as to what maturity scale is referenced for "transition-informed" index construction, if any.[32]

[29] GFANZ Secretariat. Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization, December 2023.
[30] GFANZ Secretariat. Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization, December 2023.
[31] The GFANZ Secretariat recognizes that other existing frameworks may provide sector-specific and/or more granular KPIs and attributes for the two strategies. The GFANZ Secretariat encourages financial institutions to independently adopt the framework most appropriate for their purposes.
[32] For a high-level mapping of select frameworks, please refer to Table 1 in the GFANZ Secretariat Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization.

Categories of "transition-informed" indices

Indices may continue to evolve to support transition to net zero objectives. This consultation paper acknowledges index approaches that currently exist in the market and describes three example categories of "transition-informed" indices – types of indices that index providers may choose to introduce as companies progress in their transition journey.

Figure 3. Categories and potential timeline of "transition-informed" indices



Existing index approaches

There are myriad indices in use that do not consider the transitional period real-economy companies may need to *align* with a net zero transition. Among indices that do consider climate, the approaches[33] focus predominantly on portfolio-level decarbonization:

- **Flagship indices**, which reflect traditional, non-climate-informed indices.
- **Screened and Scored indices**, which are characterized by index providers choosing to implement decreased weighting or non-inclusion of high-emitting companies and hard-to-abate sectors;

[33] See Table 4 within IIGCC's paper 'Enhancing the Quality of Net Zero Benchmarks' for additional examples of net zero offerings by index providers.

and, in some cases, significant tracking error compared to Flagship indices. These indices may not be inclusive of companies that are transitioning to net zero.

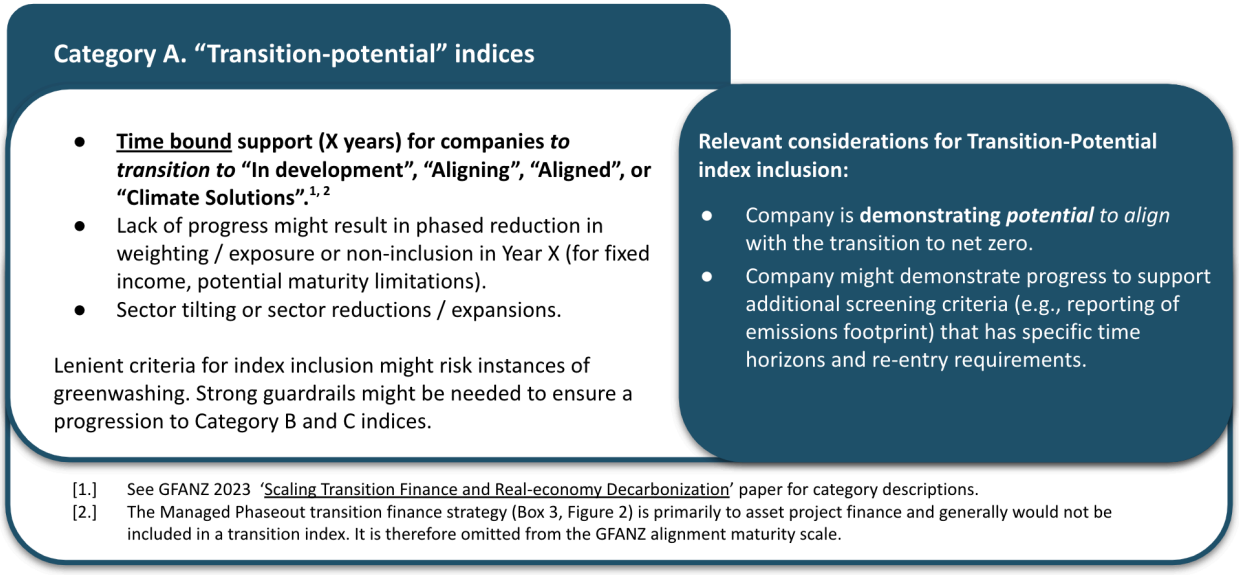
- **EU Paris-aligned benchmark (PAB) and Climate-transition benchmark (CTB) indices**, where high-emitting companies and sectors may be excluded from the indices, either because of mandatory exclusions or to comply with year-on-year improvement. These indices are challenging to implement given required year-on-year improvement and, in some cases, may experience significant tracking error compared to Flagship indices.

These existing index approaches may limit the ability to influence real-economy decarbonization by not adequately providing options for investors who are seeking to move beyond portfolio-level decarbonization.

Potential new index approaches

Index providers may choose to construct new categories of indexes that focus on real-economy transition, including "transition-potential," "transition-engaged," and "net-zero" indices. The following are example categories, illustrating how the index ecosystem may evolve as climate data availability, company engagement, and adoption of "transition-informed" indices scales.

Category A. "Transition-potential" indices [34]

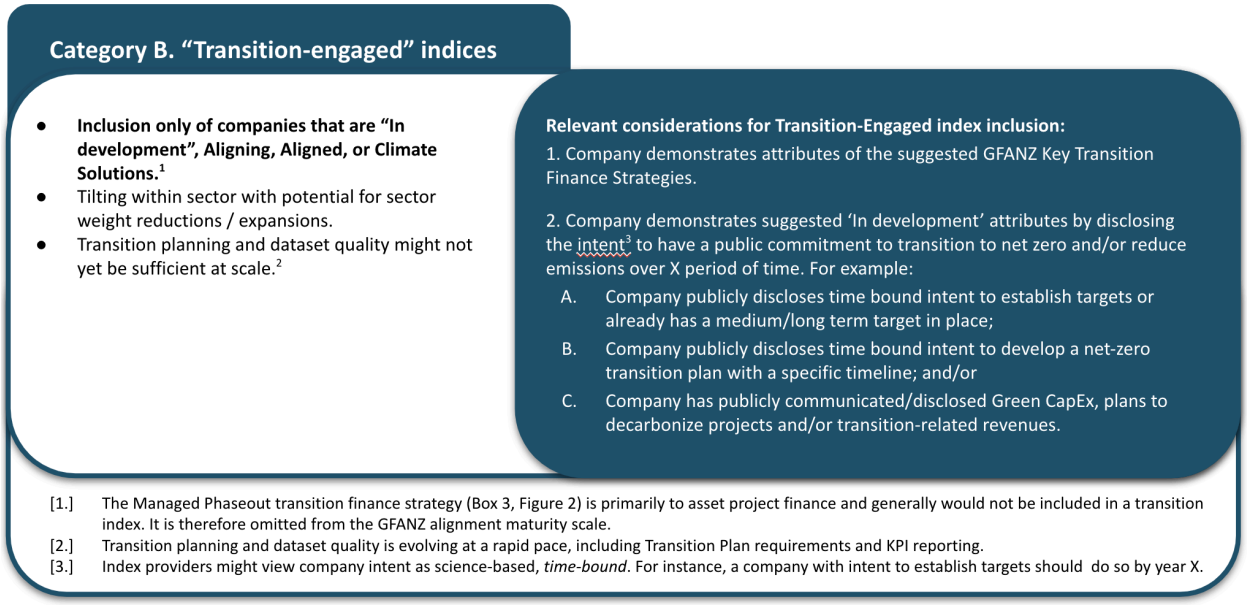


"Transition-potential" indices are most realistic for deployment by index providers in the current index ecosystem, in which there is limited (but growing) disclosure of climate data and transition planning. Companies will be expected to demonstrate potential to align with the transition in a time-bound manner.

[34] The voluntary guidance described in Part B of this consultation paper is centered on development of adoption of Category A and Category B indices.

The definition of "potential to align" will be most appropriately determined in relation to each index by the index provider. To avoid drawing concern for its greenwashing potential, an index provider may consider the time-bound component to be essential. Taking into consideration sectoral and regional variation, different time horizons might also be considered when giving time-bound support to companies in their transition.

Category B. "Transition-engaged" indices [35]



"Transition-engaged" indices may become more realistic for construction by index providers as climate data availability, company engagement, and adoption of "transition-potential" indices scales. Index constituents are those companies that, for example, can demonstrate suggested attributes of the GFANZ key transition finance strategies (Aligned, Aligning, and Climate Solutions) or companies that demonstrate suggested attributes of GFANZ's "In development" subset (Box 4).[36]

Box 4. Defining "In development"

"In development" is included as a relevant consideration for index inclusion in the context where transition planning and dataset quality may not yet be sufficient at scale. 'In development' aims to widen the scope of the index category to support companies that are demonstrating time-bound

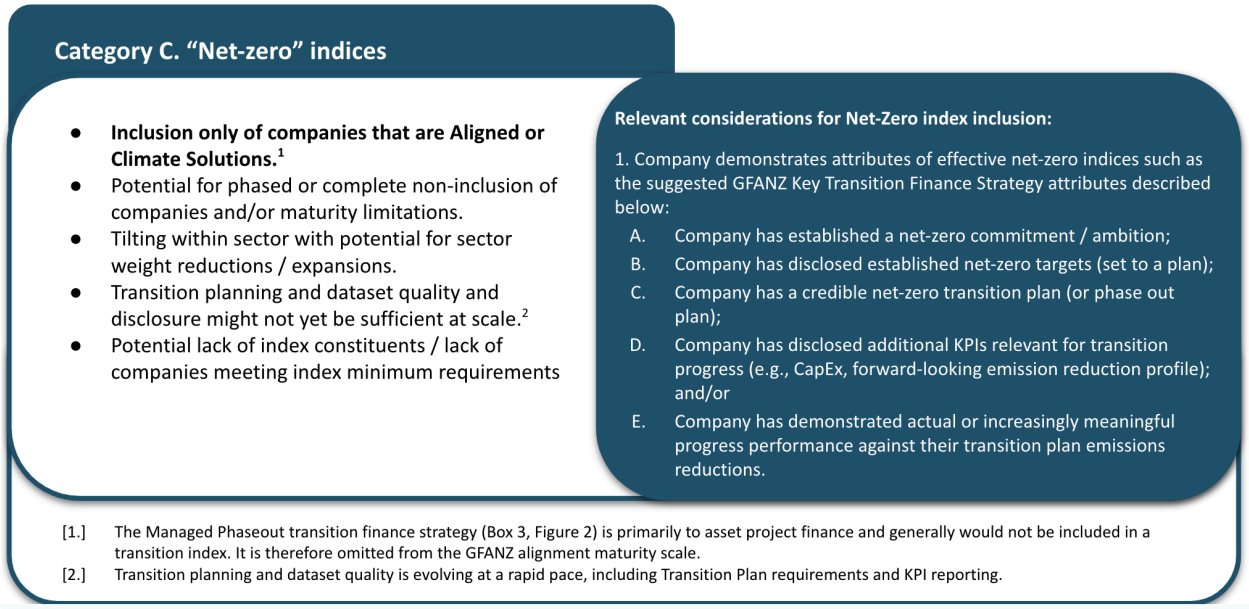
[35] The voluntary guidance described in Part B of this consultation paper is centered on development of adoption of Category A and Category B indices.

