FRANKLIN TEMPLETON

BENEFIT STREET PARTNERS

Alcentra

GUIDE TO
Measuring Carbon Footprint Of CLO Investment Portfolios

Carbon disclosure is affecting participants through the entire CLO value chain, from asset owners, CLO investors, and CLO managers to corporate borrowers, all with their own part to play in promoting carbon and climate disclosure. Carbon and climate disclosure goes beyond reporting; understanding the climate risks and their implications on investments becomes increasingly important for CLO and loan investors alike.

Key Driver for Climate Disclosure by CLOs - Regulation

1. UK FCA TCFD Reporting Requirements
2. ISSB Climate-Related Disclosures
3. EU Sustainable Finance Disclosure Regulation
4. EU Corporate Sustainability Reporting Directive
5. SEC Proposed Climate Disclosure Rule

The intensifying regulatory pressures around carbon and climate disclosures is impacting all market participants directly or indirectly.

CLO managers can increasingly expect to be required to report climate data.

Whilst most managers themselves may not fall within the scope of existing named regulations, CLO investors are looking to satisfy their own or align with their clients' sustainability reporting obligations when investing in CLOs subject to carbon and climate diligence and reporting standards.

Under UK & EU law, the goal of setting targets and reducing emissions is to reach net-zero emissions by 2050.

Taskforce For Climate-related Financial Disclosures (TCFD)

The Task Force on Climate-related Financial Disclosures (TCFD) is a market-led set of recommended climate-related disclosures for corporates and financial institutions which started as voluntary guidelines and are now becoming part of mandatory regulatory framework in many jurisdictions. The companies in scope include large premium listed companies, asset owners, life insurers and UK Financial Conduct Authority (FCA) regulated pension providers and asset managers.

FCA-authorised asset managers with AUM of over £5bn are required to publish entity- and product-level reports detailing a range of climate metrics, including emissions performance.

In practice, whilst many CLO managers will likely be out of scope of the regulations, UK-based CLO investors may request that managers prepare entity or product-level TCFD reports with respect to their CLO business and transactions.

For UK-domiciled asset managers, initial product and entity-level TCFD disclosures began in June 2023 on a 'best efforts' basis. From 2024, this will shift to a 'comply or explain' model so asset class coverage is expected to sharply increase.

In addition to the UK, a number of other jurisdictions are in the process of implementing mandatory TCFD-aligned disclosure requirements, including Australia, New Zealand, Singapore, Canada, Japan and South Africa.

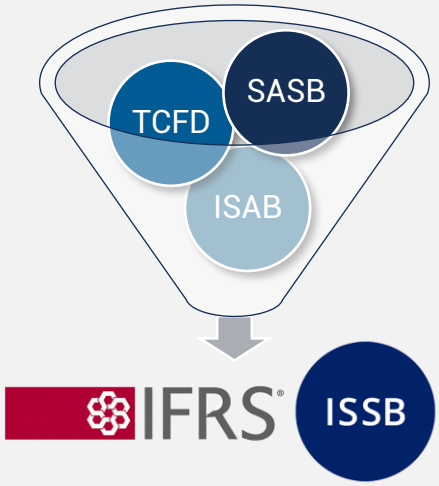
As a result, managers may increasingly be required to demonstrate TCFD alignment by clients even without a formal legal requirement to do so.

TCFD & International Sustainability Standards Board (ISSB)

The incoming IFRS ISSB standards requirements will incorporate climate-related disclosures (in line with TCFD).

From 2024, TCFD monitoring responsibilities has been transferred to IFRS, which formed the ISSB.

The FCA aims to finalise its policy on ISSB imlementation by the end of 2024, with a view to bringing in new ISSB requirements for accounting periods beginning on or after 1 Jan 2025.



The Four TCFD Pillars & Key Reporting Requirements For Asset Owners & Managers

The CLO value chain will create growing pressure for climate disclosure. CLO investors are increasingly required to disclose financed emissions, engagement, and target-setting activities in relation to climate change, for example under the UK FCA's TCFD reporting requirements.

