Net Zero Finance Tracker Methodology – 3.0

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CLIMATE POLICY INITIATIVE

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ABOUT CLIMATE POLICY INITIATIVE

Climate Policy Initiative (CPI) is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has seven offices around the world in South Africa, Brazil, India, Indonesia, the United Kingdom, and the United States.

DESCRIPTORS

KEYWORDS

Net Zero, Paris Agreement, Sustainable Finance, Integrity

RELATED CPI WORKS

Net Zero Finance Tracker Findings Summary (2023)
Global Landscape of Climate Finance (2023)
Net Zero Finance Tracker UK Beta Version (2022)
Framework for Sustainable Finance Integrity (2021)
Paris Misaligned? An Assessment of Global Power Sector Investment (2020)

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1. GLOSSARY AND DEFINITIONS OF TERMS

Term	Definition
Carbon neutrality or net zero	Refers to the balance between the amount of greenhouse gases (GHGs) emitted into the atmosphere and the amount removed or offset (e.g., though reforestation or carbon capture), resulting in no net increase in atmospheric GHG concentrations.
Divestment from high-emissions activities	The act of selling or disposing of financial assets, such as stocks, bonds, or investments, in companies or industries involved in activities harmful to the climate (e.g., fossil fuels). It is often used as a strategy by organizations to reduce their exposure to risks deriving from potential policy responses to climate change. Divestment can also have an impact on the real economy by affecting cost of capital for carbon-intensive activities, adding social pressure to companies, influencing adoption of norms, though this is generally disregarded as primary strategy for decarbonization (e.g., compared to shareholder engagement). (Tager et al. 2023)
Green finance / investment / bonds	Green finance, investment, and bonds all pertain to financial instruments and practices aimed at funding environmentally sustainable projects or initiatives such as renewable energy, clean technology, and conservation efforts.
Mitigation and adaptation finance	• Mitigation finance involves funding and investments directed at reducing GHG emissions. • Adaptation finance supports initiatives and projects that help communities and ecosystems adapt to the impacts of climate change, such as rising sea levels and extreme weather events.
Paris Agreement alignment and misalignment	• Paris Agreement alignment indicates that an organization is consistent with the goals and targets outlined in the Paris Agreement, aimed at limiting global warming to well below 2°C above pre-industrial levels.[1] • Misalignment refers to situations where actions or policies are not in line with the objectives set by the agreement.
Policy Engagement	For the purposes of this report "policy engagement" refers to engagement with government and industry representatives on climate change in a way that encourages, and does not oppose, the climate transition.
Shareholder and client engagement	Refers to active client or shareholder engagement with portfolio companies on climate action, in ways that encourage, and do not oppose, the transition.
Short-, near-, intermediate and long-term targets	These timeframes refer to the specific periods for which emissions reduction or climate action goals are set. In this dashboard we refer to: • 2030 short-/near-term and intermediate targets • 2050 long-term targets.
Target, implementation, impact	These terms are often used in the context of climate action planning: • Target refers to a specific goal or objective for financial institutions, such as reducing emissions by a certain percentage by a particular year, or increasing green investment levels. • Implementation involves the steps and strategies that financial institutions are putting in place to achieve the target. • Impact measures the real-world effects and outcomes resulting from the implementation of climate actions and the achievement of targets by financial institutions.

[1] Other interpretations exist of the term which associate Paris alignment with consistency with Nationally Determined Contributions (NDCs) or aggregate NDCs goals. These are not included in the tracker given that NDC aggregates are not in line with the Paris temperature goal.

2. INTRODUCTION

Since the adoption of the Paris Agreement in 2015, multiple public and private sector initiatives have been launched to galvanize alignment with its goals. Related actions include the adoption of mitigation and investment targets, net zero integrity standards, information disclosure, net zero pathway assessments, and portfolio temperature assessments. However, there is currently no comprehensive tracking of the financial system's progress on alignment with Paris goals.

The Net Zero Finance Tracker (NZFT), developed by CPI, is an interactive platform that provides a comprehensive assessment of the alignment of a sample of financial institutions (FIs) with net zero goals. It tracks how organizations are responding to the ambitions of the Paris Agreement at strategic and operational levels, and whether this response is translating into Paris-aligned capital allocations, and changes in the real economy. In 2021, CPI released a Beta version of the NZFT, initially covering financial and corporate actors in the UK. In late 2023, CPI released a second version that expanded coverage to 562 members of the Net-Zero Alliances supported by the Glasgow Financial Alliance for Net Zero (GFANZ). In this last iteration (2024) the dashboard **includes nearly 1,000 financial institutions including 629 Alliance members, 31 former Alliance members, and 281 European Pension funds that are not Alliance members**.

This document outlines the methodological foundations of the NZFT platform. This is the result of CPI's assessment of what Paris alignment and net zero represent, reviewed and refined considering what currently available data reveal in terms of trends and progress.

This living methodology will be continuously updated and improved upon—in consultation with data providers and end users of the dashboard —as new data become available, and as Paris alignment and net zero frameworks evolve over time.

Summary 2024 update: Based on feedback on the 2023 iteration of the NZFT, this year's methodology has been updated to better align the indicators' response scoring approach (pseudocodes) with existing international net zero frameworks (ACT Finance, GFANZ, ISSB, NZAOA, PCAF, TCFD, TPT, UN HLEG, and others). This methodology update also reflects increased data transparency achieved through new data integrations and an expansion of the impact metrics to incorporate new analysis on investment data, now covering not only the direct investment of FIs in clean energy and fossil fuels but also FIs' indirect role in enabling such investments through corporate lending or shareholder ownership (see Section 4). This year, we also made significant progress on partially automating the analysis of FI reports (see Section 6.3), which we applied, tested, and verified for top entities within the financial actor categories covered in this year's work scope.

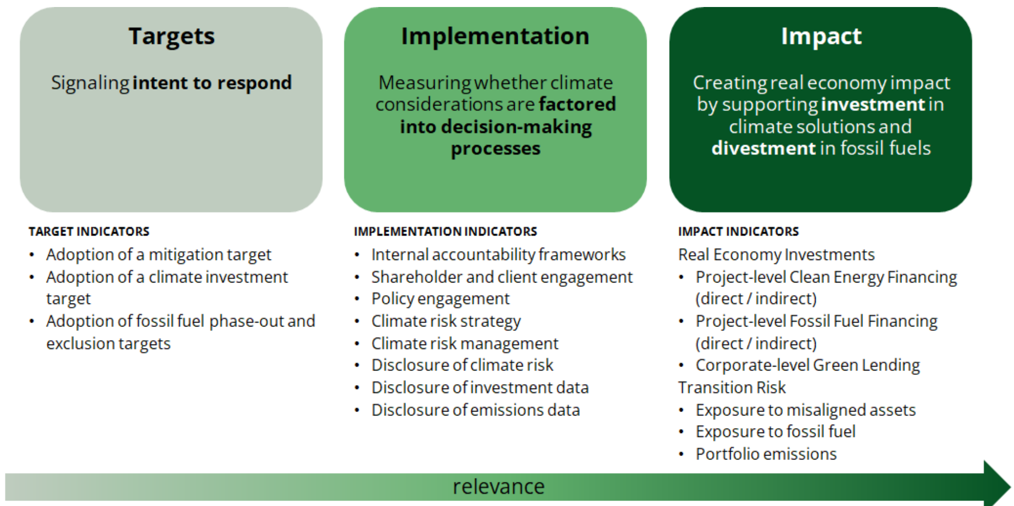
3. DIMENSIONS OF PROGRESS

From the perspective of financial institutions (FIs), Paris alignment relates to the "***holistic commitment*** *to make investments and overall organizational practices consistent with the achievement of the Paris goals … through the integration of Paris-aligned targets across the* ***investment decision chain****, from strategy and sourcing through to due diligence. Institutional engagement must be comprehensive across multiple business areas, able to deliver on a long-term horizon, and ambitious in the scale of action taken. Ultimately, action should to the extent possible translate to* ***changes in the real economy*** *– through the realignment of portfolios and investments with temperature trajectories compatible with Paris*".[2]

The NZFT aims to map the progress of private FIs towards alignment with the Paris Agreement goals. It does so using a set of indicators that track how FIs are moving from intentions to actions and results.

The dashboard shows: 1) what targets have been set; 2) how these are integrated into due diligence, internal processes, and operations; and 3) how these, in turn, drive investment decisions and impacts on the ground. We use three dimensions to organize measurement of progress, each with supporting indicators determined through a literature review and in consideration of data availability, illustrated in the figure below.