[36] The GFANZ Secretariat acknowledges that there may be exposures that are not yet part of the GFANZ four key transition financing strategies but that may, after further engagement and decarbonization efforts, be included under transition finance. The GFANZ Secretariat encourages financial institutions to capture such exposures under "In development" as part of sub-groups – e.g., may include entities that have not made a net-zero commitment (Not Aligned), are earlier on in the maturity scale (Committed to Aligning), or lack the data to appropriately assess exposures. Further description of 'In development' may be referenced in the Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization.

intent to establish targets or launch a transition plan, and/or companies that have publicly disclosed (i) green CapEx, (ii) plans to decarbonize projects; and/or (iii) transition-related revenues. In this context, intent will be defined by the index provider.

As in Category A, index providers might consider different time horizons depending on availability of emission reduction solutions, and taking into consideration sectoral and regional variation. For example, a shorter time horizon may be appropriate for most sectors and geographies. For hard-to-abate sectors or emerging economies, a longer time horizon might be appropriate.

Category C. Net-zero indices



"Net-zero" indices are constituted by companies that index providers consider to demonstrate attributes of, for example, GFANZ key transition finance strategies and thus, may also qualify for inclusion in both "transition-potential" and "transition-engaged" indices. "Net-zero" indices may encourage companies to progress from demonstrating attributes of "In development" to attributes of Climate Solutions or Aligned.

GFANZ views that indices evolving to net zero is a long-term objective. The relevance of these indices will largely depend on wide scale climate data availability, company engagement, and adoption of "transition-informed" indices, such as those described in categories A and B. Depending on availability of emission reduction solutions, different regional and sectoral trajectories may be considered when determining the attributes of effective net-zero indices.

Box 5. Consultation survey: "Transition-informed" index categories

1. Do you agree that current climate-focused indices (e.g., Screened and Scored, PAB, CTB) do not fully capture real-economy decarbonization potential?
2. In your view, would the proposed categories of "transition-informed" indices (i.e., "transition-potential," "transition-engaged," and "net-zero" indices) support real-economy decarbonization?
3. Do you think the progression from relatively inclusive "transition-potential" and "transition-engaged" indices to exclusive "net-zero" indices will encourage companies to align with the transition to net zero (by providing a launch point and time-bound criteria)?
4. Are there additional ideas to consider for developing a "launch point" index while various participants progress toward their own alignment with the transition to net zero?
5. What additional considerations may be relevant to mitigate greenwashing risk for "transition-potential" and "transition-engaged" indices?
6. Do you agree that differing timeframes/pathways to transition may be preferable in certain regions and sectors?
7. Regarding time-bound limitations of inclusion for Equities and Fixed Income, what might be a realistic cutoff suggestion (e.g., 2035 or 2050) and why?
8. For how many years should a "transition-informed" index be similar in constituency to a base index before it starts to differ? Why?
9. Is there a concern if the "transition-informed" indices differ substantially from the parent benchmark at day 1? Is there a risk of green-washing if the difference is minimal? Please explain your answer.
10. For Fixed Income specifically, would consideration of macro factor neutrality (spread/yield, duration, credit quality) versus parent benchmark be key when potentially applying time-bound limitations to certain companies?
11. How should reduction in weight be implemented?
12. How could naming convention rules impact the proposed names for each "transition-informed" index category?
13. Are there additional ideas on the content/design aspects of Figure 3 "Categories and potential timeline of "transition-informed" indices"?

Suggested key considerations

In developing the “transition-informed” index guidance, GFANZ identified several important considerations unique to index investing. The following factors take into account specific perspectives of asset owners, asset managers, and investee companies and the nuances of relevant asset classes.

The investor and company issuer perspectives

"Transition-informed" indices may be able to support the implementation of investors’ interim emissions-reduction targets, either at a top-down portfolio level or for specific asset classes. Ninety One’s global asset owner survey shows nearly half of asset owners have a portfolio emissions-reduction target in place.[37] However, reduction targets have minimal differentiation for regions. In emerging markets, emissions are expected to rise in the short to medium term, in line with a just transition to net zero.[38]

From a company perspective, as with any index, continued inclusion in "transition-informed" indices may broaden a company’s investor base beyond those who invest in traditional flagship indices, potentially increasing its valuation. For Fixed Income issuers, this potentially increases demand for their new bond issues, which may lead to lower cost of capital. In a world in which many investors are increasingly concerned about climate risks, and the energy transition is accelerating to meet net-zero goals, there may be performance advantages over time for companies classifying as transition-focused compared to peers who are not taking steps to decarbonize. Conversely, non-inclusion in "transition-informed" indices may have the opposite impact. There may also be differences in the economic performance of companies that are more committed to the transition given the expenditures required, short-term risk, and other factors. Any anticipated impact to financial performance may also depend on governments following through on their net-zero commitments (and relevant policies/regulations).

Differentiating between Equities and Fixed Income

Index participants in global public equities and corporate bonds have different ways to support companies to transition to net zero. As discussed in the GFANZ Secretariat Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization, it is important to consider differences in market exposure between asset classes.[39] Index participants may consider whether the exposure is through primary markets (new issue) or secondary markets (trading of existing bonds and shares), with primary market exposures providing potentially greater opportunities to influence a company’s decarbonization initiatives.

Equities operate largely in the secondary market, where trading existing shares has less immediate impact on a company’s financing. However, over the long term, index participants in Equities may use their voting power to support companies in their alignment with the global transition to net zero, e.g., by encouraging greater climate disclosure, climate-informed practices, and net-zero commitments. They

[37] Ninety One. Net-zero investing: searching for returns and real-world change, April 2024.
[38] Ninety One. Net-zero investing: searching for returns and real-world change, April 2024.
[39] GFANZ Secretariat. Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization, December 2023. For additional information on the differences between Equity and Fixed Income in the context of “transition-informed” indices, please refer to Appendix 5.

may see the value in leveraging their Equity ownership to support the creation of long-term, sustainable value in the firms they own. While Equity investors have the option to signal their views through divestment, many asset owners have indicated[40]that divestment of their Equity positions does not necessarily lead to GHG emissions reductions in the divested companies. Nonetheless, non-inclusion in broadly adopted indices may have a negative consequence on share price, reputation, and liquidity, which may encourage companies to implement more value-enhancing strategies meeting the conditions set in the index methodologies.

New Fixed Income issuance, or new bond issuance, which constitutes primary market activity, provides new capital to companies. The new issuance process enables index participants to engage with companies and support alignment with the transition to net zero before, during and after new issuance – providing multiple engagement opportunities for Fixed Income index participants. In particular, signaling to an issuer that its new issue bonds may be eligible for inclusion in the relevant index provider's "transition-informed" indices (either immediately or beyond a specific maturity date) if it develops and starts to implement a credible transition plan may encourage an issuer to do so.

Put differently, an index participant may have an immediate influence on, and potentially more frequent engagement with, a company issuing new debt (compared to Equities) through the phased "transition-informed" index approach outlined in Part B. This is due to the frequency of new bond issuance and opportunities for issuing companies to deploy green bonds, sustainable linked bonds (SLBs), and transition bonds.[41, 42] Notably, over half of carbon-intensive debt (US$3.2 trillion) is set to mature before the end of this decade, with global fixed income markets needing to refinance approximately US$600 billion each year.[43]

Beyond portfolio decarbonization

To support **real-economy decarbonization**, index participants may invest in or maintain exposures to companies that are not yet aligned with the transition to net zero to help companies decarbonize, encourage them to align with the transition to net zero, and hold them accountable for progress. While this may increase portfolio level emissions in the near- to medium-term, index constituents may be expected to align to a science-based pathway over time or demonstrate certain attributes (see the section "Categories of "transition-informed" indices" for example attributes). These attributes may be based primarily on forward-looking data, such as expected emissions reductions (EER), which measures the potential decarbonization impact of companies at the portfolio level.

While the two approaches – real-economy decarbonization and portfolio-level decarbonization – may be implemented concurrently, institutions may favor one over the other based on factors such as investment horizons, portfolio liquidity, and regulatory context. The voluntary guidance in Part B offers potential new opportunities for investors to actively participate in real-economy transition through

[40] Asset owners have been consulted through panel discussions, statements, net-zero commitments, reporting, and bilateral discussions to provide input on this paper.
[41] Fidelity International. The sleeping giant: Bond markets are critical in the fight against climate change, June 2022.
[42] The International Capital Market Association (ICMA) Green Bond Principles and Sustainability-Linked Bond Principles provide voluntary process guidelines for issuers. The Climate Bonds Initiative's Financing credible Transitions white paper provides a framework for use of the transition label.
[43] London Stock Exchange Group. Tracing carbon-intensive debt in corporate fixed income, March 2024.

"transition-potential" and "transition-engaged" indices, thus enhancing and expanding beyond the focus on portfolio-level decarbonization.[44, 45]

Box 6. Consultation survey: Suggested key considerations for "transition-informed" index investing

1. As an investor, what do you view as the priority of your firm/organization and/or clients:
    a. Decarbonizing investment portfolios (short-term fix)
    b. Real-economy decarbonization (longer-term approach with less immediate impact)
    c. Both
2. From an investor perspective, what are the potential impacts from shifting to a "transition-informed" index (e.g., could there be an impact on investment metrics, such as on emissions reduction targets)? What steps might investors consider as a consequence (e.g., adjustment of metrics to focus on changes in emissions instead of absolute emission numbers to support transition to net zero)?
3. Do you agree that "transition-informed" indices should take differentiated approaches for Equities versus Fixed Income, and how so?
4. Do you agree that Equities do not typically provide new capital to a company?
5. Do you agree that new debt issuance provides new capital to a company, and if an investor does not buy new debt issuance beyond a certain timeframe, they may be signaling to companies their position on the transition to net zero?
6. Should non-inclusion in a "transition-informed" index be viewed as the option of last resort if a company is not demonstrating progress to align with the transition to net zero?
7. From an investor perspective, how important is it for the index criteria and rules to maintain sector and country neutrality while reallocating to sector-leading companies?