The TCFD framework is structured around four pillars that represent core elements of how organisations operate (including managing investment portfolios). Importantly, the four pillars of TCFD aim to strengthen processes that embed climate change consideration into the fabric of an organisation, as well as processes that track progress and demonstrate outcomes to investors, lenders, and other stakeholders.

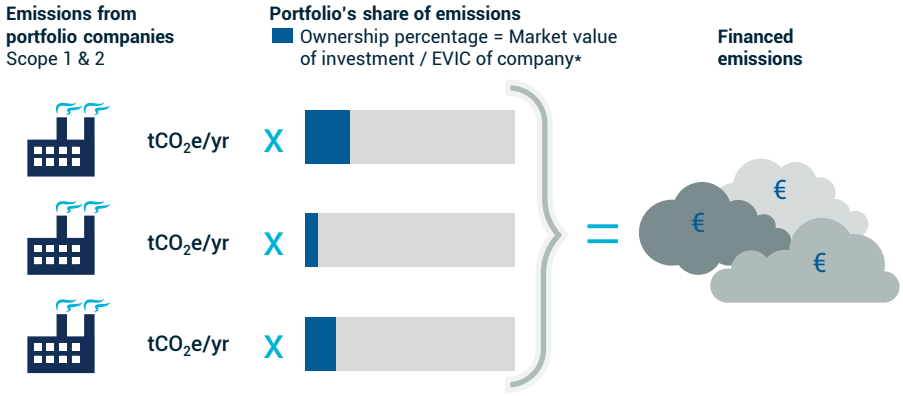
	Key Practical Outputs	Complexity	Importance For CLO Value Chain
Pillar: Metrics and Targets	For Investor Firm & Investment Portfolios: 1. Disclose Scope 1-3 GHG emissions 2. Targets for GHG reductions 3. Financed Emissions & Carbon Footprint		Investment portfolio "Metrics & Target" and "Scenario Analysis" outputs from CLO Managers is necessary to enable Asset Owner & Asset Managers to produce their own TCFD reports.
Pillar: Strategy – Scenario Analysis	For Investor Firm & Investment Portfolios: 1. Climate risks & opportunities identified 2. Climate impact on firm (incl. investment port.), strategy and financial planning 3. Scenario analysis (Climate Value At Risk & Implied Temperature Rise)		
Pillar: Governance	Need to describe the Board & Senior Management org. structure, roles, and oversight of climate risks & opportunities		
Pillar: Risk Management	Need to describe the organization's processes for identifying, assessing and managing climate-related risks		

How Do Investors Measure Portfolio Carbon Emissions?

There are several different metrics or ways of measuring portfolio carbon emissions of investment portfolios. This page describes each of the key metrics investors use.

Financed Emissions

This metric measures how a CLO portfolio's share of a company's emissions is proportionate to the CLO's ownership stake in the business. For instance, if a CLO portfolio owns 5% of a company's EVIC*, it's responsible for 5% of the company's emissions. This is considered an absolute emissions metric.