Figure 1: Three dimensions with increasing levels of relevance



Note: Due to data limitations regarding coverage and comparability, the current version of the dashboard provides information only at the individual entity level for indicators followed by an asterisk (*). Aggregated indicators will be included in the next version of the dashboard.

[2] Micale et al. 2020. "A Proposed Method for Measuring Paris Alignment of New Investment." CPI. Available at: https://www.climatepolicyinitiative.org/wp-content/uploads/2020/12/2.-A-Proposed-Method-for-Measuring-Paris-Alignment-of-New-Investment-3.pdf

4. SCORING APPROACH

4.1 FRAMEWORKS AND GUIDELINES REFLECTED IN THIS WORK

The methodology of the previous edition of the NZFT, released in 2023, drew upon CPI's previous work on sustainable finance integrity (Oliver et al. 2019, Pinko et al. 2021) to assess FIs' net zero efforts, and an in-depth review of available data sources (Micale et al. 2023). We have since complemented this with a review of frameworks and guidelines to enhance and refine our methodology, ensuring that it remains robust, credible, and aligned with global best practices and the latest industry developments.

The iterations of the NZFT have increasingly focused on FIs' adoption of detailed net-zero transition plans, including comprehensive, science-based target-setting, effective implementation of external and internal engagement strategies, climate risk management, and transparent disclosures.

A summary of the frameworks and guidelines used to inform our assessment methodology is provided below, in alphabetical order.

Assessing low-Carbon Transition (ACT) for Finance Investors framework (2023) The ACT framework reflects common finance sector strategies, incorporating insights from other frameworks (SBTi, PCAF, GFANZ, NZBA, NZAOA, NZAMI, and the IIGCC). It provides a rating system across eight topics: Targets; Intangible Investments (e.g., human capital and R&D for climate expertise); Portfolio Climate Performance; Management; Investor Engagement; Investee Engagement; Policy Engagement; and Business Model. FIs can use these to quantitatively assess their progress on net-zero transition. For example, its GHG coverage scoring methodology is based on the percentage of financed emissions an FI considers in its targets. Its five-level scoring system (Basic, Standard, Advanced, Next Practice, Low-Carbon Aligned) enables FIs to evaluate their status across multiple dimensions. The criteria for the top score, "Low-Carbon Aligned", can be considered a best-practice benchmark.
CDP Climate Change Questionnaire (2023) Updated annually and with a dedicated questionnaire for the financial services sector since 2020, the CDP Climate Change Questionnaire is one of the most widely adopted climate-related reporting frameworks. It is a representative tool for climate disclosures, requesting critical data points from the financial sector, including portfolio value and portfolio emissions data. It is aligned with global frameworks including the TCFD, helping companies to set targets and track progress.
Glasgow Financial Alliance for Net Zero (GFANZ) Transition Plan Framework (2023) The GFANZ framework outlines components, steps, and best practices for FIs to develop and implement net-zero transition plans, covering five key dimensions: Foundations, Implementation Strategy, Engagement Strategy, Metrics and Targets, and Governance. Its main recommendations include: Foundations

- Defining the objectives to achieve net zero by 2050 or sooner, in line with science-based Paris-aligned pathways. Clearly define and measurable short- and long-term targets and identify financing strategies to enable real economy decarbonisation.

Implementation Strategy
- Leveraging existing and new products to support clients / portfolio companies in net-zero transitions.
- Integrating the net-zero objectives and priorities in the decision-making.
- Establishing and enforcing policies on high-emission sectors and activities.

Engagement Strategy
- Engaging with clients and portfolio companies, industry and the public sector.

Metrics and Targets
- Developing metrics and targets to drive and track the net-zero transition progress in the short, medium, and long term. Include metrics and targets focused on aligning financial activity in line with the real-economy net-zero transition.

Governance
- Assigning ownership, oversight and responsibility of net-zero targets to the Board and senior management, and designating individuals and teams for transition plan design and delivery. Use remuneration incentives, review the plan regularly, and manage implementation risks.
- Providing training and development to ensure sufficient skills and knowledge. Foster open communication to integrate the net-zero transition into the organization's culture.

GFANZ also identified four key financing strategies that define transition finance in the real economy as, such as 1) investment in activities and entities enabling climate solutions, 2) Financing or enabling entities aligned to a 1.5 C pathway 3) Financing or enabling entities committed to transitioning in line with 1.5 C pathway. 4) Financing or enabling the accelerated managed phaseout (of high-emitting physical assets (GFANZ, 2022 and 2023).

United Nations High Level Expert Group (UN HLEG) Recommendations on the Net Zero Emissions Commitments of Non-State Entities (2022)
These 10 detailed recommendations aim to help businesses, FIs, and other entities enhance the credibility and accountability of their net-zero pledges, emphasizing the need for rigorous standards to prevent greenwashing and ensure concrete progress towards net-zero emissions by 2050. Key recommendations relevant to the current iteration of the NZFT include setting clear, short-, medium-, and long-term emissions reduction targets, creating a transition plan, phasing out fossil fuels, increasing transparency and accountability, and aligning lobbying and advocacy.

International Sustainability Standards Board (ISSB) International Financial Reporting Standards (IFRS) S1 and S2 (2023).
Signalling a transition from the TCFD climate-related disclosures, IFRS S1 and S2 are effective as a voluntary framework for reporting periods from January 2024. Jurisdictions including the UK, Canada, Japan, Singapore, Australia, Malaysia, Brazil, Costa Rica, Sri Lanka, Nigeria, and Turkey are considering or have announced the adoption of the IFRS standards in their regulation of sustainability-related disclosures (IFRS, 2024).
S1 covers general sustainability-related financial disclosures and S2 focuses on climate-related disclosures following the four TCFD pillars: Governance, Strategy, Risk Management, and Metrics and Targets. While aligned with the TCFD, IFRS S2 requires more detail. For example, IFRS S2 is broadly consistent with the TCFD Recommendation for Risk Management to describe the organization's processes for identifying and assessing climate-related risks, but also requires disclosure of the parameters used to identify risks (e.g., data sources, operations covered, and how assumptions were made). It also requires entities to explain if and how they use climate-related scenario analysis to identify risks. Additionally, entities need to disclose changes in their processes to identify, assess, prioritize, and monitor risks compared to the previous reporting period.

Net-Zero Asset Owner Alliance (NZAOA) Target-setting Protocol fourth edition (2024)
This protocol provides detailed guidelines for asset owners on setting and achieving net-zero targets from different dimensions, including methodologies for measuring and reporting progress. The NZAOA recommends four types of targets: 1) Engagement with priority investees that produce 65%

of the FI's total portfolio emissions; 2) Sub-portfolio targets by asset class; 3) Investment in climate solutions; and 4) Sector-specific targets focused on portfolio emissions in high-emitting sectors.
Institutional Investors Group on Climate Change (IIGCC) Net Zero Investment Framework (NZIF) 2.0 (2024) The NZIF 1.0 (2021) covered governance and strategy, targets and objectives, engagement, recommended disclosures, and asset-specific guidance on sovereign bonds, listed equity and corporate fixed income, and real estate. The 2024 update adds guidance for new asset classes, including infrastructure and private equity, and updated recommendations on what it differentiates as "essential" and "advanced" action points based on best practices observed over the past three years. While Advanced action points may be challenging, they will be beneficial in the long run. For instance, Advanced targets-related action points recommend investors to describe the science-based scenarios or pathways used to guide their target setting to enhance the credibility of the target and the alignment with global climate goals.
Principles for Responsible Investment (PRI) **Climate risk: An investor resource guide (2022):** This guide is aligned with the TCFD four pillars (Governance, Strategy, Risk Management, and Metrics and Targets) and provides common questions and answers, examples of investor practices, and key resources to support action for each pillar. **Stewardship for Sustainability Evaluation Tool (2023):** This tool provides a framework to help evaluate and compare how managers use stewardship to address sustainability issues, including climate change. It offers three levels of performance rating: Developing, Intermediate, and Advanced.
SBTi Near-Term Framework for Financial Institutions (2023a and 2023b). **SBTi's** sector-specific guidance aims to help FIs set science-based targets that align their activities with the goals of the Paris Agreement. The framework states that financial services should not contribute to the increase of GHGs and achieve net-zero emissions across their portfolios. Short-term science-based targets (with 5-10 year timeframes) must align with the milestones required in the real economy and progressively increase the alignment of all financial flows with the 1.5°C ambition. Regarding coverage of targeted emissions, the 2023 **SBTi** guidance specifies that a FI's net-zero target is only credible if it addresses all emissions it finances (through investing and lending) and facilitates (through managing, transacting, and insuring). The 2020 version of the SBTi target-setting manual—which was not specific to FIs—did not require an entity to set targets on Scope 3 emissions unless these accounted for over 40% of its total emissions. However, the 2023 guidance states that FIs should set targets on all investment/lending activities (SBTi, 2023b).
Transition Plan Taskforce (TPT) Disclosure Framework and Asset Owner Sector Guidance (2023) This framework and guidance were issued by UK HM Treasury to develop best practices for transition progress disclosures for the finance sector and the real economy. The framework is aligned with and builds on the ISSB's climate-related disclosure standard. It is structured into five elements that are consistent with GFANZ's transition planning components: 1) **Foundations:** Disclosure of the entity's strategic ambition including its objectives, and priorities for transitioning to net zero. 2) **Implementation Strategy:** Disclosure of measures taken in its operations, products, services and policies to achieve its ambition, and the impacts on its financial condition. 3) **Engagement Strategy:** Disclosure of the entity's the measures taken across its value chain, peers, government, public sector, communities, and society to achieve its ambition. 4) **Metrics & Targets:** Disclosure of the metrics and targets it has adopted to measure and drive progress towards its ambition. 5) **Governance:** Disclosure of how it integrates its transition plan in its governance structures and organizational arrangements to achieve the ambition of the transition plan.
UNEP FI Guidelines for Climate Target Setting for Banks V2 and supporting note (2024a, 2024b) These documents provide detailed guidance for banks on setting robust and impactful targets to achieve net zero by 2050 by looking into four elements: 1) Individually and independently setting and publicly disclosing both long-term and interim targets. 2) Establishing an emissions baseline and annually track and disclose the emissions of their activities. 3) Using widely accepted science-based scenarios. 4) Regularly revisiting targets to ensure consistency with the latest climate science.