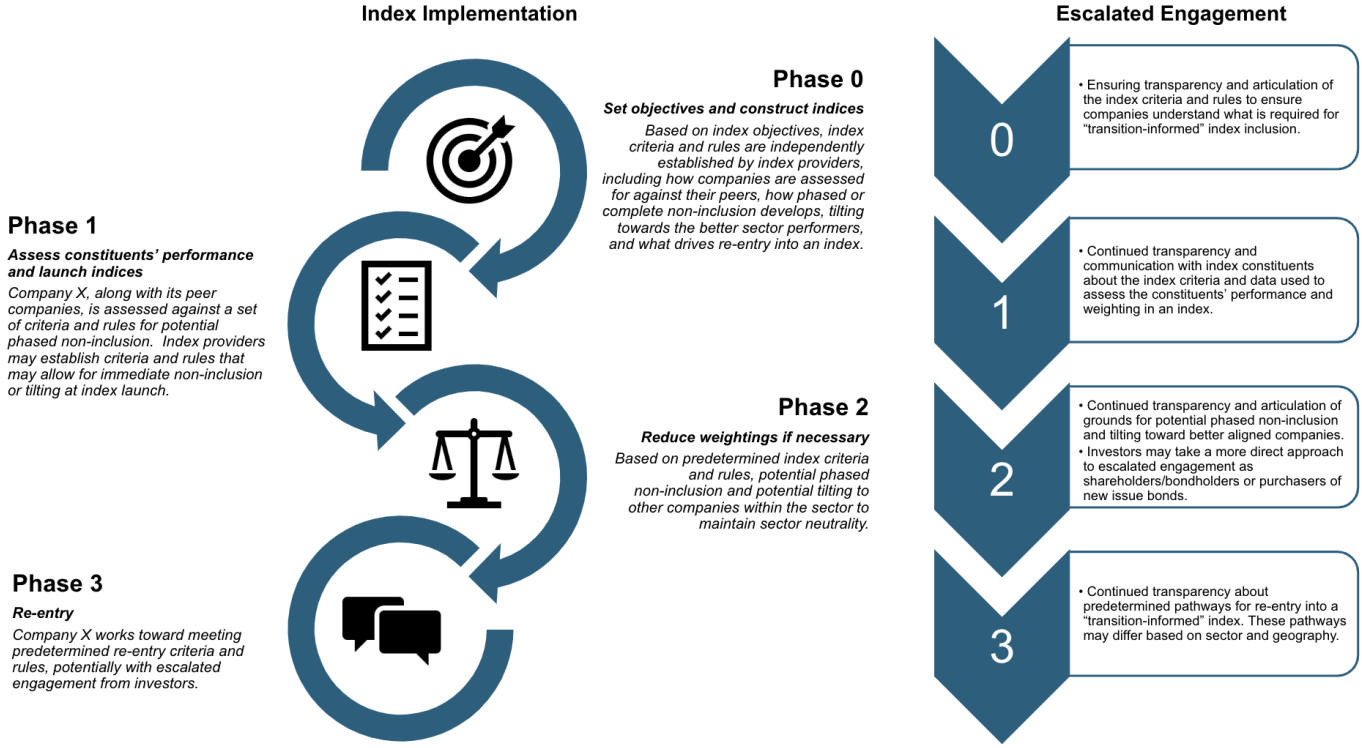
[44] Kölbel, J.F. et al. Can Sustainable Investing Save the World? Reviewing the Mechanisms of Investor Impact. Organization & Environment, 2020. https://doi.org/10.1177/1086026620919202

[45] Quigley, E. Evidence-based climate impact: A financial product framework. Energy Research & Social Science, November 2023. https://doi.org/10.1016/j.erss.2023.103252.

Part B: Voluntary index guidance

This section provides guidance to support index participants to independently and voluntarily develop and adopt suites of "transition-potential" and "transition-engaged" indices. This guidance is proposed in five phases, where *inclusion* of all companies in the investable universe is the starting point, followed by a continuous assessment by reference to key criteria for each company (individually and independently determined by index providers). Assessment may lead to a future phased *non-inclusion* of the company should there be no demonstrable effort to align with a net-zero pathway. The assessment and subsequent actions to support real-economy decarbonization may differ in Fixed Income and Equities approaches. The assessment should also take into account differences in speed of decarbonization across sectors and geographies, in line with NZAOA Principle 5.[46]

Figure 4. Voluntary Index Guidance



[46] UNEP FI and PRI. Development and Uptake of Net-Zero-Aligned Benchmarks, November 2022.

Phase 0. Set objectives, support launch, and adoption of indices with transition-related criteria

The index participant sets objectives, launches, and supports the adoption of "transition-informed" indices based on existing indices. Setting a clear objective for a “transition-potential” and "transition-engaged" index is a key first step, followed by choice and definition of transition-related criteria, and finally, composition of the initial index constituents. Objectives may include aligning with science-based pathways aligned to 1.5 degrees C, or aiming to reduce the emissions intensity of the overall index over time by a certain target amount that is consistent with a scientific scenario.

While developing and launching indices is a central focus of index providers, index providers may also encourage voluntary adoption of “transition-informed” indices. For example, an index provider may choose to engage with the stakeholders who might be strategically influential in supporting adoption, including[47] boards of directors and trustees, investment committees, investment management teams, investment consultants, and actuaries, among others.

Box 7. Consultation Survey: Voluntary “transition-informed” index adoption

1. Do you agree that a lack of good data is a key impediment to adopting transition-focused instruments?
2. What data could be key to unlocking scaled adoption of transition indices?
3. What other considerations and suggestions will support voluntary adoption of “transition-informed” index investing strategies by interested investors? Are there specific considerations for specific types of investors?
4. Are there any areas of further work to help expedite the adoption path by investors?

Initially, the index should start with the full universe of companies in its parent index, including high-emitting companies that have the potential to follow a net-zero pathway. Depending on the index's objectives (e.g., mitigating transition risk, reweighting toward biggest decarbonization opportunities, alignment with global frameworks), the index participant may choose to establish rules and criteria which will remove some index constituents from the onset that are unlikely to be compatible with any transition pathway. Other participants may choose to more heavily weight Climate Solutions, Aligned, and Aligning companies with a grace period for some companies to meet transition-related criteria during Phase 1.

Engagement in this phase: An index participant should clearly articulate the engagement strategy and the pathway that allows for inclusion in “transition-potential” or “transition-engaged” indices. Index

[47] The relative influence of these actors on the use of transition index strategies in an investor’s portfolio would be dependent on the investor's governance structure, delegation of authority, the division of labor, and the level of expertise. Influence may also vary across geography and individual contexts, and is subject to the regulatory environment, peer and market development, availability of data and products, and cultural preferences.

participants may consider different engagement frameworks for abating easy-to-abate and hard-to-abate industries (see NZAOA Principle 5, Appendix 2); and different standards for companies offering climate mitigation and adaptation technologies, products, and services.

Relevant considerations for "transition-engaged" index inclusion

Key attributes for determining a company's alignment with the transition to net zero

In line with the GFANZ four key transition financing strategies (see Box 3), GFANZ proposes several framing questions to help guide individual index providers in their individual development or selection of criteria for "transition-engaged" indices.[48] These framing questions are aimed at supporting index providers in determining whether a company falls within the alignment maturity scale suggested for use by GFANZ, including Climate Solutions, Aligned, Aligning, and "In development."[49] The following attributes are based on this suggested maturity scale, and when overlaid, can shape a stronger picture of a company's alignment with the transition to net zero.[50]

- **Attribute A: Company has established a net-zero commitment/ambition;**
- **Attribute B: Company has disclosed established net-zero targets (set to a plan);**
- **Attribute C: Company has a credible net-zero transition plan (or phaseout plan);**
- **Attribute D: Company has disclosed additional KPIs relevant for transition progress (e.g., CapEx, forward-looking emission reduction profile); and/or**
- **Attribute E: Company has demonstrated actual or increasingly meaningful progress performance against their transition plan emissions reductions.**

Matrix 1. Transition-related data usability and coverage provides a summary of the climate data landscape, with potential metrics that may inform assessments of how a company is performing against these attributes.

In the context of index investment, **criteria on engagement** may also be key to ensuring that index constituent companies are willing to actively collaborate with the index participant to improve their alignment with the transition to net zero. By prioritizing companies that are receptive to constructive dialogue and willing to make meaningful changes, "transition-engaged" indices may better promote real-economy decarbonization and help index participants meet their own transition goals. With limited engagement data, it may be important to assess what data is unclear, nascent, or not available, and yet expected to play a larger role in index criteria as data improves.

[48] The voluntary guidance on "transition-potential" indices encourages companies to demonstrate potential to align with the transition in a time-bound manner. Thus, the relevant considerations for index inclusion described above are centered on "transition-engaged" indices, where companies may demonstrate attributes of the GFANZ key transition financing strategies (see Box 3).

[49] GFANZ Secretariat. Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization, December 2023.

[50] The workstream does not provide a framework to guide scoring of companies within an index.

The above attributes may not be all-encompassing. Index providers should assess the credibility of a company's climate objectives and compare the company relative to sectoral and regional expectations of the net-zero transition, and relative to its peers.

Transition-related data indicators, usability, and coverage

Key climate data indicators

Climate data come in many different forms, with varying levels of availability, quality, and comparability. The GFANZ Index Investing Workstream identified seven example data classifications within the climate data landscape (Table 1)[51] that may be relevant for the development of new suites of "transition-potential" and "transition-engaged" indices. Index providers, at their own discretion, may consider these classifications when combining data to generate new suites of "transition-engaged" indices. These groupings are not discrete, nor exhaustive, and serve as example classifications only.

Table 1. Example climate data classifications

Public vs. Proprietary	*Public-use* datasets are generally collected by government agencies and open source, whereas *proprietary* datasets are often collected by private companies and made available for a fee. In the modern context of growing AI applications, it is equally important to consider whether the data is published in a machine-readable format.
Operational vs. Financial	*Financial* indicators are measures of a company's financial condition, such as green revenues or green CapEx. *Operational* indicators may involve financial indicators but may also include data on a company's operational performance, a GHG management assessment (GHG reductions) or science-based targets (SBTs), which include a range of criteria related to target duration, ambition, and coverage of internal and value chain sources. Green taxonomy may be considered a financial indicator in certain contexts.
Sector-specific vs. Non-sector specific	Sector-specific intensity metrics may be more indicative of a company's progress and ambition than non-sector-specific metrics, and allow users to compare data across peers (e.g., tCO2/MWh for energy companies). The differentiation between these datasets is important because various sectors will progress at different rates, with some transitioning much faster than others. Sector-specific data may be key where different sectors have different measures (to prevent inconsistent data).
Assurance vs. Unaudited	Data that undergoes *assurance* is examined and validated by an external independent auditor, thus enhancing credibility. Data quality assurance is a key step toward ensuring accuracy, completeness, and consistency. The classic example of audited data is verified carbon offsets. *Unaudited* data, on the other hand, is more informal in that it has not been verified by an external independent auditor.
Historical vs. Forward-looking	*Historical* data, such as a company's GHG emissions track record, help investors make predictions about future corporate emissions, and may be considered when formulating a carbon performance score. *Forward-looking* metrics (e.g., company climate governance / management scores, CapEx, and net zero transition plans) are tools for making projections

[51] The classifications described in Table 1 are meant to complement the final climate-related disclosure standard (IFRS S2) issued by the ISSB. IFRS S2 requires an entity to disclose information that enables users of general purpose financial reports to understand: governance, strategy, risk management, and metrics and targets.

	about corporate performance. A company's progress against forward-looking metrics may be periodically reviewed to ensure consistent compliance with index criteria.
Qualitative vs. Quantitative	*Qualitative* data considers "soft" or non-quantifiable information, such as forward-looking transition plans and governance metrics, whereas *quantitative* analysis uses exact inputs such as profit margins, debt ratios, and earnings multiples. Data providers might consider methods of quantitatively assessing qualitative datasets while "hard" data becomes more accessible.
Primary, Secondary, & Tertiary	*Primary* data sources determine a verifiable amount of GHG emissions by amount, time and place, such as utility bills. Primary data typically capture Scope 1 and 2 emissions but also Scope 3 in some cases. *Secondary* data sources are not directly collected, measured or estimated by a company, but rather sourced from a third-party life-cycle-inventory database. *Tertiary* data sources index, compile, or digest other data sources. For example, defining a company or asset as Aligned based on existing climate data, or including the company in an index because it meets a certain threshold. Within the index landscape, data processing and scoring is a well-covered market while data identification services currently lag behind demand. Qualitative metrics, like governance, typically manifest into some kind of scoring system, but can also score carbon performance or climate-related risk.