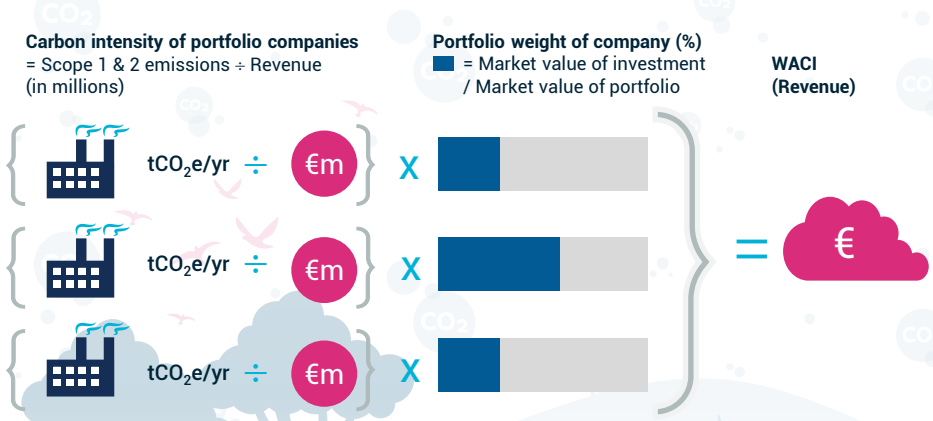


Carbon Emissions Per Euro (or Dollar/Pound) Invested

This metric offers insights into the carbon emissions generated by a CLO portfolio for every €1m invested. As illustrated, this figure is arrived at by first calculating financed emissions, and then normalising this by the market value of the portfolio and/or benchmark.

Weighted Average Carbon Intensity (WACI) By Revenue

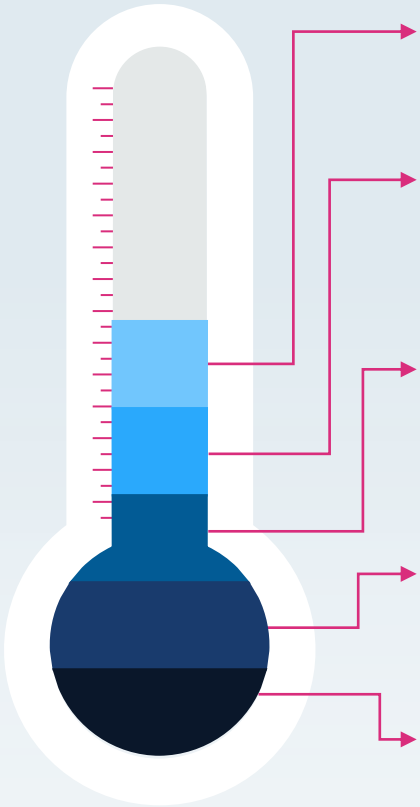
This metric indicates the level of carbon emissions a portfolio generates per euro of revenue from the underlying portfolio companies – offering a gauge of carbon efficiency in terms of output. It's arrived at by calculating the carbon intensity of each portfolio company, and then computing the weighted average based on portfolio weights.



*EVIC = Enterprise Value Including Cash. It is computed as the sum of a company's market cap (ordinary and preferred shares), debt, and cash

Don't Wait For Complete Borrower-Level Data

Early-stage analysis of carbon emissions in CLO portfolios, even when based on estimates, is an important step towards understanding climate-related risks within investment portfolios. **This approach could help investors:**



01 **Gain** a fundamental understanding of carbon metrics and challenges related to their calculations

02 **Undertake** carbon relative analysis, establishing a clear view on where a particular investment sits within its universe as well as versus the overall global carbon emissions backdrop

03 **Identify** the largest carbon emitters, which in turn guides corporate engagement efforts to either obtain more refined data or probe companies on their current and future decarbonisations plans and encourage change

04 **Determine** critical pressure points in investment portfolios by identifying jurisdictions, sectors, and entities with higher exposure to current and future transition and physical climate-related risks

05 **Refine** and advance analysis by developing and incorporating over time a complete suite of climate metrics as recommended by TCFD, further enhancing an understanding of underlying risks in investment portfolios

How CLO Portfolio Companies Can Measure Emissions & Set Targets

Greenhouse Gas Protocol

Many standards and methodologies exist for carbon accounting. The most widely used and recognised standard is the Greenhouse Gas Protocol (GHGP).

