Task Force on Climate-related Financial Disclosures (TFCD)

Analytics and regulatory solutions to support your TCFD requirements

STATE STREET.

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Over the last several years, we have seen client questions evolve from "why should I care about ESG" to "how can I better integrate and reflect ESG considerations." We believe ESG is one of the most important frontiers in the investment industry. As long-term stewards of our clients' assets, we are committed to understanding how structural changes in value drivers, including ESG issues, will impact the long-term value of our clients' portfolios.

With climate-related risks posing a potential threat to the long-term stability of investment portfolios, there is a growing focus on investors' climate risk management practices and disclosures. To support our clients' ESG reporting and analytics needs, we developed State Street ESG Analytics.

Task Force on Climate-related Financial Disclosures (TCFD)

In 2015, the Financial Stability Board (FSB) created the TCFD to support the goals of the Paris Agreement, a voluntary framework for companies and institutional investors to develop effective climate-related financial disclosures through their reporting and disclosures.

The UN Principles of Responsible Investment (PRI) announced that its climate risk strategy and governance indicators (aligned with the TCFD guidelines) are mandatory for PRI signatories to report on from 2020 but voluntary to disclose publicly.

Climate change risk is a complex field and due to the uncertainty of its impacts, is inherently difficult to measure. TCFD-aligned reporting helps investors with a framework to determine their exposure to climate transition risk.

The TCFD structures its recommendations around four thematic areas that represent core elements of how organizations operate: governance, strategy, risk management, and metrics and targets.

How We Can Help

With a global support team and a risk control environment structured around stringent standard operating policies and procedures, we deploy innovative and advanced technology to provide you with an automated, end-to-end experience.

Our State Street ESG Analytics Solution:

- Provides a multi-vendor suite of ESG data to meet your investment and reporting needs across asset classes
- Offers transparent, streamlined and customizable ESG analytics and reporting
- Helps to navigate the non-traditional financial data landscape, while allowing integration or calculation of proprietary client ESG scoring methodologies and frameworks
- Lets you view your portfolios through the lens of industry-leading ESG data sets, including MSCI, Sustainalytics, TruValue Labs, S&P Trucost, Arabesque and IdealRatings, providing breadth, depth and flexibility to align with your goals
- Aligns your reporting to TCFD's "Metrics and Targets" pillar that asks investors to "Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, when such information is material"

Understanding Carbon Footprint and Methods

Carbon footprinting has been the industry standard for measuring institutional investors' climate transition risk exposure to provide a baseline for action. This has involved various calculations to understand emissions in relation to the amount of investment or in relationship to the revenues generated by companies.

The TCFD has recommended three metrics:

1. **Total Carbon Emissions** – The total Carbon emissions do not represent the absolute emissions of companies held in the portfolio or relative benchmark, but rather the sum of each holding's emissions proportional to the amount of stock held by the portfolio or benchmark.
2. **Carbon Footprint** – Carbon emissions in relation to the amount of investment. This aims to answer the question: how much carbon is owned by the investment? This metric represents the overall exposure per unit of investment. A normalized measure of a portfolio's contribution to climate change enables comparisons with a benchmark, between multiple portfolios and over time, regardless of portfolio size

3. **Carbon Intensity** – Carbon emissions in relation to revenues generated by companies. This aims to answer: how 'carbon efficient' are the companies invested in? This metric permits comparison of different companies. Emissions of large companies become comparable to those of smaller companies in the same industry by dividing them by their respective revenues.

In addition to carbon data, the report also calculates water and waste intensity metrics at the portfolio level.

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Covered Carbon Metrics

The following key metrics use the S&P Trucost ESG Analysis data that covers 13,000+ companies:

Carbon emissions – Scope 1 and 2 | As the most significant drivers of climate change, Scope 1 and 2 data on emissions of carbon dioxide (or greenhouse gases standardized as CO_2 equivalent) are the most easily measured and tracked across the investment universe.

Carbon emissions – Scope 3 | Scope 3 emissions is also critical to understand the indirect risks to which companies may be exposed. Disclosure quality is relatively poor at the moment, especially on a global portfolio.

Carbon reserves | While carbon emissions capture the current snapshot of the energy use and operations of companies, evaluating climate risks requires the consideration of future emissions embedded in known reserves and resources of fossil fuels, i.e. coal, gas and oil. These exposures are captured under the scope of 'embedded carbon,' which determine the resulting emissions if the reserves were to be extracted and burnt in the future. The risk of embedded carbon will mostly be in the energy, utilities and materials sectors.

S&P Trucost ESG Analysis provides data on coal, oil, other coal, oil, shale in units of output based on a 90 percent chance of being present.

Reserves	Proven Reserves
1P Metallurgical Coal (m tonnes)	(>90% chance of being present) in million tonnes of coal used to manufacture steel.
1P Thermal Coal (m tonnes)	(>90% chance of being present) in million tonnes of coal used to generate power.
1P Other Coal (m tonnes)	(>90% chance of being present) in million tonnes of all other coal uses, or where coal disclosure is not transparent.
1P Conventional Oil (mmbbl)	(>90% chance of being present) in million barrels of crude oil.
1P Unconventional Oil (mmbbl)	(>90% chance of being present) in million barrels of unconventional oil - including natural gas liquids (NGL), oil sands, condensates and liquid petroleum gas (LPG).
1P Natural Gas (bcf)	(>90% chance of being present) in billion cubic feet of natural gas.
Reserves 1P Shale Gas (bcf)	(>90% chance of being present) in billion cubic feet of shale gas.

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