To obtain quality data, an index participant will need to determine what data a company should disclose to present a complete picture of its climate-related risks and opportunities. Matrix 1 on the following pages describes three transition-related data categories that index providers may use to identify relevant climate data for "transition-potential" and "transition-engaged" index composition. The three categories are:

1. **GHG emissions data** on a company's position to transition to net zero by 2050 by accounting for emissions across an company's emissions inventory, including direct emissions (sources owned or controlled by the company) and indirect emissions (such as energy purchases and throughout its value chain).

2. **Transition-related investment data** on a company's current climate change position and exposure to climate-related risk, such as transition-related CapEx/OpEx, exposure to fossil fuel, green revenue.

3. **Forward-looking indicators** about a company's future emissions – based on historical data and emissions reduction targets – as well as corporate net-zero transition plan metrics and a company's alignment to that plan.

Matrix 1 lays out these three categories in the context of their usability and coverage in the present climate data landscape.

Matrix 1. Transition-related data usability and coverage

This consultation paper aims to provide example metrics which index providers may consider assessing to make an informed decision on a company's eligibility and continued inclusion in a "transition-informed" index. Survey respondents are asked to assess and score each metric in terms of its (1) Applicability/Relevance; (2) Global Coverage/Availability; and (3) Degree of Standardization/Comparability.

Data Category	Metric	Definition	Please refer to the survey to score each question in:		
			How applicable or relevant is the metric to index construction?	How <u>available</u> is climate data to inform each metric, in order to impact index construction?	How <u>standardized</u> is this metric in index construction?
GHG Emissions Data	Scope 1 GHG emissions	As defined in the GHG Protocol, in tonnes of carbon dioxide equivalent (tCO2e).			
	Scope 2 GHG emissions	As defined in the GHG Protocol, in tCO2e.			
	Scope 3 GHG emissions	As defined in the GHG Protocol, in tCO2e.			
	GHG intensity (physical)	Total GHG emissions divided by physical activity-based metric.			
Transition-related Investment Data	Transition-related CapEx	Amount or percentage of capital expenditure spent in transition-related economic activities.			
	Green Revenue	Income generated from products, services, and business activities that have a positive environmental impact.			
	Transition-related OpEx	Amount or percentage of Operating Expenditure towards environmentally Transition-related economic activities.			
	Transition-related R&D	Amount or percentage of R&D budget spent on transition-related economic activities. (Aspirational metric)			
	Exposure to fossil fuels	Percentage ownership / operation of fossil fuel related assets.			

Data Category	Metric	Definition	Please refer to the survey to score each question in:		
			How applicable or relevant is the metric to index construction?	How available is climate data to inform each metric, in order to impact index construction?	How standardized is this metric in index construction?
Forward-looking Data	GHG emissions reduction targets (Absolute)	Targeted reduction in GHG emissions relative to activity metric by target year from baseline year.			
	GHG emissions reduction targets (Intensity)	Targeted reduction in GHG emissions relative to a specific denominator.			
	Expected Emissions Reduction (EER)[52]	The "emissions return" of a financing decision by representing the unrealized emissions reduction potential of an asset or entity over a specified timeframe.			
	Other climate targets	Such as Renewable targets and Production targets.	*(Above survey questions not applicable to this broad based category of metrics)*		
Net Zero Transition Planning	Set Transition Plan	A credible plan to align business activities with a pathway to net zero.[53]			

Box 8. Consultation survey: Transition-related data

This consultation paper aims to provide a list of data that index providers may consider assessing in order to make an informed decision on a company's continued inclusion in a "transition-engaged" index. Survey respondents are requested to review Table 1 and Matrix 1, and consider the following questions:

[52] The GFANZ Secretariat Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization outlines potential decarbonization contribution methodologies for deriving EER for each of the GFANZ four key transition financing strategies. EER calculations may be developed in-house by financial institutions based on internal data, or produced by real-economy clients and portfolio companies as part of their net-zero transition plans or in capex requests. Notably, the usage of EER hinges on the availability of a complete and consistent dataset for a universe of companies such that it can be used in indices.

[53] Transition plans exist on a spectrum of detail and their credibility is not a binary metric. For guidance on credible transition planning, readers may reference the GFANZ report Expectations for Real-economy Transition Plans, as well as the Transition Plan Taskforce (TPT) Disclosure Framework.

1. Should additional classifications be recognized?
2. Are there classifications that should not be included?
3. Are there classifications that should be elaborated?
4. Would it be helpful if climate data is reported similarly to financial data?

Phase 1. Assess index constituents' net-zero commitments, targets, transition plans, and performance

The relevant index provider assesses companies' current climate data against a set of transition-related criteria associated with the "transition-engaged" index. An initial assessment period should review a company's progress in developing and implementing credible net-zero commitments, targets and transition plans. During this phase, companies may work to demonstrate progress to align with a net-zero pathway. Over time, the relevant index participant may assess the transition performance of issuers against these criteria. Issuers that do not demonstrate adequate progress may move to a phased "non-inclusion" status at the discretion of the index participant's index criteria and rules. An index participant may differentiate itself from its peers by selecting different criteria or giving different weights to each criterion in its index methodology.

Forward-looking transition targets may consider emissions data, such as expected emissions reductions (EER, see Box 9),[54] and follow industry target-setting guidance as relevant to the sector and/or region. These targets may provide an index participant with a complementary dimension to consider in an engagement strategy — i.e., the dependencies in a company's emission reduction trajectory may inform the objectives and timeline of a targeted engagement strategy.

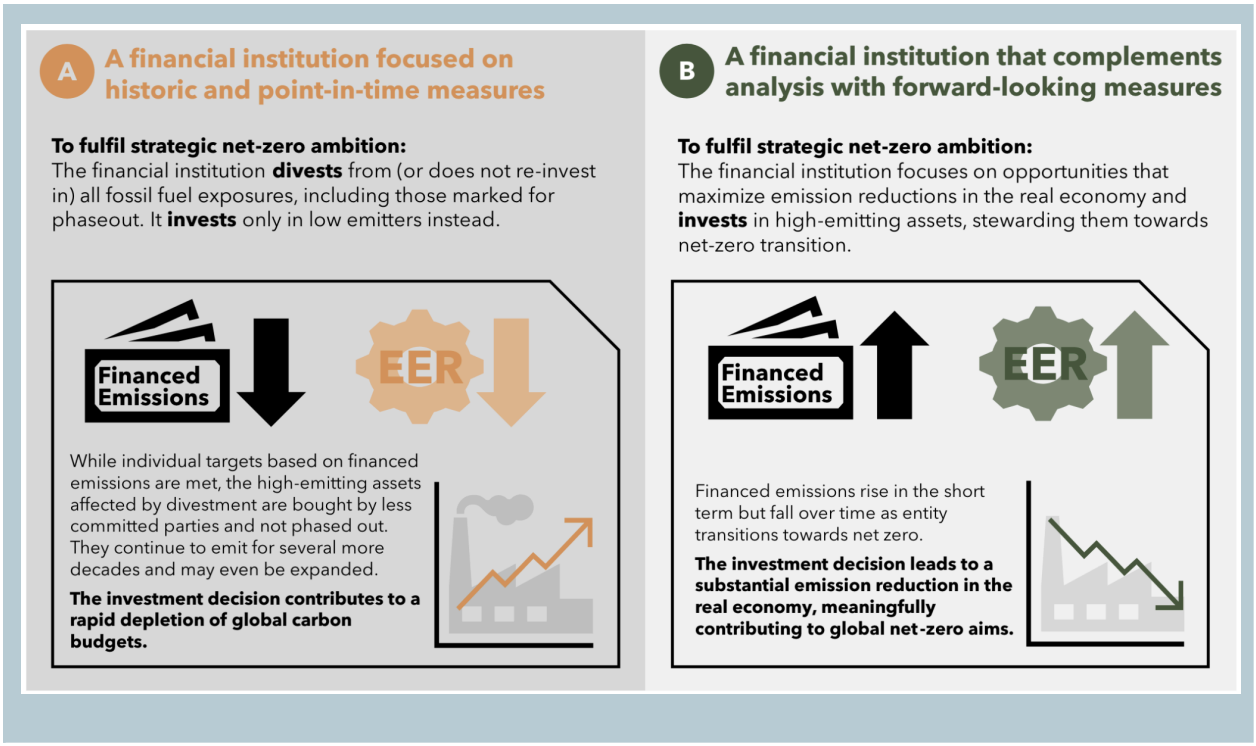
Box 9. Expected Emissions Reductions (EER)

The GFANZ Secretariat introduced the concept of Expected Emission Reductions (EER) as a complementary measure to existing KPIs that may offer perspective on the forward-looking decarbonization potential of holdings and opportunities. Similar to the expected return of a financing decision, the EER could be quantified to express the "emissions return" of a financing decision by representing the unrealized emissions reduction potential of an asset or entity over a specified timeframe. This offers a potential approach to assess and quantify the decarbonization contribution potential of exposures, with transparency and awareness of limitations important to credible application. Forward-looking metrics, like EER, together with historical/point-in-time measures (e.g., financed emissions), can provide a more holistic perspective of an issuer's transition trajectory and potential. However, notably, the usage of EER hinges on the availability of a complete and consistent dataset for a universe of companies such that it can be used in indices.

The GFANZ Secretariat Technical Review Note - Scaling Transition Finance and Real-economy Decarbonization outlines potential decarbonization contribution methodologies for deriving EER for each of the four key transition financing strategies. EER calculations may be developed in-house by financial institutions based on internal data, or produced by real-economy clients and portfolio companies as part of their net-zero transition plans or in capex requests.

Figure 5. Illustration of the value of including complementary forward-looking metrics such as the EER to encourage financing and support across all sectors, including high-emitting sectors

[54] Refer to Matrix 1 that asks survey participants to provide feedback on the use of forward-looking indicators.



Engagement in this phase: An index participant should be transparent about the methodologies and data it is using to assess performance of index constituent companies while industry standards are still maturing.