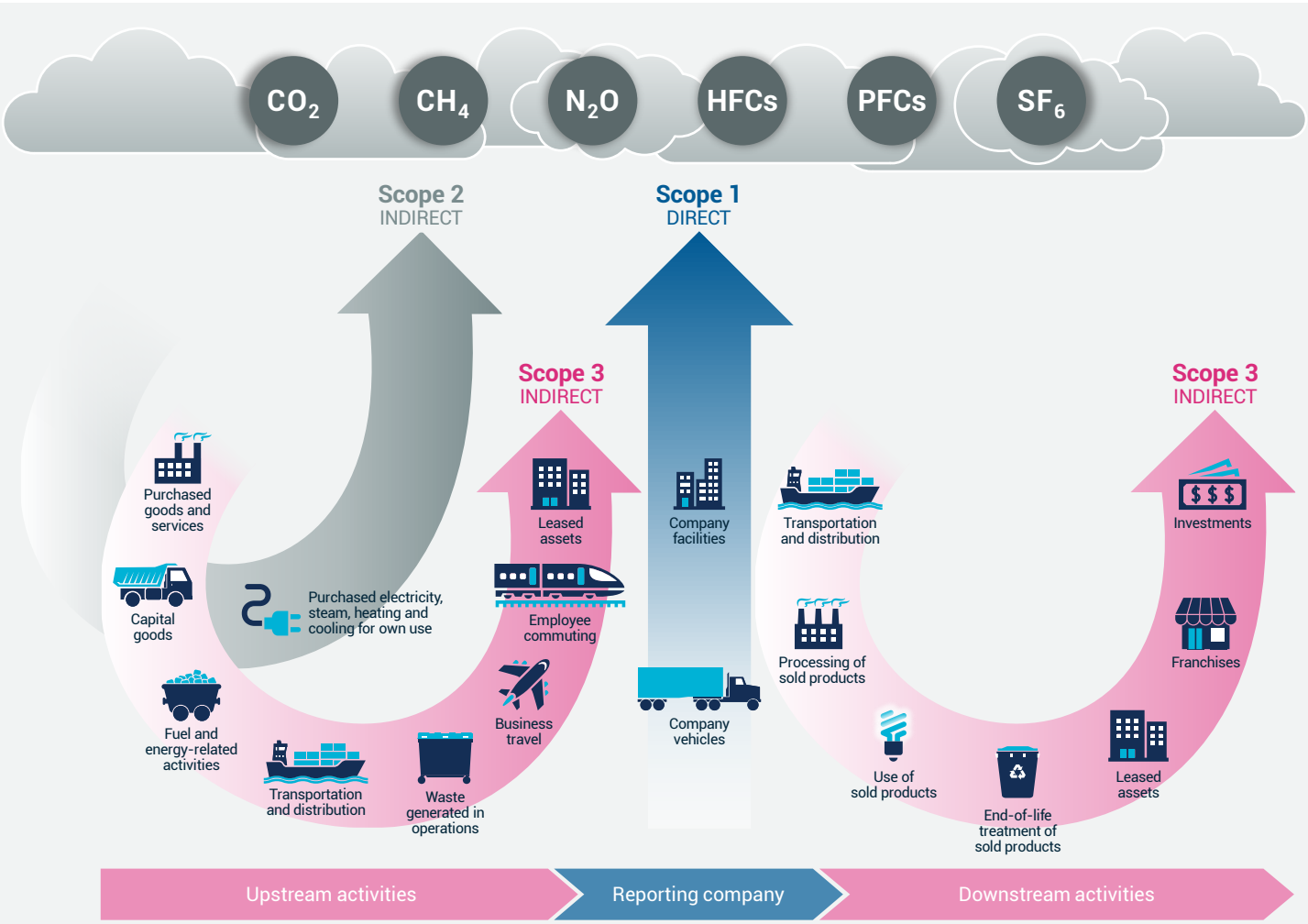
For structure and clarity to understand one's carbon footprint, The GHGP groups emissions under three scopes. Understanding these categories is essential for accurate measuring of a company's carbon footprint.

Scope 1: Direct emissions from owned or controlled sources;

Scope 2: Indirect emissions from the generation of purchased electricity, steam, heating, and cooling;

Scope 3: All other indirect emissions that occur throughout a company's value chain, which are split into 15 different categories. These include business travel, upstream and downstream transportation and distribution, capital goods, and processing of sold products.

A corporate carbon footprint does not only include carbon dioxide (CO2) but the sum of all greenhouse gas emissions that are released as a result of a company's operations.