4.2 SCORING INDICATORS

Targets and Implementation are assessed qualitatively, while Impact is assessed using quantitative methods. Targets and Implementation indictors are scored using a tiered badge system, which assesses tracked actions against those considered necessary for a net zero transition, drawing on literature presented in the previous chapter. This enables assessment of FIs' efforts to meet net zero, and how far they have integrated climate concerns into their operations. Responses are ranked on credibility, based on the following principles:

- **Transparency:** ranging from non-transparent to transparent
- **Concreteness:** ranging from commitment to action
- **Comprehensiveness:** from incomplete/sectoral/partial to comprehensive
- **Ambition:** ranging from low to high

Impact is assessed using quantitative indicators relating to activities that either support a net zero transition (e.g., green bonds and new project-level investment in climate solutions), or detract from it (e.g., new project-level fossil fuel finance). Transition risk management is measured by exposure to misaligned assets, and portfolio emissions. For all indicators, location is attributed by the source of flows, rather than their destination.

Figure 2: Assessment of indicators within the three dimensions.

Targets | **Implementation** | **Impact**

Credibility assessment

What should the institution be doing?

Qualitative indicators using tiered 'badge' system based on the necessary actions (e.g. from Framework for Sustainable Finance Integrity or other NZ initiatives)

"Badge"	Definition
Full response	Indicator meets all "full alignment" requirements/thresholds
Partial response	Indicator meets all "partial alignment" requirements/thresholds
Initial response	Actions have been taken within the indicator, but do not meet minimum alignment requirement.
Planned response	There is evidence that the organization plans to act.
No action	There is no evidence of action, or plans regarding the indicator.

Progress assessment

How far is the institution from where it should be?

Quantitative Outcome indicators

The table below summarizes the actions and metrics tracked by each indicator, how they are assessed, and how they relate to the existing frameworks. Further details on the scoring approach and underlying data are available online.

4.2.1 TARGETS

	Standard actions/metrics tracked for net-zero targets	Response Assessment	Reference Frameworks and Data sources
Adoption of a mitigation target	• Type of asset concerned • Percentage of relevant portfolio covered • Validation of long-term target (2030-50) • Validation of near-term target (2025-30) • Sector concerned by the target • Disclosure of baseline year • Specification of scenario/ methodology used • Adoption of net zero or long-term target • Adoption of intermediate net zero target • Disclosure of temperature alignment of its activities • Adoption of carbon neutrality target • Adoption of active portfolio/investment emission target • Adoption of other active climate-related targets • Commitment to adopt a mitigation target • Commitment to adopt an intermediate target • Commitment to adopt Paris-aligned targets • Commitment to adopt short-term, long-term, and intermediate targets	• **Full**: Externally validated aligned long-term and near-term targets, covering 90% or more of the relevant portfolio. • **Partial**: Transparently assessed aligned long-term and near-term targets, covering a portion of the relevant portfolio. • **Initial**: Target adopted but it is partial, or information is incomplete. • **Planned**: Has committed to adopt a target • **No response**: No evidence of target.	**Reference Frameworks**: **TCFD** Recommendation on Metrics and Targets, **SBTi** Near-Term Financial Sector Science-based Target Guidance (5.3 Defining the Boundary of Portfolio Targets/3.2 Scope 1 and 2 Target Time Frame) **UNEP FI** Guidelines for Climate Target Setting and supporting note (Guidelines 2 & 3) **GFANZ** Financial Institution Net-zero Transition Plans (Metrics and Targets) **UN HLEG** Recommendation 2: Setting net-zero target **ACT Finance** (Module 1: Target-Alignment of Scope 3 Emissions Reduction Target) **TPT** Disclosure Framework (Accountability - 4. Metrics & Targets - 4.3 GHG metrics and targets) **Data Sources**: Accounting For Sustainability, BankTrack, CDP, CPI, ECIU, ESG Book, NZAM, NZBA, NZIA, NZAOA, Net-Zero Donut, Observatoire de la Finance Durable, PAII, PAAO, PRB, PRI (2021), RTZ, SBTi
Adoption of a climate investment target	• Disclosure of quantified target • Specification of timeline • Adoption of investment target • Commitment to finance climate solutions	• **Full**: Quantified target disclosed, with a timeline. • **Partial:** Quantified target disclosed. • **Initial**: Target adopted but information is incomplete. • **Planned:** Commitment to adopt a target. • **No response**: No evidence of target.	**Reference frameworks:** **SBTi** Near-Term Financial Sector Science-based Target Guidance (2.3. The FINZ Target-setting Framework) **ACT Finance** (Module 1: Target-Financing target) **NZAOA** Target Setting Protocol (financing transition targets) **GFANZ** Financial Institutions Net-Zero Transition Plans (climate solutions financing strategies) **TCFD** Recommendation on Metrics and Targets (capital deployment metrics)

	Standard actions/metrics tracked for net-zero targets	Response Assessment	Reference Frameworks and Data sources
			Data sources: CDP, CIC, CPI, Net-Zero Donut, NZAOA, WRI Green Targets
Adoption of fossil fuel phase-out and exclusion targets	• Extent of divestment target • Fossil fuel exclusion policy • Has an undefined policy on coal and other fossil fuel investment • Policy framework includes undefined exclusion policies • Has a phase-out policy • Commitment to exclude/phase-out thermal coal	• **Full**: Has comprehensive fossil fuel exclusion or phase-out policies, or has no fossil fuel assets. • **Partial**: Has partial or undefined fossil fuel exclusion or phase-out policies. • **Initial:** Has a divestment goal, or other undefined fossil fuel policies. • **Planned**: Commitment to adopt a target • **No response:** No evidence of target	**Reference frameworks:** **ACT Finance** (Module 1: Target-Engagement target-Assessment) **GFANZ** Financial Institutions Net-Zero Transition Plans (managed phaseout financing strategies) **UN HLEG** Recommendation 5: Phasing out of fossil fuels and scaling up renewable energy **Data sources:** BankTrack, CDP, CPI, DivestInvest, Fossil Free Divestment, Net Zero Donut, NZAM, NZAOA, Powering Past Coal Alliance