Box 10. Examples of common engagement practices to encourage the net-zero transition

Index participants may identify select companies for targeted, escalated engagement based on factors outlined in the voluntary guidance. The GFANZ Net-zero Transition Plan Framework Engagement Strategy theme[55] encourages financial institutions to engage with (i) clients and portfolio companies; (ii) financial sector peers and industry associations;[56] and (iii) governments and the public sector. In line with this strategy, the GFANZ Index Investing Workstream identifies the following index-specific common engagement practices, although it is recognized that not all all index participants will have the same tools for engagement:

I. Clients and portfolio companies

- **Thoughtfully prioritize the universe of investee companies for engagement.** Many index participants find the key tenets of effective engagement are to **relate** to companies they are engaging with, ensure they **understand** company context and why firms are taking (or not

[55] GFANZ. Recommendations and Guidance on Net Zero Transition Plans for Financial Institutions, November 2022.
[56] Industry-related bodies may include civil society and nongovernmental organizations providing subject matter expertise,targeted initiatives, and collaborative opportunities, among other purposes (e.g., Council for Inclusive Capitalism's Just Energy Transition Framework for Company Action, ShareAction, WWF, World Resources Institute).

taking) specific actions, and **convey** how engagement responses may impact escalation and voting. While scaling up engagement efforts remains a challenge, prioritizing companies where significant change can be achieved, starting with those currently not aligned with the transition to net zero, may improve efficiency.

- **In order to measure the effectiveness of engagement with companies, an index participant first should understand its desired outcomes.** Index participants may then identify specific engagement around time-bound expectations based on the criteria for inclusion.

- **Build metrics for successful "transition-informed" indices (such as those described in Matrix 1), and track and share progress against those metrics with stakeholders.** Measuring the effectiveness of metrics requires ongoing exploration of methods that align with the individual desired outcomes of both investors and investee companies. Building a coherent narrative, with a clear understanding of time horizons, is important and may be coupled with a clear engagement escalation strategy. Likewise, transparent pathways for re-inclusion in an index may be necessary for companies that are phased out due to non-compliance with index criteria. **The preceding guidance on Phase 0 provides additional considerations for index participants when assessing individual index constituent companies.**

- **Develop and clearly communicate policies and conditions[57] to clients and portfolio companies, including by implementing transparent engagement and voting processes.** Voting guidelines and practices that support the identification of climate-related risks and opportunities and that request robust company transition plans are strongly encouraged. The GFANZ Net-zero Transition Plan Framework Engagement Strategy theme encourages investors to exercise rights with respect to proxy voting, director voting, and shareholder resolutions to signal to companies the financial institution's expectations for net-zero transition disclosure, planning, and strategy.[58] In this sense, a change in board members may have an impact on the direction of travel of the company.

II. Financial sector peers and industry associations

- **An investor may encourage consistency in engagement between Equities and Fixed Income, although approaches need not be identical.** Engagement is particularly important in cases of secondary engagement (Equities and Fixed Income) and avoiding primary engagement (predominantly Fixed Income). Equity investors typically utilize levers such as annual general meetings, voting rights, shareholder resolutions, and index inclusion, whereas Fixed Income strategies may use tools like index inclusion to attract capital through new bond issuances. Fixed Income strategies may also employ maturity adjustments, the new issue (primary

[57] Policies and conditions can be used to manage an index participant's interaction with high-emitting companies; to transition those companies to a net-zero pathway; and to speed the real-economy transition to net zero. Policies and conditions set out a clear management process for priority areas and communicate the organization's intentions both internally and externally.

[58] GFANZ. Recommendations and Guidance on Net Zero Transition Plans for Financial Institutions, November 2022. Page 63.

market) process, and monitoring use of proceeds, particularly in green bonds, SLBs, and transition bonds.

III. Governments and the public sector

- **Recognize the importance of policy engagement to further enhance investor outcomes**, regardless of whether the engagement is focused on Equity or Fixed Income instruments. Investors engaging with public-sector institutions may proactively support efforts to establish clear and consistent policy regarding disclosure of climate-related information, including net-zero transition plans, including to promote global consistency in transition planning guidance.

Box 11. Consultation survey: Engagement

1. What is the role of engagement in "transition-informed" index investing? In your view, to what extent do engagement efforts by index participants deliver real value in driving real-economy decarbonization?
2. In your view, what are the most effective engagement levers to encourage index constituent companies to align with the transition to net zero? Where can index participants improve the engagement approach to encourage transition to net zero?
3. How do you see engagement differing between Equities and Fixed Income in the context of "transition-informed" indices?
4. In the case of Equities, are voting rights an effective lever to support transition?
5. In the case of Fixed Income, does the new issue (primary market) process provide a reasonable opportunity to engage with companies on transition alignment? What other opportunities are there for Fixed Income investors to engage with issuers?
6. In the context of "transition-informed" indices, do you think transparent methodology is a sound engagement tool, and if so, how can it be used to amplify the effects of engagement with real-economy companies?

Phase 2. Reduce weightings if necessary

After a period of escalated engagement,[59,60] an index participant may find engagement methods ineffective in driving change within a particular company. Over time, based on individual provider index criteria and rules, an index provider may reduce weights of those companies that continue to miss criteria for inclusion.

Based on index criteria and rules, an Equity position in that company may be partially or fully divested. **Divestment is viewed as a last resort for many Equity investors** because full divestment forfeits the ability to influence company performance through engagement and voting. Index rules-based thresholds for divestment may be individually determined by the index provider and/or asset managers that develop the relevant index-based product and should be well communicated to companies.

A Fixed Income index provider may, based on index criteria and rules, limit the maturity profile of companies that do not respond to escalated engagement efforts. This means that bonds with a maturity beyond a certain date would not be included in the index (except for green bonds, SLBs, and transition bonds).

Box 12. Consultation survey: Development of a "transition-informed" index

1. How would you rank the following in order of importance in regard to index construction: ex-ante tracking error volatility (risk), sector exposure, duration, yield, currency, curve risk, and spread risk?

2. For Fixed Income specifically, how should reduction in weight be implemented — e.g., by not including new issues beyond a maturity threshold, through reduction in weight across all bonds from the issuer, by limiting inclusion to only new green, social and sustainability bonds while retaining existing bonds?

Once a company has had its weighting reduced or is no longer included in an index, the index criteria and rules should determine how to reallocate that constituent weighting. The index provider may look to maintain sector and region neutrality while tilting toward better Aligned, Aligning and/or lower emitting companies in the same sector. The index provider should be mindful that achieving complete sector neutrality, especially at the country level, may not be realistic to meet "transition-potential" or "transition-engaged" index objectives, as well as given individual index participants' unique investment strategies.

Engagement in this phase: Where a company does not meet the criteria but could take steps to align its activities with the criteria, an index participant may consider undertaking escalated engagement. This judgment may be informed by the disclosure and credibility of a company's targets, transition plan, and

[59] Escalated engagement refers to increased engagement with a company focused on reducing the company's CO2 GHG emissions over time. It is acknowledged that index providers will have different starting points for engagement and different criteria for determining when engagement should be escalated.
[60] GFANZ. Recommendations and Guidance on Net Zero Transition Plans for Financial Institutions, November 2022. Page 63.

implementation efforts. **Engagement between index providers and/or asset managers that manage index products/portfolios and companies may be at an industry level, data-driven, and independent and rules-based, leveraging the existing data infrastructure.** Index participants should focus on publicly available disclosures and avoid subjective engagement.

Where applicable and based on index criteria and rules, index providers and asset managers that manage index products/portfolios may decide to be transparent about the timeline and process for phased reduced exposure or non-inclusion of a company in an index if it is not demonstrating sufficient decarbonization progress. Gradually reduced exposure or non-inclusion may have an impact on overall demand for a company's equity and debt and its cost of capital.

Asset owners, asset managers, and other investors may take a more direct approach to engagement as shareholders or purchasers of new issue bonds. Director voting and stating their positions (e.g., on debt maturity limitations or non-inclusion) may incentivize high-emitting companies to enhance the ambition of their net-zero targets, improve their transition plans, become more transparent about key data and metrics, and ultimately accelerate the decarbonization of their activities.

An **Equity** investor may include escalation methods in its engagement strategy, including by leveraging its shareholder voting rights, if a company's progress against its transition plans is not adequate. An investor may find it effective to determine whether escalated engagement should be targeted toward reducing emissions within a specific scope, such as a company's Scope 3 upstream emissions (originating from production) and/or downstream emissions (from a product's use or disposal).

In the case of Fixed Income, an index participant may assess a company's transition metrics – and the credibility of the underlying data – **before purchase of new issue bonds**. Companies that cannot demonstrate alignment or provide sufficient data may be considered for **escalated engagement**, or **purchases of new issues may be limited beyond a specified future maturity date** based on index criteria and rules – or as the case may be, only inclusion/purchases of new issue green bonds, SLBs, and transition bonds. An index participant may use the new bond issuance process to engage with the bond issuer (e.g., before, during and after the new issue – primary market – process) on climate-related risks and opportunities, and encourage transition alignment.

If companies positively react to either the Equities or Fixed Income engagement, index criteria and rules should provide a path to continue company inclusion in "transition-engaged" indices. While index participants are likely to establish different engagement objectives and approaches, this guidance should direct shared efforts in a similar direction.

Box 13. Consultation survey: Fixed Income and Equity considerations

Fixed Income considerations

1. Is it realistic for index providers to assess if a company is meeting the applicable GFANZ key transition financing strategies – and the credibility of the underlying data – before determining inclusion of the company in a "transition-informed" index and/or purchase of the company's new issue bonds based on index criteria and rules?

2. Are there instances where it makes sense to assess an issuer on existing bond issuances?

3. Should Fixed Income investors and data/index providers lead in assessing a company's transition alignment before inclusion/purchase of new issue bonds?

4. Is the new bond issuance process a feasible opportunity to engage the bond issuer on climate-related risks and opportunities and encourage transition alignment? Are there specific engagement practices that would best apply to this strategy?

5. Would consideration of macro factor neutrality (spread/yield, duration, credit quality) be key when potentially applying, based on index criteria and rules, maturity limitations to certain companies?

Equity considerations

1. Should companies be prioritized for escalated engagement activities in order to scale and accelerate real-economy decarbonization? What factors should be considered in order to identify priority companies?

2. Is there a role for "transition-informed" indices to play in embedding transition to net-zero objectives into the normal asset allocation processes?

Phase 3. Re-entry

Based on index criteria and rules, a company whose weighting has been reduced (partially or fully) may be expected to demonstrate alignment progress – meeting certain transition-related criteria and performance standards set by the index participant – over a defined period of time before being phased back into the index. The criteria may include demonstrating alignment with a net-zero transition and enhancing corporate transparency. The re-entry process underscores the dynamic nature of "transition-potential" and "transition-engaged" indices, where companies must continuously adapt and perform to maintain or regain their position, reflecting the evolving standards and expectations of index providers. Notably, the process of re-including a company in an index may be a source of additional turnover, transaction costs, and tracking error for investors. Investors should be aware of potential financial implications associated with complex index methodologies.

Engagement in this phase: The index participant is transparent about how companies can regain inclusion into the index, based on index criteria and rules, by meeting attributes of the applicable GFANZ key transition financing strategies. Transparency might include establishing a transparent review process, and providing regular updates and feedback mechanisms.

Part C: Areas for further work

In this section, the GFANZ Index Investing Workstream identifies two areas where further work is likely to improve the development and uptake of these indices: increased development and use of credible net-zero transition plans; and improvement in climate data availability, quality, and comparability.