Corporates borrowers should expand coverage to cover all relevant emissions (scope 1, 2 & 3) for all entities in the defined organisational boundary. Borrowers should look to improve data quality through moving from estimates to actual primary data over time. Quantification of a company's carbon footprint is one of the first obstacles to creating a successful climate strategy.

What Is A Science-based Target?

Once companies have measured their carbon footprint, they should identify strategies to reduce GHG emissions. Targets should be clear and well-defined, and they must always be based on accurate and transparent emissions reporting. For reporting purposes, targets need to be tied to a base year and have a clearly defined deadline.

Targets are considered science-based if they align with what the latest climate science says is necessary to meet the goals of the Paris Agreement: to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C. To reach Net Zero emissions by no later than 2050, we need to see emissions reductions on a massive scale in the near-term aligned to 1.5°C, and a 90%* reduction in the long-term.

Leading this area globally is the Science Based Targets initiative (SBTi), a partnership of organisations that supports companies to set targets using different methodologies, and then validates those targets.

Science-based targets (SBT) have become the globally accepted standard for companies setting carbon reduction targets in both the near- and long-term.

Targets help build your brand reputation, drive ambitious climate action and offer greater engagement.

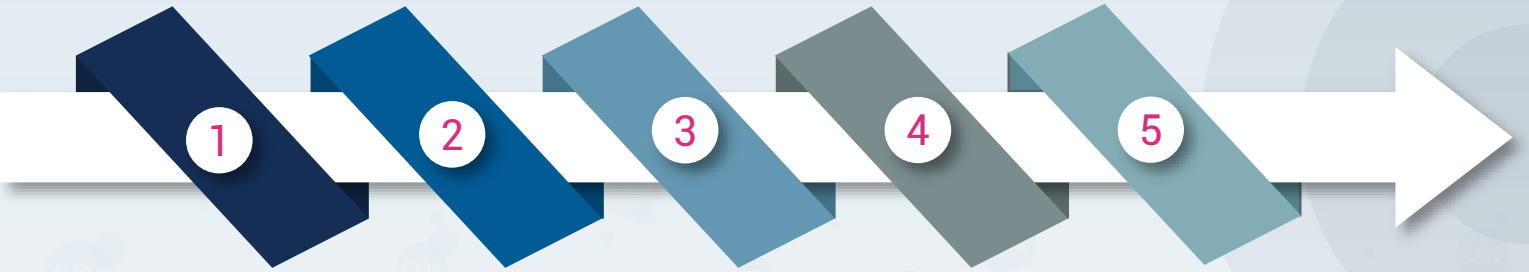
** Sectoral Decarbonisation Approach (SDA) pathways may vary.*

Five Key Components To Setting a Science-Based Target:

1. Boundary
Your SBT should include at least company-wide Scope 1 and Scope 2 GHG emissions

3. Timeline
Your SBT goal period should be between 5-15 years from your baseline. Keep in mind, currently SBTi considers your "start" period to be the year you submit your SBT to them for review, and since submissions can take up to a year to be formally approved, a five-year target would only have four years to report and achieve the target

5. Level of Ambition
At a minimum, your target must be consistent with the economic pathway to 2°C mean global warming by 2050 (but ideally 1.5°C)



2. Scope 3 Screening
If Scope 3 emissions cover a significant portion of your organization's emissions (i.e., greater than 40% of total aggregate Scope 1-2-3), your company should also set an ambitious, measurable Scope 3 target

4. Reporting
Your company must report annually on its SBT progress

Absolute *vs* Intensity Targets

Absolute Targets: are required by most reporting standards. An absolute target is a target that aims to reduce the total amount of emissions from your company.

An example of a well-set absolute target is:

- Reduce your scope 1 and 2 emissions by 50%
- Reduce scope 3 emissions by 30% by 2030 compared to the base year of 2019

Intensity Targets: are set relative to productivity or economic output, such as annual revenue, or number of products sold. Intensity targets stimulate businesses to improve efficiency and reduce greenhouse gas emissions on a relative basis.