4.2.2 IMPLEMENTATION

	Standard actions/metrics tracked	Response Assessment	Reference Frameworks and Data sources
Internal Accountability Frameworks	• Has dedicated responsible investment staff • Board is accountable for climate change • C-suite level staff are accountable for climate change • Business-level staff are accountable for climate change • Provides incentives on the management of climate-related issues • Has committed to integrating sustainability principles in governance	• **Full:** Dedicated responsible investment staff, and evidence that whole organization is accountable for climate change • **Partial:** Dedicated responsible investment staff, and evidence that part of the organization is accountable for climate change • **Initial:** First measures introduced to increase accountability • **Planned:** Commitment to adopt measures to increase accountability • **No response:** No evidence of action	**Reference frameworks**: **GFANZ** Financial Institutions Net-Zero Transition Plans (Governance-Roles, responsibilities, and remuneration) **TCFD** Recommendation on Governance **IIGCC** NZIF 2.0 (Governance & Strategy), **ACT Finance** (Management-Oversight of climate change issues/capability and incentives) **ECB's** best practices **Data sources**: CDP, CPI, ESG Book, FinanceMap, Net-Zero Donut, PRB, PRI
Shareholder and Client Engagement	• Successfully voted or engaged to drive climate-related behavior in investees Voted or engaged to drive climate-related behavior in investees Engages with investees on transparency requirements • Engages with other external parties on climate-related issues • Commitment to engage on climate change or sustainable practices	• **Full:** Indications of positive engagement on business practices and transparency, and no negative action • **Partial:** Indications of general positive engagement, and no negative action • **Initial:** First steps at engaging (including with suppliers), but possible presence of negative engagement, too • **Planned:** Commitment to engage • **No response:** No evidence of action	**Reference frameworks**: **GFANZ** Financial Institution Net-zero Transition Plans (Engagement Strategy) **UN HLEG** Recommendation 4: Include voting (especially proxy) strategies in line with decarbonization and escalation policies, **ACT Finance** (Module 7: Investee engagement) **PRI** Stewardship for Sustainability Evaluation Tool **TPT** Disclosure Framework (Action - 3. Engagement Strategy - Engagement with value chain), **IIGCC** NZIF 2.0 (Stakeholder and Market Engagement), **TCFD** Recommendation on Risk Management **NZAM**. **Data Sources:** CDP, Climate Action 100+, CPI, FinanceMap, Net Zero Donut, NZAM, NZAOA, NZIA, PAII, PRB, PRI, PSI, ShareAction
Policy Engagement	• Directly participates to policy processes for climate/sustainable government reforms and regulations • Positions itself in favor of climate/sustainable government reforms and regulation • Positions itself in favor of specific financial regulation, including the use of reporting standards and taxonomies, as well as prudential regulation	• **Full:** Indications of positive engagement on climate change and financial reform and no negative action • **Partial:** Indications of general support and no negative action • **Initial:** First steps at engaging, but possible presence of negative engagement, too • **Planned:** Commitment to engage	• **Reference frameworks**: **ACT Finance** (Module 8 - 8.3: Policy engagement), **UN HLEG** Recommendation 6: Aligning lobby and advocacy, **GFANZ** Financial Institution Net-zero Transition Plans (Engagement strategy - Direct and indirect lobbying and public-sector engagement), **TPT Disclosure Framework** (Action - 3. Engagement Strategy -

	Standard actions/metrics tracked	Response Assessment	Reference Frameworks and Data sources
	• Commitment to work with business partners on ESG • Commitment to work with government on ESG • Commitment to work with industry on responsible investment • Commitment to work with industry on a sustainable economy • Commitment to influence climate policy • Commitment to work with governments on NZ transition • Commitment to work with governments and industry on net zero transition • Commitment to conduct engagement activities in line with Paris Agreement goals	• **No response:** No evidence of action	Engagement with industry/Engagement with government, public sector, communities, and civil society), **IIGCC** NZIF 2.0 (Policy advocacy and Stakeholder and Market Engagement). • **Data Sources:** BEI, CDP, CPI, FinanceMap, IA, Net Zero Donut, NZAM, NZAOA, NZIA, PAII, PRI, PSI, WMB
Climate Risk Strategy	• Considers the impact of climate risks and opportunities in strategy or financial planning • Uses climate scenarios to inform strategy • Assesses climate risks and opportunities for different time horizons • Provides temperature trajectories for the scenarios examined • Uses reputable energy transition scenarios • Uses reputable physical climate risk scenarios • Commitment to assess climate risks	• **Full:** Assesses climate risks, and scenarios and incorporates them in strategy, using various timeframes and reputable climate scenarios • **Partial:** Assesses climate in strategy, with some degree of transparency on the use of scenarios • **Initial:** First steps at developing a climate risk strategy • **Planned:** Commitment to adopt a climate risk strategy • **No response:** No evidence of action	• **Reference frameworks:** **TCFD** Recommendation on Strategy, **GFANZ** Financial Institution Net-zero Transition Plans (Implementation Strategy), **UN HLEG** Recommendation 4: Creating a transition plan, **ISSB** IFRS S2 (Climate-related Disclosures-Risk management), **IIGCC** NZIF 2.0 (Governance & Strategy), **WEF**, **S&P** Global Corporate Sustainability Assessment. • **Data Sources:** CAFI, CDP, CPI, FinanceMap, PRI, TCFD
Climate Risk Management	• Has a process to assess climate risk • Has a process to manage climate risk • Has a process to assess and manage climate risk • Integrates climate into overall risk management • Uses tools to manage climate-related risks and opportunities • Coverage in the use of tools • Commitment to manage climate risks • Commitment to adopt a carbon price	• **Full:** Evaluates and manages climate-related risks, comprehensively using appropriate tools • **Partial:** Evaluates and manages climate-related risks with the support of tools • **Initial:** First steps at managing climate risk • **Planned:** Commitment to manage climate risk • **No response:** No evidence of action	• **Reference frameworks:** **ACT Finance** (Module 5: Management-5.5 Risk Management), **GFANZ** Financial Institution Net-zero Transition Plans (The relationship between risk management and transition planning), **PRI** (Climate risk: An investor resource guide - Risk Management), **TCFD** Recommendation on Risk Management, and **ISSB** IFRS S2 (Climate-related Disclosures-Risk management). • **Data Sources:** CAFI, CDP, CPI, CPLC, GCAP, ESG Book, FinanceMap, Net Zero Donut, PRI, TCFD, WMB.

	Standard actions/metrics tracked	Response Assessment	Reference Frameworks and Data sources
Disclosure of Climate Risk	• Publishes TCFD/ISSB disclosures • Requests that external managers and/or service providers incorporate TCFD into reporting • Commitment to engage for corporate TCFD disclosures • Commitment to TCFD reporting	• **Full:** Publishes TCFD disclosures and actively urges external managers and/or service providers to include TCFD principles in their reporting • **Partial:** Publishes TCFD disclosures or actively urges external managers and/or service providers to include TCFD principles in their reporting • **Initial**–First steps in disclosing climate risk • **Planned:** Commitment to disclose climate risks • **No response:** No evidence of action	• **Reference frameworks**: **TCFD** Recommendation, , **IIGCC** NZIF 2.0 (Governance & Strategy, relevant guidance in Essential action points), **ISSB** IFRS S2 (Climate-related Disclosures), **UN HLEG** (Accelerating the Road to Regulation). **Bloomberg** Law's analysis on ESG tool, **PRI** analysis • **Data Sources**: Accounting For Sustainability, CDP, Climate Action 100+, CPI, IFRS Sustainability Alliance, NZAM, NZIA, PAAO, PAII, PRI, TCFD.
Disclosure of Investment data	• Reporting system for climate investment data is in place • Plans to disclose climate investment data	• **Full:** Evidence of reporting system for climate investment data. • **Initial:** Has taken first steps at disclosing climate investment data • **Planned:** Commitment to disclose climate investment data • **No response:** No evidence of action	• **Reference frameworks**: **CDP** (Questionnaire section C-FS14.0 Portfolio Value), **GFANZ** Financial Institution Net-zero Transition Plans (Disclosure), **UN HLEG** Recommendation 4: Creating a transition plan, **ISSB** IFRS S2 (Climate-related Disclosures-Climate-related metrics), **TCFD** Recommendations under Metrics and Targets for Financial Sector. • **Data Sources:** CAFI, CDP, CIC, CPI, Net Zero Donut, WRI.
Disclosure of Emissions Data	• Financed emissions are disclosed • Portfolio emissions are disclosed • Portfolio emissions are tracked • Coverage of portfolio emissions is tracked • Scope 1 and/or 2 emissions disclosed • Baseline emissions are disclosed • Scope 3 emissions are disclosed • Disclosed emissions are verified externally Some level of emissions is tracked • Commitment to track and disclose emissions	• **Full:** All financed emissions or portfolio emissions have been disclosed and verified • **Partial:** Some or unspecified portfolio emissions are tracked or disclosed • **Initial:** First observable steps taken towards emissions disclosure • **Planned:** Commitment to disclose emissions • **No response:** No evidence of action	• **Reference frameworks**: **CDP** (Questionnaire section C-FS14.1 Portfolio Impact), **UN HLEG** Recommendation 8: Increasing transparency and accountability, **PCAF** (Financed Emissions-The Global GHG Accounting & Reporting Standard-Financed Emissions), **GFANZ** Financial Institution Net-zero Transition Plans (Disclosure), **IIGCC** NZIF 2.0 (Objectives-Reporting on portfolio financed emissions), **ISSB** IFRS S2 (Climate-related Disclosures-Climate-related metrics),and **GRI**-G4 Financial Sector Disclosure. • **Data Sources:** CAFI, CDP, CPI, ESG Book, FinanceMap, Net Zero Donut, NZBA, NZAOA, PCAF, PRI, WRI.