Development and use of credible net-zero transition plans

Net-zero transition plans are a key source of forward-looking information that may complement the limited availability of climate data, such as by identifying decarbonization levers specific to the company. An index participant may consider whether a company has a credible transition plan (following a credible and granular 1.5 degrees C-aligned pathway/scenario) and/or whether the company is making progress against its transition plan metrics or targets when assessing its current and potential alignment with the transition to net zero. This assessment may help the index participant determine the company's eligibility for inclusion, based on index criteria and rules, in a "transition-engaged" index. Index providers may assess the credibility of a company's climate objectives and compare the company relative to sectoral and regional expectations of the net-zero transition and against its peers.

The GFANZ Net-zero Transition Plan Framework provides voluntary guidance on how companies can undertake transition planning to deliver on their net-zero commitments, and the International Sustainability Standards Board (ISSB) is developing educational material on transition plan disclosures,[61] building on the Transition Plan Taskforce (TPT) disclosure framework and reports.[62] A credible net-zero transition plan includes all 10 components identified in the GFANZ NZTP framework, but it is important to consider the company's track record in implementing the plan and meeting performance indicators, as well as whether the plan is resourced appropriately. Transition plans may not be comparable to industry peers unless guided by specific frameworks. Increased uptake and disclosure of transition plans would support construction of "transition-engaged" indices.

Box 14. Consultation survey: Net-zero transition plans

1. To what extent, if any, should there be a convergence around methodologies for assessing the credibility and implementation of a company's net-zero transition plan? What metrics or methodologies could be used?
2. How can the format/method of disclosure of net zero transition plans be improved to facilitate assessment and comparison of individual components?

Climate data availability, quality, and comparability

In this proposed voluntary guidance, reported climate data is the key input for an index participant when assessing whether a company meets criteria for continued inclusion in a "transition-engaged" index. The

[61] ISSB. IFRS - ISSB delivers further harmonisation of the sustainability disclosure landscape as it embarks on new work plan, Accessed July 2024.
[62] TPT. Explore the Disclosure Recommendations, Accessed July 2024.

climate data offered by third-party data providers helps to assess climate risk of specific investments. However, there is a lag in the availability of robust, consistent, and high-quality climate data that is needed to ensure credible indices. Real-economy companies may consider providing more transparency by disclosing the underlying calculation data of their GHG emissions and reduction targets, which would allow an index participant to understand the quality of the data.

To obtain quality data, an index participant will need to determine what data a company should disclose to present a complete picture of its climate-related risks and opportunities. Of the three data categories described in Matrix 1 in Part B, GHG emissions metrics are observed to be more established, with disclosure requirements already in place in some jurisdictions. However, there are critical gaps in standards and regulation when it comes to transition-related investment data and forward-looking indicators, such as expected emissions reductions (EER). These gaps may be addressed through the following suggestions:

1. More disclosure of key inputs and transparency on the methodologies of estimation models by data providers would support index participant understanding of data comparability. They may be transparent about how modeling changes impact results over time, why results may diverge, how models improve over time, with the ambition to gradually move away from estimated data toward reported data (e.g., ISSB disclosure). They may also consider establishing an open process to collect feedback from users.

Box 15. Suggested key considerations for estimation model consistency

Index providers and asset managers that manage index products/portfolios may consider the following to support a consistent approach and minimize the volatility in estimation models:

1. Gradual introduction of more precise estimation methods, allowing companies to adapt and improve data collection and reporting processes. For instance, the Intergovernmental Panel on Climate Change (IPCC) often uses phased approaches to update its guidelines on national GHG inventories, allowing countries to transition to improved methods.

2. Identification of systematic differences to generate an adjustment factor, by conducting studies to identify systematic biases or differences between various estimation models and actual measured data. Subsequently, data providers may develop and apply correction factors to adjust estimates from models that consistently deviate from actual measurements.

3. Encourage companies to disclose data at standardized time and date cutoff points for data collection and reporting. This reduces variability caused by different data collection timelines and helps to make more accurate comparisons and aggregations. Notably, financial reporting standards often require companies to use specific fiscal year-end dates, which helps in maintaining consistency and comparability across financial statements from different organizations.

2. The index participant may apply consistent definitions (e.g., GHG emissions, net-zero pathways, carbon offsets, and ESG metrics) across the climate data ecosystem where appropriate, while leaving room for innovation and development. This may enhance comparability and avoid patchwork data.

Different index participants may have different sources of information and/or perspectives, leading to a risk of unnecessary inconsistencies and incomparability of results. Observed inconsistency in data may be due to differences in how data are tracked (e.g., time lags) and/or how the data are weighted for scoring. There may also be inconsistencies in how ambition and progress on transition to net zero is benchmarked, potentially making data providers a key stakeholder in company assessments. Rather than advocating for more data or further work to digest the available data, the index participant is encouraged to simplify datasets and focus on addressing comparability issues first. Engaging with issuers to improve consistency and quality of data may drive better outcomes and aid in cross-sector comparison. Furthermore, an index participant may consider elevating the importance of digitally tagged data and the use of taxonomies. A taxonomy can be likened to a dictionary which provides a level of assurance that entities are using the same definitions when reporting.

An index participant may also consider elevating the importance of forward-looking indicators and attributes to encourage disclosure by issuers, while at the same time, using estimation models as a secondary source of data until reported data becomes available, comparable, and of higher quality.

Box 16. Transition Finance case studies

In September 2024, the GFANZ Secretariat published a set of Case Studies on Transition Finance and Decarbonization Contribution Methodologies to provide perspectives of specific financial institutions, the learnings from which may benefit other financial institutions independently involved in Transition Finance and decarbonization contribution methodologies. The case studies illustrate financial institutions' approaches to incorporating Transition Finance and/or the GFANZ four key transition financing strategies into their strategy or real-economy investments, and how forward-looking methods are used to assess and quantify the decarbonization contribution potential of clients and portfolio companies.

3. Potential use of a public data utility may provide a common platform for index participants to access comparable, verified climate data to inform the index assessment process. A public data utility could go beyond simply offering a centralized dataset by also serving as quality control for index participants. Regulators may consider requiring vetting of climate data quality, maintaining a low cost of validation, and improving the ability to control data quality over time (with potential to link to ISSB reporting). A public data utility may enable all index participants, no matter their size, to assess companies on a level playing field. An investor or company would no longer need scale to have affordable validated climate data.

As one example, the Net Zero Data Public Utility (NZDPU) aims to be the world's first global, centralized, open repository for private sector climate transition-related data that is freely accessible to the public. While further work would be needed to mature such a utility for index construction and usage, the prototype signals promising advancements in securing comparable datasets. UN Special Envoy for Climate Ambition and Solutions Michael R. Bloomberg is a co-founder of the Climate Data Steering Committee (CDSC) and Co-Chair of GFANZ.

Conclusion

The path to aligning index methodology and index investment with net-zero objectives is complex and multifaceted, requiring a strategic approach that manages climate-related risks and opportunities in the transition to net zero while seeking to achieve financial performance objectives and outcomes. This consultation paper provides voluntary guidance to assist index participants on the development and adoption of “transition-informed” indices, and emphasizes four key takeaways, below.

- **“Transition-informed” indices support an accelerated transition to net zero by 2050** by directing capital toward transition-aligned activities and strategies. The voluntary guidance proposed in this paper encourages indices that prioritize real-economy decarbonization over portfolio-level decarbonization.

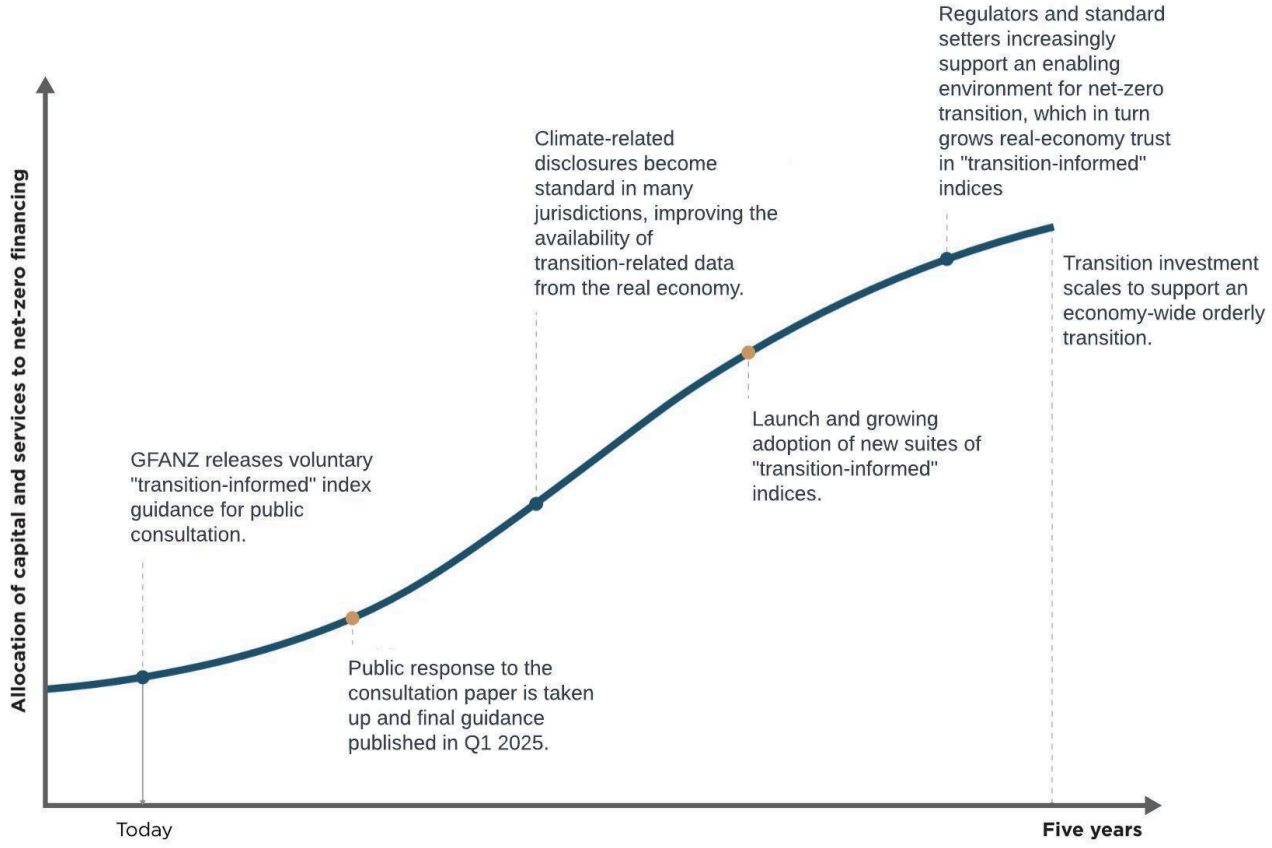
- **Equities and Fixed Income may require nuanced approaches in "transition-informed" indices** due to their differing nature as sources of capital, specifically in primary markets (new issue bonds) versus secondary markets (trading of existing bonds and shares), and thus, their differing degrees of influence on a company's net zero alignment.