Example of a well-set intensity target are:

- To reduce emissions per €m revenue by 30% by 2030 from a 2019 base year;

However, only reducing along intensity targets can allow for increases in the company's total emissions due to growth in business operations. Therefore, intensity targets are not allowed in most reporting standards, or by the SBTi, unless they lead to absolute emission reductions.

Net-Zero Targets

Under UK & EU law, the ultimate goal of setting targets and reducing emissions is reaching net-zero emissions by 2050. For this, the SBTi has launched a new Net-Zero Standard. It aims to help companies set both short- and long-term targets that align with science and the sector-specific requirements to reach net-zero by 2050.

Key Components Of The Corporate Net-Zero Standard:

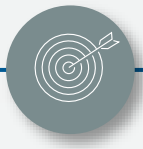
Near-Term Targets (Short- & Medium-Term)

Rapid, deep cuts to direct and indirect value-chain emissions must be the overarching priority for companies. Companies must set near-term science-based targets to roughly halve emission before 2030. This is the most effective, scientifically-sound way of limiting global temperature rise to 1.5°C.

Long-Term Targets

Companies must set long-term science-based targets. Companies must cut all possible - usually more than 90% - of emissions before 2050.

Neutralise Residual Emissions



After a company has achieved its long-term target and cut emissions by more than 90%, it must use permanent carbon removal and storage to counterbalance the final 10% or more of residual emissions that cannot be eliminated. A company is only considered to have reached net-zero when it has achieved its long-term science-based target and neutralised any residual emissions.

How Portfolio Companies Can Set Science-Based Emissions Targets

To summarise, if your portfolio companies are considering setting science-based sustainability targets, we recommend following these steps:

1. Measure Emissions Baseline
2. Evaluate the Feasibility of SBT among Key Internal Stakeholders
3. Make a Formal Science-Based Target Commitment
4. Target Announcement Communications
5. Complete Decarbonization Work and Track Progress

Definitions Glossary

GHG Emissions

Climate Change: The overarching term used to describe the long-term shift in global climates associated with an increase in average global temperatures. These changes can include increased rainfall, increased desertification, more extreme temperature variations or higher frequency extreme weather events.

Green House Gas (GHG): Is a gas that absorbs and emits radiant energy at thermal infrared wavelengths, causing the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor (H2O), carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and ozone (O3).

tCO2e: Refers to tonnes of carbon dioxide (CO2) equivalent. There are a number of greenhouse gases which warm the earth with different intensity levels. Rather than providing metrics for each gas they are converted into tCO2e for reporting.

Net Zero: Is an ideal state where the amount of greenhouse gases (GHGs) released into the earth's atmosphere is balanced by the amount of GHGs removed. Decarbonization efforts are needed to reach net zero.

Scope 1 Emissions: Are the direct emissions associated with the business operations e.g. a utility company's emissions from combusting fuel.

Scope 2 Emissions: Are the indirect emissions associated with the business' heating/power requirements e.g. a software company's emissions from buying electricity.

Scope 3 Emissions: Emissions from: purchased goods and services; business travel; employee commuting; waste disposal; use of sold products; transportation and distribution (up and downstream); investments; leased assets; and franchises.

GHG Emissions Intensity Metrics

Financed Carbon Emissions (FCE): Represent the total financed greenhouse gas (GHG) emissions associated with the fund. The larger the number, the more it is contributing to the effects of climate change. The FCE is directly related to the size of the fund and therefore it is difficult to use to compare across funds.

Carbon Footprint: Refers to financed carbon emissions divided by the fund's market value, expressed in tCO2e/£m invested. The larger the number, the more it is contributing to the effects of climate change. Carbon footprint can be used to compare across different funds.

Carbon Intensity: Refers to volume of carbon emissions per million pounds of sales (carbon efficiency of a corporate), expressed in tCO2e / £M sales.

Weighted Average Carbon Intensity: Is the fund's exposure to carbon-intensive issuers, expressed in tCO2e/£m sales. The larger the number, the more carbon intensive the investments currently are. WACI allows comparison across different funds.