4.2.3 IMPACT

	Metrics Tracked	Data Sources
Project-level Clean Energy Financing	This indicator measures how entities have directly contributed to funding of new clean energy projects via direct/primary investment. Investment figures are broken down to track investment (in USDm) by **technology** (Biofuel/Biomass, Hydroelectric Energy, Solar Energy, Wind Energy, Waste-to-Energy, Power Grids, Nuclear Energy, Carbon Capture and Storage, Energy Storage, Other Climate Solutions), **capital type** (Debt, Equity, Other/Unknown), **region of destination** (Western Europe, Central Asia & Eastern Europe, US & Canada, Latin America & Caribbean, Middle East & North Africa, Sub-Saharan Africa, South Asia, East Asia & Pacific, Oceania, China, Unknown), and **IPCC country classification** (Developed, Developing, and LDC). Projects appearing in multiple data sources are removed from the data source containing the least information (e.g., on the identity of the financing institution or on the location of the project) and identified via fuzzy-matching of project names. The final project-level data is also used to calculate project-level investment that has been **indirectly enabled** by financial entities, according to the same splits described above. For more information, refer to the paragraph 4.2.3.1 below. Solution, capital type, and region categories are based on CPI's Global Landscape of Climate Finance taxonomies of low-carbon activities for the power sector. (CPI, 2023) Note that financing data was retrieved in March 2024, any subsequent update of the datasets by the provider is therefore not reflected.	BNEF fDi Intelligence IJ Global PPI
Project-level Fossil Fuel Financing	This indicator measures how entities have directly contributed to the funding of new fossil fuel projects via direct/primary investment. Investment figures are broken down to track USDm investment by **technology** (Oil and Gas Supply Chain, Coal mining, Oil-Powered Energy Production, Gas-Powered Energy Production, Coal-Powered Energy Production, Other), **capital type** (Debt, Equity, Other/Unknown), **region of destination** (Western Europe, Central Asia & Eastern Europe, US & Canada, Latin America & Caribbean, Middle East & North Africa, Sub-Saharan Africa, South Asia, East Asia & Pacific, Oceania, China, Unknown), and **IPCC country classification** (Developed, Developing, and LDC). Projects appearing in multiple data sources are removed from the data source containing least information (e.g., on the identity of the financing institution or on the location of the project) and identified via fuzzy-matching of project names. The final project-level data is also used to calculate project-level investment that has been **indirectly enabled** by financial entities, according to the same splits described above (for more information, refer to the CPI methodology on attribution of indirect financing). Tracked financing flows generally focus on the construction of new fossil fuel capacity, but may include new infrastructure with unspecified purpose that may constitute transition finance. Note that financing data was retrieved in March 2024; any subsequent update of the datasets by the provider is therefore not reflected.	fDi Intelligence GCPFT GOGET IJ Global PPI
Corporate-level Green Lending	This indicator tracks loans and bonds made available for green projects as defined according to Green Loan Principles and Green Bond Principles (in USDm). The eligible projects under these principles are not explicitly defined, but the principles provide guidance on the process and disclosure for issuers. Some examples of projects financed through green bonds include solar and wind electricity plants, energy-efficient buildings, sustainable water management systems, and clean transportation infrastructure.	BNEF CBI

	Metrics Tracked	Data Sources
Exposure to Misaligned Assets	This indicator measures whether portfolio composition is misaligned with Paris agreement mitigation targets. Misaligned assets are reported both as a share of total portfolio value (USDm), and as a share of assets examined in depth (e.g., assets in traditionally emission intensive sectors).	FinanceMap, CPI
Exposure to Fossil Fuels	This indicator measures entities' material exposure to fossil fuel investments (USDm). Exposure is examined for a subset of the institution's portfolio for which information exists on exposure to companies of which the primary sector of operations is in, or uniquely associated with, upstream or midstream oil and gas and coal mining sectors. Activities included in the portfolio assessed include a variety of asset types, depending on data available, such as lending to, investing in, and insuring coal and oil & gas.	CDP CPI Fossil Free Divestment Fossil Free Funds FinanceMap Investing in Climate Chaos Net-Zero Donut UN Sustainable Funds Database

Portfolio Emissions	The indicator measures the level of financed emissions (tCO2) of the financial institution. Specifically, we track information on Scope 3 – Category 15 (Investments) emissions, portfolio emissions, or financed emissions. Emissions can be either:
	• "Reported" by financial institutions.
	• "Estimated" based on asset ownership of the financial institution considered, for example:
	  o Asset impact uses equity ownership consolidation methodology to estimate emissions, aggregating the relevant asset-based emissions for each successive level of the ownership tree weighted by the parent company's equity stake in the subsidiary or affiliate.
	  o MSCI uses emissions from investments as defined by the Greenhouse Gas Protocol [tCO2e/yr], and those that companies may optionally report.
	• "Interpolated": In the absence of comparable emissions between various years within the same institution, latest emissions are used to fill data gaps.
	
	Aggregate emissions data displays "minimum" and "maximum" emission values, and information of the type of data used (reported/estimated/interpolated).
	
	Note: Where methodology changes have been verified within the same source, or where significant "outlier" emission changes were observed (e.g. increases or decreases of emissions by a factor of 5), we only considered the latest figures. Similarly, where multiple data sources were used to fill data gaps, leading to outlier data fluctuations (e.g. increases or decreases of emissions by a factor of 5), we prioritized datasets that are the most recent, the most complete, and the largest (for maximum values), or smallest (for minimum values). Despite this, data may in part still reflect improvements in the methodology. To the extent possible, raw data was also checked for potential errors (e.g. significant inconsistency between values reported in different years).
		Asset Impact
		CDP
		CPI
		ESG Book
		MSCI
		Net-Zero Donut
		NZDPU

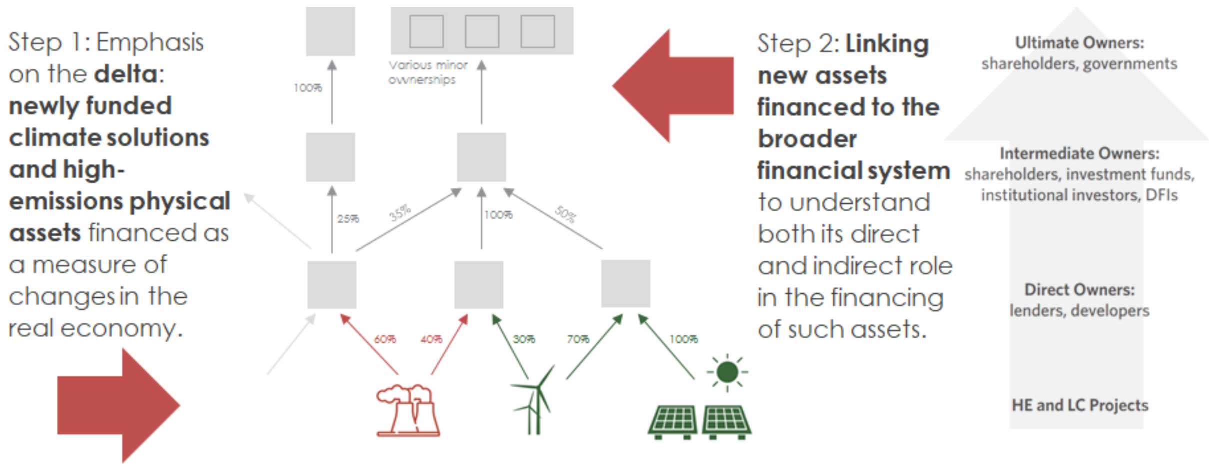
4.2.3.1 Linking the financial system with the real economy: The money behind investment in climate solutions and high-emission assets

The financial sector has a pivotal role to play in achieving the climate change mitigation objectives of the Paris Agreement and the transition to net zero GHG emissions. Regulators, coalitions, and FIs require an informed understanding of the real-world impacts of investments, in both climate solutions and high-emission assets.