- **Further work is needed to improve the availability, quality, and comparability of climate data**, **including to increase development, implementation and disclosure of net-zero transition plans,** including by elevating the importance of key transition-related indicators and encouraging data disclosure rules for companies. This will ultimately support the construction of credible indices that align with science-based pathways to net zero.

- **Additional work is needed to support the early adoption of “transition-potential” and “transition-engaged” indices.** Asset owners, asset managers, and other investors individually choosing to adopt these indices will signal a strong preference for investments that are aligned with the transition to net zero and real-economy decarbonization, thereby encouraging index providers to further develop their suites of transition to “net-zero indices.” This will help offerings for "transition-informed" indices mature. Policymakers and governments may contribute by developing clear regulations, standards, and enabling policies.

The proposed guidance underscores the importance of integrating robust climate data, engaging in proactive engagement, and employing innovative index design to drive real-world decarbonization. Ultimately, the transition to a sustainable economic future depends on the actions of index participants as well as companies and policymakers. By voluntarily adopting the guidance and strategies in this consultation paper, financial institutions can play a key role in supporting an orderly transition to net-zero. Credible provision of these indices and global uptake has the potential to direct capital toward transition-aligned activities and ultimately accelerate the real-economy transition to net zero.

Figure 6. Illustration of adoption and mainstreaming of the proposed voluntary guidance



Appendices

Appendix 1. Additional resources

In delivering this consultation paper, the workstream builds on and makes reference to recent work by GFANZ and partners, and advances tools and frameworks published between 2022 and 2024, including:

- The GFANZ report (November 2022) "Recommendations and Guidance on Net Zero Transition Plans for Financial Institutions," which outlines the four key transition financing strategies. The report lays out a framework for credible transition planning by financial institutions and a related publication on "Expectations For Real-economy Transition Plans".

- The GFANZ Secretariat Technical Review Note (December 2023) "Scaling Transition Finance and Real-economy Decarbonization," which supplements the 2022 Net-zero Transition Plans report and develops the Transition Finance strategies by refining the attributes of the GFANZ four key transition financing strategies and discussing potential decarbonization contribution methodologies to complement existing metrics.

- UN-convened Net-Zero Asset Owner Alliance (NZAOA) discussion report (April 2023) "Development and Uptake of Net-Zero-Aligned Benchmarks," which is aimed at supporting Alliance members and other asset owners in establishing index universes with decarbonization pathway objectives that can be applied in a broad range of cases and to a globally diversified multi-asset class portfolio.

- The Institutional Investors Group on Climate Change (IIGCC) report (May 2023) "Enhancing the Quality of Net Zero Benchmarks," which addresses the growth of net zero benchmarks and the impact of regulation, and proposes five principles to improve net zero benchmark alignment with the Paris Agreement.

Appendix 2. Unique considerations on the NZAOA principles

The NZAOA Principles on Net-Zero-Aligned Benchmarks[63] calls on index providers to consider ten key principles in the development and enhancement of net-zero-aligned benchmarks and index universes. The paper also calls on asset owners to apply net-zero-aligned benchmarks. The guidelines address gaps in two types of climate benchmarks – EU Paris-aligned Benchmarks (PABs) and EU Climate Transition Benchmarks (CTBs) – while recognizing that asset owners may require additional customization to what is currently offered by index providers. The voluntary guidance proposed in this consultation paper builds on the ten key NZAOA principles.

NZAOA Principles on Net-Zero-Aligned Benchmarks

Principle 1. Ensure transparency in methodology and design

Principle 2. Starting point of decarbonization should be set to "today"

Principle 3. No mechanical exclusion of high emitting sectors (except thermal coal) or countries

Principle 4. Net-zero-aligned indices should correspond to real-economy decarbonization

Principle 5. Account for difference in speed of decarbonization across sectors and geographies

Principle 6. Ensure that forward-looking indicators are a key input in the decarbonization process

Principle 7. Every index universe needs to report on climate KPIs

Principle 8. Lack of data must be correctly addressed

Principle 9. Key metrics should be comparable to the parent index and tracking should be practical

Principle 10. The benchmark universes should incorporate metrics for a just transition, acknowledging that appropriate metrics are still to be refined

The GFANZ Index Investing Workstream identifies five priority NZAOA principles for net zero aligned benchmarks most relevant to Equities and Fixed Income, and thus they form the suggested launch point for "transition-informed" index construction beyond CTBs and PABs.[64] The following NZAOA principles are ranked in the workstream's perceived order of importance, based on workstream objectives and relevance to the Equity and Fixed Income frameworks.

Principle 1. Ensure transparency in methodology and design of a net-zero benchmark in order to track and reassess the benchmark's construction over time and to ensure it remains credible, relevant and appropriate. The workstream views this principle as the most important concern for both Equity and Fixed Income investors.

[63] UNEP FI and PRI. Development and Uptake of Net-Zero-Aligned Benchmarks, November 2022.
[64] NZAOA. Development and Uptake of Net-Zero-Aligned Benchmarks, November 2022.

Principle 3. No mechanical exclusion of high-emitting sectors (except thermal coal) or countries in order to ensure real-economy companies and slow-to-align sectors are not left behind in the transition. The workstream views this principle as the second most critical principle for both Equity and Fixed Income investors to consider in index design. NZAOA recognizes that an inclusive approach to benchmark construction may amount to less real-economy decarbonization in the near term, but the delay could be compensated by a steeper year-on-year decarbonization pathway over time. Investors may prioritize a transition finance strategy that maintains or, in some cases, increases investment in high-emitting companies that will need to decarbonize in the long run in order to help facilitate an orderly transition. Blanket exclusions do not achieve this objective.

Principle 4. Net-zero-aligned indices should correspond to real-economy decarbonization, in part by assessing whether companies' transition plans are credible and align to 1.5 degrees C pathways, such as those set out by the International Energy Agency (IEA) or the One Earth Climate Model (OECM).[65] GFANZ suggests use of performance against a pathway in determining whether a company or asset is Aligned, Aligning, or "In development". Pathway alignment is important to both Equities *and* Fixed Income investors who may consider methods for engaging with companies on net-zero transition.

Principle 5. Account for difference in speed of decarbonization across sectors and geographies (in line with IEA 1.5 degrees C and OECM sector models). Diverse operational footprints and hence differences in geographical concentrations in portfolios will lead to differences in pace of the decarbonization of economies and thus portfolios. The workstream views this principle as a unique consideration for Fixed Income investors where inclusion or inclusion up to a certain maturity date should be in line with the relevant decarbonization scenarios.

Principle 6. Ensure that forward-looking indicators are a key input in the decarbonization process, such as those stated in Climate Action 100+'s Net Zero Company Benchmark. NZAOA states that frameworks based on company transition plans should include information on whether issuers are:

- Committed to achieving net-zero carbon emissions by 2050;
- Pursuing serious short/medium term absolute and intensity decarbonization targets;
- Allocating capital dedicated to decarbonization projects;
- Reporting in accordance with recommendations of the Task Force on Climate-related Financial Disclosures (TCFD);
- Verified by the Science Based Targets initiative (SBTi); and
- Developing a strategy on phasing out fossil fuels.

Net-zero transition planning can be a useful tool for both Equity and Fixed Income investors. Indicators of future company performance against net-zero targets may encourage investors to choose an engagement pathway over divestment. For Fixed Income investors, transition planning can inform investment decisions such as maturity limitations.

Principle 9. Key metrics (e.g., turnover, credit rating, duration, spread / yield) should be comparable to the parent index, and tracking should be practical for application by investors. NZAOA recognizes that there is no "right" level of tracking error or reduced emissions given the variability between geographic

[65] IEA. Net Zero by 2050, May 2021; OECM. One Earth Climate Model: Sectoral Pathways to Net-Zero Emissions, May 2022.

areas and the construction of the underlying index. The workstream views this principle as a particular consideration for Fixed Income investors where lenders have a responsibility to minimize tracking error as a measure of near-term financial performance.

Appendix 3. IIGCC guidelines

IIGCC Net Zero Benchmark framework

The IIGCC framework on Enhancing the Quality of Net Zero Benchmarks addresses the growth of net zero benchmarks and the impact of regulation, and proposes five principles to improve net zero benchmark alignment with the Paris Agreement.

1. Prioritize real world emissions reductions
2. Ensure transparency of benchmark rules and their consequences
3. Incorporate a sectoral and regional based approach
4. Prioritize publicly available data, integrating alternative alignment metrics
5. Facilitate engagement to improve issuer behavior

NZIF Net Zero Stewardship key steps

The IIGCC Net Zero Investment Framework 2.0 provides recommendations on engagement for net zero aligned investors. The NZIF outlines key components of a net zero strategy for investors, with two key objectives: (1) transitioning investment portfolios in a way that is consistent with the mitigation goals of the Paris Agreement, focusing on real-economy decarbonization; And (2) increasing investment in the range of climate solutions to enable the transition.

For listed Equities, NZIF 2.0 recommends the following approaches to engagement:

- Utilize routine votes, shareholder resolutions and other means when the corporation is insufficiently progressing towards Aligned status.
- Co-file and/or support shareholder resolutions in line with the criteria.
- Implement an escalation approach, including a time-bound escalation strategy.
- Consider alignment criteria when voting on M&A, including whether the post-M&A company meets or can be expected to meet the criteria within a reasonable period.
- Ensure voting rights exist, including with external investment managers, to undertake the above actions.

For corporate Fixed Income, NZIF 2.0 recommends the following approaches to engagement:

- Engage issuers to secure agreement to alignment criteria and climate solutions activities, including the potential use of covenants and verified labeled bonds (e.g., GSSS+ issuances) as mechanisms to ensure alignment criteria are met during the lifetime of the bond.
- Commence engagement well in advance of the 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.

Appendix 4. Additional climate-informed index approaches

Climate-informed investing emerged in the early 2000s with the launch of a renewable energy index, with an initial focus on portfolio-level GHG emissions reductions. Today, climate-informed investing has evolved to the introduction of indices that seek to encourage net-zero transition activities. In addition to the proposed framework for "transition-informed" indices in this consultation paper, several other approaches are recognized, as discussed below. These approaches are not mutually exclusive and may be used concurrently, including with transition to net-zero strategies.

1. Screened and Scored indices

Screened and Scored indices build on the environmental, social and governance (ESG) concept with a focus on maximizing social change – not just portfolio performance. Screening and scoring offers a process for determining which investments are or are not permitted in an index portfolio based on specific ESG attributes.

The screening process removes certain companies and sectors from the parent benchmark, and subsequently the scoring process removes those companies with the lowest ESG scores. The scoring process may also remove companies based on binaries, or rules-based non-inclusion (e.g., a violator of UN Global Compact, tobacco, controversial weapons) regardless of ESG score.

Some screening and scoring approaches are key to ethical investment decision making. At the same time, it is important to recognize that screening and scoring approaches may lead to non-inclusions that could deter or delay real-economy transition activities.

2. Evolution of European Union climate-focused indices

European Union (EU) climate-focused indices equip investors to make informed, cost-effective investment decisions based on climate and transition risks and opportunities. These indices incorporate specific objectives related to GHG emissions reductions and the transition to a lower carbon portfolio through the selection, weighting, or non-inclusion of underlying companies.