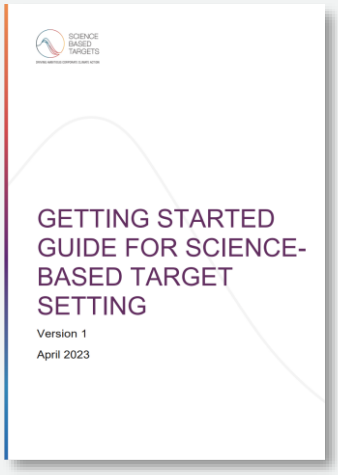
TCFD Scenario Analysis

Scenario Analysis: The financial impact of climate change on a fund's assets is assessed based on a range of scenarios that have been assessed using a climate scenario model.

Climate Value At Risk (CVAR): Is designed to provide a forward-looking and return-based valuation assessment to measure climate related risks and opportunities in an investment portfolio. Climate VaR is typically calculated using a combination of historical data, modelling techniques, and scenario analysis.

Implied Temperature Rise (ITR): This estimates the global temperature increase contribution from a fund's current greenhouse gas emissions trajectory. It is a simplified tool to assess alignment of business strategies with climate goals like the Paris Agreement target.

Useful Guides & Training Webinars For Portfolio Companies



BSP Alcentra – ESG Contacts

Vai Patel
Head of ESG, Alcentra
vai.patel@alcentra.com

Jaya Puri-Parsons
ESG Associate, Alcentra
jaya.puri-parsons@alcentra.com

Cannon Place | 78 Cannon Street | London | EC4N 6HL
www.alcentra.com

Sources

1. https://ghgprotocol.org/
2. https://sciencebasedtargets.org/
3. https://www.fsb-tcfd.org/
4. https://www.ifrs.org/sustainability/tcfd/
5. https://elfainvestors.com/wp-content/uploads/2023/10/ELFA-Insights-39-CLO-Carbon-and-Sustainability-Reporting-Paper.pdf

Disclosures:

This Report is proprietary and not to be reproduced or redistributed in whole or in part without the prior written consent of Alcentra. All views, opinions and estimates in this Report constitute the best judgment of Alcentra as of the date hereof, but are subject to change without notice, and do not necessarily represent the views of Alcentra. The information in this Report may contain projections or other forward-looking statements regarding future events, targets or expectations regarding the strategies described herein (including those introduced by the terms "may," "target", "expect", "believe", "will", "should" or similar terms).

There is no assurance that such events or targets will be achieved and may be significantly different from that shown here. The information in this Report including statements concerning financial market trends, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.

Certain information contained herein is based on outside sources believed to be reliable, but its accuracy is not guaranteed.

The information in this Report is only as current as the date indicated and may be superseded by subsequent market events or for other reasons. Nothing contained herein constitutes investment, legal, tax or other advice nor is it to be relied on in making an investment or other decision. Investors should independently investigate any investment strategy or manager, and consult with qualified investment, legal, and tax professionals before making an investment.

This is an Report and is not intended as investment advice. The information provided within is for use by professional investors and/or distributors and should not be relied upon by retail investors.

This material has been provided for informational purposes only and should not be construed as investment advice or a recommendation of any particular investment product, strategy, investment manager or account arrangement, and should not serve as a primary basis for investment decisions. Prospective investors should consult a legal, tax or financial professional in order to determine whether any investment product, strategy or service is appropriate for their particular circumstances.

Franklin Templeton holds the majority of The Alcentra Group (or "Alcentra"), which is comprised of the following affiliated companies: Alcentra Ltd. and Alcentra NY, LLC. Alcentra NY, LLC is registered with the U.S. Securities & Exchange Commission under the Investment Advisers Act of 1940. Alcentra Ltd. Is registered with the U.S. Securities & Exchange Commission under the Investment Advisers Act of 1940 with respect to its US clients. Alcentra Ltd is authorized and regulated by the Financial Conduct Authority – Registration number 196845 - and regulated by the Securities Exchange Commission with respect to its US clients – Registration number 801-74223.