Our methodology takes a two-step approach to link FIs' net zero strategies and targets to their ultimate contributions to investment in the real economy:

1. **Emphasis on new assets**: Monitoring investments in newly funded climate solutions and high-emission assets can help hold financial actors accountable for the real-world impacts of their investments, which could either lock in or mitigate emissions.
2. **Financial system's role:** Traditional tracking of investments in climate-aligned projects typically only reflects direct finance. However, many major financial actors invest indirectly, holding either corporate equity or debt in intermediary investors. To fully grasp a given FI's contribution to real-world projects, both direct and indirect investments must be evaluated.
   Our analysis reattributes direct investments in climate solutions and high-emission assets based on:
   - Equity/shareholder ownership (financed projects' owners of owners, etc.)
   - Corporate lending ownership

Figure 3: Attributing real economy investment to the financial system



This approach has several benefits:
1. It provides a more robust metric for determining the real-world impacts of financial decisions.
2. Institutions can be held accountable not just for their direct investments but also for their indirect influence.
3. It sheds light on what levers FIs can use to increase their impact in the real economy.

For more information on the approach please see the Ownership methodology document.

4.3 SCORING DIMENSIONS

Once indicators have been assessed, qualitative methods are used to score the Targets and Implementation dimensions, using the following approach.

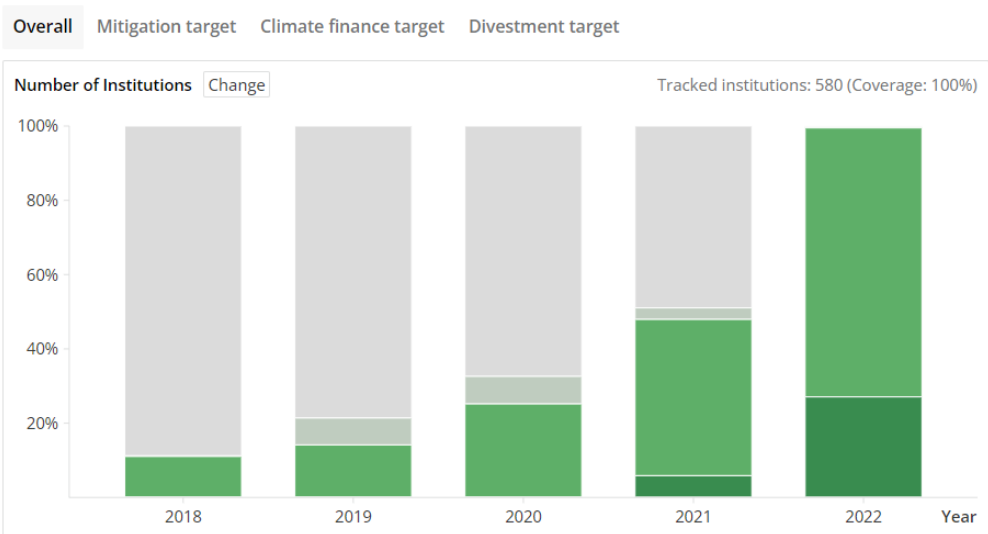
Response Assessment	Approach	Targets	Implementation
Full	Applied if all indicators in the dimension are scored as 'Full response'	Entities disclosed validated short-term and long-term mitigation targets covering most of their portfolio, adopted full fossil fuel phase-out policies, and disclosed climate solution investment goals with a precise timeline.	Entities have a climate change lead and internal incentive systems. They engage with policymakers, clients, and shareholders, following TCFD guidelines for climate risk strategy and disclosure.
Partial	Applied if at least 50% of all indicators in the dimension are scored as either 'Full response' or 'Partial response'.	At least 2 target types are adopted but not being fully validated or disclosed.	Most of the minimum conditions are met, including multi-level incentive systems, engagement with policymakers and stakeholders, adherence to most TCFD guidelines, and disclosure of progress.
Initial	Applied if at least one indicator in the dimension is scored as 'Early response' or higher.	Targets are adopted, but response requirements are still at early stage.	Some action has been taken, but response requirements are still at early stage.
Planned	Applied if at least one indicator in the dimension is scored as 'Planned response'.	Institutions are planning to adopt targets.	Institutions are planning to implement response measures.
No response	Applied if 'No action' is observed in all of the indicators.	No evidence of any action on targets is available.	No evidence of any implementation action is available.

4.4 HOW QUALITATIVE INFORMATION IS DISPLAYED FOR “TARGETS” AND “IMPLEMENTATION”

To display qualitative information at an aggregate level, i.e., to gauge the overall progress made by the institutions tracked at once, we show how their scores are distributed in a given year. We have a series of options to aggregate results.

Aggregation by nr of institution - The most immediate form of aggregation – and the default one displayed on the web dashboard upon loading – consists in merely a distribution of the number of institutions falling in each scoring category, for all the years tracked by the datasets. For a given indicator or dimension, the weight attributed to each score X (“No action” all the way to “Full response”) is therefore determined by the number of institutions in a given year, which our methodology has scored with score X, divided by the total number of institutions tracked in that same year. An example of the aggregation method by nr of institutions is provided below.

Figure 4: Example of scores distribution by number of institutions.



Aggregation by financial metrics - The aggregation presented above, albeit intuitive, foregoes a key element, that of the importance within the financial system of the institutions tracked, measured by institutions’ financial metrics. The aggregation methods used are:

- Assets Under Management (AUM), defined as the market value of the entirety of the investments controlled by a financial entity (typically, an asset manager) on behalf of its investors.
- Total Assets, i.e., the sum of all the assets the FIs owns or has a claim to, as reported on the balance sheet. It may consist of both tangible (cash, property, investments, etc.) and intangible assets (such as intellectual property).
- Revenue, i.e., the total amount of goods and services sold by a company, multiplied by the respective price of each of these goods and services. It is a measure of the amount of money that the company has generated in a given reporting year.
- AUM or Total Assets: a combination of the first two measures presented above. When Assets Under Management are reported for the year of interest, this measure is used, alternatively, Total Assets are used as a proxy for AUM. This measure, computed internally, is introduced to remedy the lower coverage of each of the two individual measures.

Financial data is currently gathered from the Bloomberg Terminal, Factset, S&P Capital IQ, and IPE's Top 1000 European Pension Guide 2023 (IPE, 2023) and the distribution of scores is computed by dividing the sum of the financial measure chosen (AUM, Revenue, etc.) for all the entities falling within a scoring category, by the total sum of that same financial measure across the whole dataset, in the relevant year.

Note that, due to the incompleteness of the dataset(s) used to extract this type of information (primarily derived by the fact that not all institutions tracked are public institutions which are required to disclose these figures), these distributions are in fact a sample of the population's distribution, biased towards public institutions.[3]

Our tracker provides the percentage of institutions covered by the aggregation method chosen.

[3] The coverage of the aggregation method selected is displayed at the top right corner of each of the graphs in the "Aggregate Data" section of the dashboard, and is calculated as the share of institutions for which this information was made available in the last year tracked over the total number of institutions tracked in that same year.

5. INSTITUTIONS COVERED AND ATTRIBUTION OF ACTIONS

5.1 INSTITUTIONS COVERED

The sample covered by the NZFT 3.0 includes nearly 1000 entities including

- **629 financial institutions that were members of Net-Zero Alliances supported by the Glasgow Financial Alliance for Net Zero (GFANZ)** – as of December 2023, with a total combined owned assets and assets under management (AUM) of more than USD 87 trillion. The sample excludes members from NZICI (Net Zero Investment Consultants Initiative) and Net Zero Financial Service Providers Alliance (NZFSPA), as they are not capital allocators. The sample also currently excludes members from Venture Climate Alliance (VCA) and Net-Zero Export Credit Agencies Alliance (NZECA), to be added next year.
- **31 former Alliance members**, as of December 31, 2022, corresponding to USD 1.5 trillion in assets managed or owned. These members have been retained to allow for comparison of progress with respect to their Alliance counterparts.
- **281 European Pension funds that are not Alliance members**, with a total combined owned assets and assets under management (AUM) of USD 5 trillion. Sample was defined starting from a list of top 500 European funds,[4] retaining those for which at least one action was tracked in our data, and for which no-action has been confirmed by the lack of publication of Climate transition reports, TCFD reports, ESG reports, or net zero plan reports. Other entities in the list have not been included as we could not verify whether the no action was the result of lack of data or lack of response. 19 European Pension funds are counted as Net-Zero Alliance members.