For example, EU index providers that wish to offer a climate-focused index must meet the standards of the EU Benchmarks Regulation, which provides a framework for climate-specific indices against which the performance of investment strategies can be judged. This has led to the creation of two benchmarks: the **EU Climate Transition Benchmarks (CTBs)** and the **EU Paris-aligned Benchmarks (PABs)**. The CTBs and PABs hold the same criteria focused on decarbonization, but vary in set thresholds. After year one, CTBs will have decarbonized at least 37% in alignment with a 1.5 degrees C scenario with no or limited overshoot, and PABs will go a step further to decarbonize at least 57%.[66] Both benchmarks are recognised for being ambitious and their potential to provide meaningful competition to mainstream

[66] The level of overshoot (i.e., no, limited or high) will depend on the pace at which the CO2e thresholds in the taxonomy itself for transitional activities will decline, i.e., the extent to which these may compensate for the much lower initial decarbonization.

benchmarks. However, their steep initial decarbonization requirements have been viewed as a barrier to adoption for many institutional investors.[67]

While the CTBs and PABs are welcome and important additions to the index universe, there are several reasons contributing to their slow uptake. Given that investors typically have diverse investment strategies, they may require additional customization to what is currently offered by index providers for the following reasons:[68]

1. **The current CTBs and PABs may have steep sector concentration and high tracking error**, which may or may not grow over time, so some investors are unable to implement them.

2. **CTBs and PABs trajectories may conflict with investment strategies**. Investors may be managing policyholder assets, where the client expects to receive returns of a broad traditional-market index, and/or members of schemes or mandates have conflicting investment time horizons, risk and return expectations, and/or decarbonization targets.

The proposed **EU Taxonomy-Aligning Benchmarks (with or without exclusions) (TABs/TABex)** aims to address the above challenges by eliminating the initial decarbonization requirement, opening the door to benchmark users who may not be able to meet Paris-aligned standards from the start. Under the TABs, underlying assets would be selected, weighted, or not included such that the resulting benchmark portfolio is on a scaling environmentally sustainable CapEx trajectory, while the non-environmentally sustainable CapEx proportion is on a decarbonization trajectory in accordance with minimum standards laid down in the preceding PABs. The proposed TAB minimum standard would see at least 7% on average per annum reduction in CO2e intensity until 2050.[69]

While the proposed TABs could provide a feasible starting point for some investors looking to progress transition to net zero, it is worth recognizing that along with the CTBs and PABs, these benchmarks focus on **portfolio level** emissions reductions. The CTBs, PABs, and TABs/TABexs systematically underweight or do not include high-emitting companies and, thus, may not include companies in sectors that may need financing to start aligning with the transition to net zero. Forward-looking metrics that consider the transition potential of index holdings rather than merely tracking and reducing financed emissions could further support "transition-informed" index investing.

Box 17. Naming rules and climate-focused benchmarks[70]

Terminology embedded in funds' names is a powerful marketing tool for fund managers, designed to attract investor assets in a competitive market. In recent years, a rise in demand for ESG, climate-informed, and transition-aligned funds has grown sharply and is expected to continue as

[67] While there is approximately US$15.1 trillion net assets in global passive Equity funds (Reuters, 2024), Morningstar estimates that the AUM of ETFs that track EU CTBs and PABs stands at US$40.7 billion (Responsible Investor, 2024)
[68] Platform on Sustainable Finance. EU Taxonomy-Aligning Benchmarks (TABs) Report, December 2023.
[69] Platform on Sustainable Finance. EU Taxonomy-Aligning Benchmarks (TABs) Report, December 2023.
[70] ESMA. ESMA34-472-440 Final Report Guidelines on funds' names using ESG or sustainability-related terms, May 2024.

market pressure and climate regulation come into effect. In response, regulators[71] have taken recent steps to ensure index names fairly and consistently represent the fund's investment objectives and policy, similarly to SFDR guidance on article 8 and 9 funds.

While these efforts to counter the risk of greenwashing are important and welcome, their linkage to portfolio-level decarbonization approaches (CTBs and PABs) may deter transition-focused financing strategies. Regulators may be cautious of future rules that may bar new indices that encourage real-economy decarbonization and may not be able to immediately meet the criteria for new naming conventions.

[71] Including from the European Securities Market Authority (ESMA) guidelines on funds' names, UK's Financial Conduct Authority's (FCA) anti-greenwashing rule, Hong Kong Securities and Futures Commission (SFC) guidelines on ESG fund disclosures, Monetary Authority of Singapore (MAS) circular on disclosure and reporting guidelines for retail ESG funds, among others.

Appendix 5. Differentiating between Equities and Fixed Income

Investors in Equities and Fixed Income face unique challenges and potential approaches to aligning with the transition to net zero. While Equities investors, as owners, have a direct and immediate sensitivity to sustainability factors at the company level, incorporating sustainability in Fixed Income investing may not be as straightforward given its place in a company's capital structure. This section covers three areas of distinction between Equities and Fixed Income which may affect an investor's approach to the net-zero transition and the levers used to drive change: capital structure differences and engagement opportunities; capital allocation and use of proceeds; and tracking error and performance.

1. Capital structure differences and engagement opportunities

Most Equity issued by companies is perpetual in nature, whereas most Fixed Income instruments have finite maturity dates. Equity investors are in effect owners of a company which include voting rights, whereas Fixed Income investors are in effect "lenders" to a company; therefore, different tools of influence exist to encourage companies to make changes.

2. Capital allocation and use of proceeds

When Equity investors buy or sell a company's equity in the secondary market, no new capital is provided to the company. However, when Fixed Income investors purchase a new bond issuance, they are injecting new capital into a company and in most cases for a specified period of time.[72] This illuminates the distinction between Equity and Fixed Income investors – and potentially the available tools to encourage the transition to net zero.

With that said, as "owners," Equity investors may vote on various governance matters; however, they may only reduce their exposure to a company by a full or partial sale (divestment) of a company's equity. In line with NZAOA principle 3 (no mechanical exclusion of high-emitting sectors or countries), divestment is likely to be seen as a last resort for many investors where companies have not demonstrated effort to transition to net zero over a period of time. This further aligns with IIGCC principle 1 – that the greatest real economic impact occurs when Equity investors adopt a process "where the dominant influence comes from organic declines in emissions or allocating capital to industry best performers".[73] Another option is through tilting within a sector. Portfolio divestment reduces or eliminates investors' ability to directly influence the sustainability performance of companies through shareholder power. Analysis by asset manager Ninety One finds that although selling high-emitting assets may reduce financed emissions at the portfolio level, it has little influence over decarbonization in the real economy – the firm notes that emissions from listed global companies have risen by 16% since 2015. In other words, divestment does not appear to influence the trajectory of high-emitting companies.[74]

Also of note is that Fixed Income investors may be able to encourage the transition to net zero by investing in Green Bonds, SLBs, or Transition Bonds. Furthermore, Fixed Income investors may use

[72] With the caveat that a long term bond (e.g., 100 years) could be considered perpetual.
[73] IIGCC. Enhancing the Quality of Net Zero Benchmarks, May 2023.
[74] Ninety One calculations based on the MSCI Net Zero Tracker, April 2024 analyzing the MSCI All Country World Index (ACWI) IMI Scope 1 emissions.

limitations on legal final maturity dates of bonds to limit financing certain activities beyond a specific maximum future date.

Fixed Income investors have different options available to encourage the transition to net zero. They may be able to encourage the transition to net zero by investing in green bonds, SLBs, or transition bonds. Furthermore, Fixed Income investors may use limitations on legal final maturity dates of bonds to limit financing certain activities beyond a specific maximum future date.

Similar to Equities, Fixed Income investors may choose to tilt within a sector, maintaining sector exposure by readjusting allocations depending on whether a company's transition trajectory is Aligned, Aligning, or "In development". Maintaining sector neutrality in both Equity and Fixed Income portfolios is likely to be a priority for investors when taking a tilted approach, given potential tracking error compared to strategic (or parent) benchmarks.

3. Tracking error and performance

Tracking error volatility against a strategic (or parent) benchmark is often discussed in conjunction with performance and investors often view it as a key challenge in climate-informed indexing.[75] Many investors prefer low tracking error to a parent benchmark, meaning preferences for new indices that hold a similar risk return profile. Tracking error is amplified in approaches that incorporate exclusionary portfolio level decarbonization targets, as is the case with Screened and Scored, CTB and PAB indices. In Equities, tilting within the sector reduces potential tracking error (assuming tracking error constraints are applied at the broader index level on factors such as sector exposures or country exposures, in relation to the parent benchmark). In Fixed Income, all macro factors may be maintained as close to the parent index as possible, across sector, spread/yield, duration, and credit quality.

However, while tracking error may be significant, research by State Street Global Advisors (SSGA) finds that overall performance for exclusionary ESG indices do not suffer over the long run.[76] Tracking error may be viewed as a short-term financial measure rather than a measure of climate performance. It is possible that as investors increasingly become aware that incorporating transition targets into index methodologies is not detrimental to value in the long run, tracking error may become less of a concern and uptake of all climate-informed indices more favorable. Monitoring tracking error versus a traditional market index is natural for many investors.

[75] Fulcrum Asset Management LLP. The tracking error error: why climate alignment calls for bolder steps, January 2022.
[76] SSGA. ESG, Tracking Error and Long-Term Performance, March 2021.

Appendix 6. Index participant categories

The parties described in the table below have important roles in indexation and index investment strategies. This table is not exhaustive, but indicates how the following key participants interact within the index universe.

Index Participant	Description
Index providers	Index providers are organizations that create, maintain, and publish financial market indices. Index providers may create benchmarks that asset managers or asset owners use to track market performance; support the creation of index-based investment products, such as index mutual funds and ETFs; and set standards for market performance.
Data providers	Data providers are companies that offer financial data and analytics services to market participants. They supply the data that is essential for index calculation, performance tracking, and portfolio management. This includes historical data, real-time data, and derived analytics.
Asset managers	Asset managers are financial institutions or individuals responsible for managing investment portfolios on behalf of clients, which can include mutual funds, ETFs, and pension funds that track specific indices. Asset managers also provide client services to investors, including institutional clients and retail investors, to help them achieve their investment goals.
Asset owners	Asset owners are entities or individuals that own significant investment assets, typically including pension funds, sovereign wealth funds, insurance companies, and endowments. Asset owners set investment strategies, including the choice of indices to track, which influences the demand for index-based products. Asset owners are key sources of capital, often allocating large sums to index-based strategies due to their low cost and diversification benefits.
Stock exchanges	A stock exchange is a regulated marketplace where buyers and sellers trade equities (shares of ownership in companies) and other securities. Stock exchanges can facilitate the trading of exchange-traded funds, enabling investors to participate in broad market trends without selecting individual stocks.
Other investors	This category includes individual retail investors, financial advisors, and smaller institutional investors who invest in index-based products. They may create demand for index funds and ETFs, driving the growth of index investing. The collective actions of these investors can influence market dynamics, such as flows into specific “transition-informed” indices or sectors.