By focusing predominantly on Net-zero Alliance members, the dashboard serves as a valuable indicator of action taken by FIs that have joined the alliance and are

[4] The 500 top European pension funds list originally included both **financial institutions** and **real-economy companies (corporates)** with large pension schemes in place. With regards to the latter, when possible, we tried to identify either their fund entity name or the name of the trustee of these corporates (i.e., the entity that is in charge of managing the retirement savings of the original firm's employees -e.g., "Shell Pension Trust Limited" is the trustee of "Shell UK") and discarded those companies for which this was not possible (as information on the net-zero actions relating to the corporate firm will reflect actions concerning their real-economy operations, rather than the financial ones). The list is a subset of the 1000 pension funds list (IPE, 2023).

voluntarily committed to achieving net-zero greenhouse gas (GHG) emissions and may not include industry laggards. Pension funds have been added in 2024 as result of research CPI is currently leading on the role of pension funds in enabling the Net Zero transition.

While the NZFT does not currently provide a comprehensive overview of the entire financial sector's efforts towards net zero, in 2024-2025 we aim to expand coverage of FIs to cover top global entities across the key FI categories (see Section 5.2).

5.2 INSTITUTION TYPES

The following categories of private FIs are currently included in the NZFT dashboard, organized into two levels of analysis.

Level 1 (Sectors):

- Asset Owners
- Asset Managers
- Insurance
- PE, VC, and hedge funds
- Banks

Level 2 (Subsectors):

- Foundations & Endowments
- Family offices
- Sovereign Wealth Fund
- REITs
- Pension Funds
- Asset Management
- Insurance
- PE&VC
- Hedge Fund Manager
- Global Banks
- Retail banks
- Commercial Banks
- Investment banks

Certain categories of institution will be more influential than others in the greening of the financial system. For example, despite having huge assets to deploy, a private asset manager investing in public markets in adherence with a client mandate may be less able to affect change than a quasi-public development finance institution that can provide risk capital to nascent businesses and may have influence over government policy and own investment targets.

Similarly, different institution categories' investment considerations also play a role. For example, a regulated asset manager for which liquidity and client mandates are key considerations may not be well placed to invest in wind farm development, while a lightly regulated private equity fund with a high-risk appetite and lower liquidity requirements could be.

5.3 ACTION ATTRIBUTION

A critical step of the NZFT process is the initial attribution of actions to the various uniquely identified entities. The approach adopted by the NZFT dashboard is to attribute the net zero action of each entity exclusively at the level reported by the original data source, whether the entity is a local division, subsidiary, or a global or entity headquarters.

The attribution of each action to a unique entity means that actions attributed to subsidiaries do not contribute to the score of their headquarters, and vice versa. For example, an action attributed to "HSBC UK" does not alter the score of its parent entity, "HSBC". Similarly, an action attributed to "HSBC Asset Management" will only contribute to that entity's score and not to any other division belonging to the same parent company, or to the parent company itself. Accordingly, an action attributed to the entity "HSBC" will only affect the score for "HSBC" itself, and not that of its divisions or subsidiaries.

We acknowledge that while the proposed attribution method helps address double counting, the current approach may be conservative and disperse actions across the parent entities and subsidiary entities. This can lead to challenges in accurately reflecting the full scope of our governance mechanisms and their practical applications. In the absence of alternative ways to address double counting we hope that increasing reporting at the subsidiary level will help address the information gaps over time. We are committed to continuously refining our framework to better balance accuracy, practicality, and clear communication, and we welcome ongoing feedback to help us improve in these areas.

6. DATA SOURCES

6.1 SECONDARY DATA SOURCES

Information is collected from various **publicly and privately available sources** at the level of individual FIs. Sources to date include about 50 data providers, with our main data partners being CDP, the Principles of Responsible Investment (PRI), FinanceMap/InfluenceMap, and ShareAction.

Our sources are listed in alphabetical order below. Details on all derived datasets are available in the metadata file "NZFT 3.0 - Metadata", accessible online.

Figure 5: Data sources used in the study.

- Accounting for Sustainability (A4S) *
- Asset Impact (AI) *
- Banking Environment Initiative (BEI)
- BankTrack *
- Bloomberg New Energy Finance (BNEF)
- Carbon Pricing Leadership Coalition (CPLC)
- Climate Action 100+ (CA 100+)
- Climate Action in Financial Institutions (CAFI)
- Climate Bonds Initiative (CBI)
- CDP
- Climate Investment Coalition (CIC) *
- Climate Policy Initiative (CPI)
- DivestInvest *
- Energy and Climate Intelligence Unit (ECIU)*
- ESG Book
- fDI Intelligence *
- FinanceMap/InfluenceMap (FM)
- Fossil Free Divestment (FFD)
- Fossil Free Funds (FFF) *
- GEM's Global Coal Project Finance Tracker (GCPFT) *
- GEM's Global Oil and Gas Extraction Tracker (GOGET) *
- Global Climate Action Portal (GCAP)
- IJ Global
- IFRS Sustainability Alliance *
- International Sustainability Standards Board (ISSB) *
- Investing in Climate Chaos (ICC) *
- Investor Agenda (IA)
- MSCI *
- Net-Zero Asset Managers initiative (NZAM)
- Net-Zero Asset Owner Alliance (NZAOA)
- Net-Zero Banking Alliance (NZBA)
- Net-Zero Data Public Utility (NZDPU) *
- Net-Zero Donut / Observatoire de la finance durable*
- Net Zero Insurance Alliance (NZIA)
- Paris Aligned Asset Owners (PAAO) *
- Paris Aligned Investment Initiative (PAII)
- Partnership for Carbon Accounting Financials (PCAF)
- Powering Past Coal Alliance (PPCA)
- Principles for Responsible Banking (PRB)
- Principles of Responsible Investment (PRI)
- Principles for Sustainable Insurance (PSI)
- Private Participation in Infrastructure (PPI)*
- Race To Zero (RTZ)
- Rainforest Action Network (RAN)
- Science Based Targets (SBTi)
- ShareAction *
- Task Force on Climate-Related Financial Disclosure (TCFD)
- UN Sustainable Funds Database *
- We Mean Business Coalition (WMB)
- WRI's Green Targets

(*) data sources integrated in 2023-2024.

From the above sources, we retrieved information on specific institutions' response to Paris alignment for all indicators under the three dimensions (Targets, Implementation, and Impact). We will work to progressively expand the range of datasets used for the dashboard. Understanding data gaps is critical to ensuring that this is done effectively.

The table below shows the extent of coverage that current data sources provide for each attribute/indicator. The availability of data varies significantly between attributes/indicators; while information is good in understanding progress on the

Adoption of mitigation targets, on climate risk management and on tracking investment in climate solutions and high-emissions projects (although the latter assumes a good coverage of transaction from underlying independent/third party datasets), more data is needed on institutions' investment goals and how they are effectively tracking progress towards these goals, as well as portfolio emissions and their alignment.

Figure 6: Datasets and extent of coverage of attributes/indicators

		Coverage (*)		Variation
Dimension	**Indicator**	**2023**	**2024**	**2023-24**
Target	Adoption of a mitigation target	🟢	🟢	↑
	Adoption of a climate investments target	🔴	🔴	↗
	Adoption of fossil fuel phase-out and exclusion targets	🟡	🟡	↗
Implemen	Internal accountability frameworks	🟡	🟡	→
	Shareholder and client engagement	🟡	🟡	→
	Policy engagement	🔴	🟡	↑
	Climate risk strategy	🟡	🟡	→
	Climate risk management	🟢	🟢	→
	Disclosure of climate risk	🟡	🟡	↗
	Disclosure of investment data	🔴	🔴	↗
	Disclosure of emissions data	🟡	🟡	→
Impact	Project-level clean energy financing (**)	🟢	🟢	↗
	Project-level fossil fuel financing (**)	🟢	🟢	↗
	Corporate-level green lending (**)	🟢	🟢	→
	Exposure to fossil fuel	🟡	🟡	→
	Exposure to misaligned assets	🔴	🔴	→
	Portfolio emissions	🔴	🔴	↗

Legend: colors indicate high (green), medium (yellow) and low (red) data coverage. Arrows indicate improvement in data between 2023 and 2024.

Note: (*) Coverage calculated based on share of institutions tracked for which at least one net-zero action is present in a dataset; (**) Coverage is assumed to be perfect for these indicators and absence of data is taken to be an indication of absence of proejct/corporate-level investments rather than lack of data disclosure.

6.2 SECONDARY DATA PROCESSING

Data processing for the NZFT has two main goals:

A. **Collection and standardization of data from various sources**. Information is obtained from various formats of original data sources, including web pages, PDF files, reports, and files downloadable in csv format. Qualitative datasets, representing the larger share of datasets, usually consist of 1/0 true/false logical statements, answering specific questions related to climate action or Paris alignment (e.g., "Has the organization committed to mitigation targets?", "Has the organization adopted a carbon price?"). A smaller share of datasets contain numeric values (e.g., USD millions invested in low-carbon climate resilient projects). Data collected covers from 2018 onwards.

B. **Unique identification and categorization of FIs**. In parallel to Process A, reference tables are developed in which individual institutions or investor entities are uniquely identified. This aims to ensure that information on the same organization, which may be named differently in different datasets, is attributed to a single uniquely identified entity. These reference tables also include information such as country of the organization's headquarters, AUM, total assets, capitalization, and revenue, which is used to present the distribution of the scores among the various institution types at the aggregate level.

Data processing is based on programming code – typically Python – while storage occurs in the cloud, organized in source-specific backend datasets. This develops automated data pipelines that will drastically decrease the time it will take to incorporate new data sources.

Figure 7: Data collection and storage

Updates will be much quicker to implement and easier to track, due to the relevant code being hosted in the same environment as the data, greatly improving internal visibility of the process. Specifically:

- Automation of the data extraction process enables the NZFT to be regularly updated with new additions to coalitions and organization announcements in a way that reduces the need for further human input. By using web

scraping or AI techniques such as Natural Language Processing, which extracts relevant data from textual sources such as news articles or organization sustainability reports, data extraction can be automated – increasing our ability to collect the vast data required for the NZFT and the relevance of our data as it can be published with shorter turnaround times and even on a near real-time basis.
- Once data have been retrieved, an updated data warehousing infrastructure allows for greater automation of the data transforming, joining, and scoring process. This involves storing all data, from ingestion of raw sources through to the final data set used in the interactive tool, in a single environment.

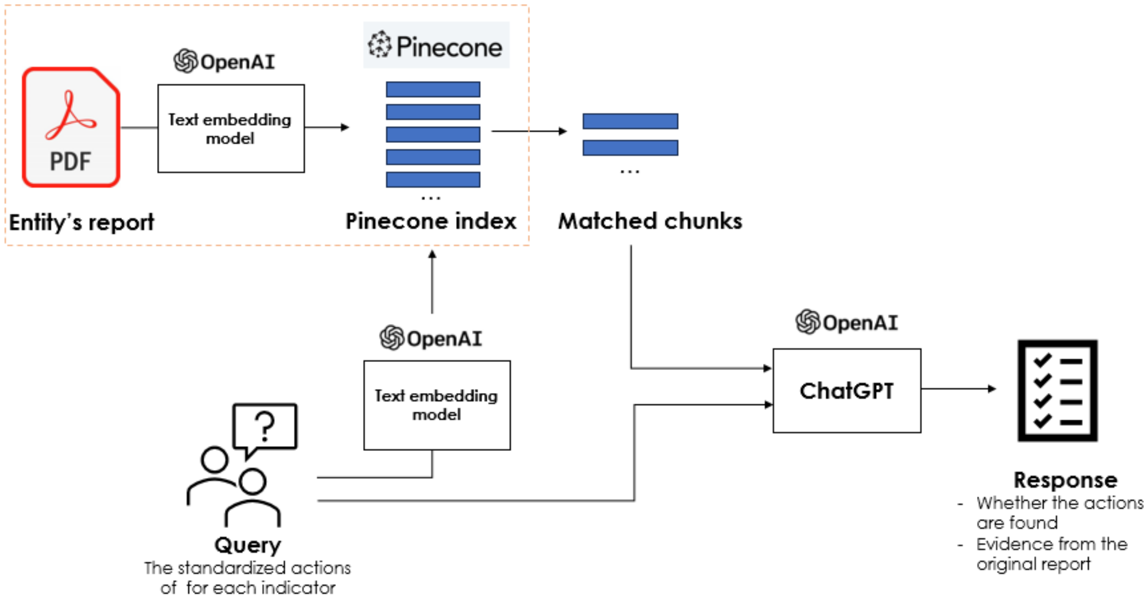
6.3 DIRECT PRIMARY DATA PROCESSING FROM REPORTS

We integrated the Large Language Model (LLM) into our data ingestion using technologies from OpenAI and Pinecone API, which enables us to extract data from PDF reports efficiently. The process involves the following steps:

1. **Data Preparation**: Initially, we extracted text from each PDF report using the "fitz" Python package. The extracted text is then segmented into approximately 1000-word chunks. Each chunk is processed using the "text-embedding-3-small" model from the OpenAI API, which converts the text into a numerical vector known as an embedding. These embeddings are crucial for enabling efficient similarity searches later. The chunks and their corresponding embeddings are subsequently inserted into a Pinecone database as a Pinecone "index". This step ensures that each report is embedded only once, eliminating the need for redundant processing and embedding in future searches.
2. **Search**: When a user query is received, it is converted into an embedding using the same model employed for the report chunks. This query embedding is then used to perform a similarity search through the Pinecone index to identify the top three report chunks most relevant to the query.
3. **Response Generation**: With the most relevant chunks identified, the user's question, along with these chunks, is fed into the "GPT-3.5-turbo" model. This model synthesizes the provided information to generate a contextually appropriate answer. This approach not only ensures that the response is highly

relevant to the user's query but also optimizes the use of resources by querying the model only once per report, thus reducing costs associated with API usage.

Figure 8: Direct data retrieval process



For each standardized action, we constructed a detailed query structure to guide GPT in providing accurate responses and extracting verifiable evidence from source documents. Each query includes a question, an explanation of the action, format requirements, and several exemplar responses. This structured approach enables GPT to address the query precisely while identifying and retrieving relevant textual evidence from original reports.

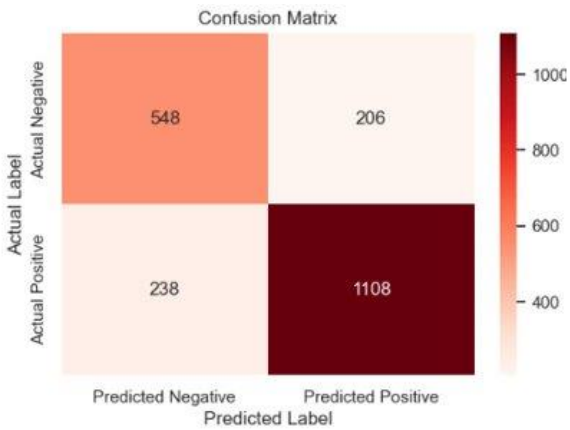
To assess the performance of this methodology, we conducted a manual evaluation involving 70 standardized actions across both 15 top Net-Zero Alliance members and 15 top pension funds, totalling 2,100 data points. Of these, 1,656 were accurately identified, resulting in an overall accuracy rate of 80%.

For broader implementation, we have instituted several steps to maximize accuracy and reliability:

1. **Manual Sense-Checking**: After extraction, each data point retrieved from reports undergoes a manual review. This step is crucial for identifying and eliminating false positives, ensuring that only true positive data is considered.

2. **Targeted Re-extraction**: For actions characterized by lower accuracy rates or higher incidences of false negatives, we perform a supplementary manual extraction process. This allows us to refine and verify the data further, enhancing the integrity of our dataset. These measures are designed to improve the precision of our automated text extraction processes, thereby enhancing the overall quality and reliability of the data obtained through this AI-driven LLM method.

Figure 9: Direct data retrieval performance evaluation



7. ADDITIONAL NOTES AND CAVEATS

Given the high share of entities being part of Net-Zero Alliances supported by GFANZ, and the focus of this alliance on net zero commitments, this is where most related action happens in the financial sector. This means that we cannot derive universal conclusions from this analysis, which **should be interpreted as an optimistic view of the sector, particularly regarding financial actor categories beyond pension funds**. In 2025, we will increase the number of organizations covered in this report to include entities beyond Net-Zero alliances across all financial actor categories, and offer a comprehensive overview of progress of the financial sector.

Conclusions are also informed by data availability over time. As we go back in time, there are fewer initiatives that collect action from FIs, thus data on trends over time may be affected by **lack of early monitoring efforts**.

Our data reflects any type of commitment, action, and investment undertaken by the tracked institutions **as of December 31, 2023**, with most datasets accessed or retrieved in March 2024 (only exceptions being MSCI, ShareAction, BNEF debt information accessed in May 2024). Data from PRI currently covers actions tracked until 31/12/2021. Only specific data subsets from ShareAction and MSCI have been integrated.

Information is primarily sourced from external data collection efforts and may reflect **possible lags in entity-level voluntary disclosures** to the original data providers, or **data gaps** derived by entities failing to systematically disclose their progress or failing to make it easily accessible in a machine-readable format. As standardized data becomes more readily available (e.g., in both existing and forthcoming datasets), we plan to gradually integrate it into the dashboard.

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