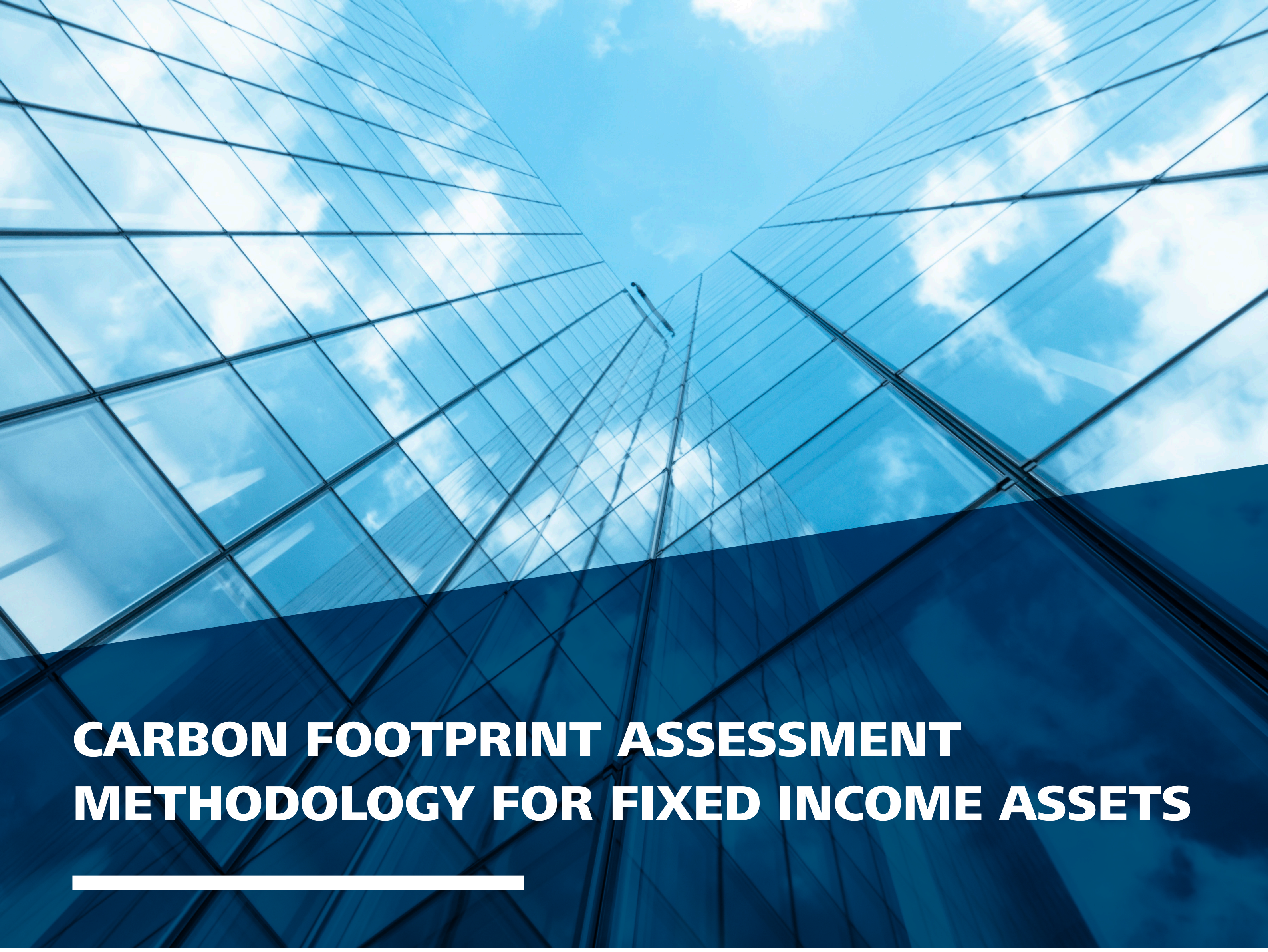

# CARBON FOOTPRINT ASSESSMENT METHODOLOGY FOR FIXED INCOME ASSETS

## In a nutshell

*South Pole Group's unique carbon footprint assessment methodology enables investors to thoroughly understand the climate impact of their fixed income portfolios.*

**Added value for investors:**

| | |
|---|---|
| 01 | **High coverage and clear interpretation of data** |
| 02 | **Insights on the portfolio's carbon impact at asset level that facilitate appropriate mitigation strategy design** |
| 03 | **Perfect complement to a Climate Risk Analysis for portfolios that include sovereign, sub- and supranational bonds** |

*Quantifying the carbon footprint of a portfolio, while distinguishing the approach for the different asset types within a fixed income portfolio, is a complex exercise. South Pole Group has developed a unique approach that provides a presentation of the aggregated impact results across an entire portfolio.*

## Understanding the Climate Impact of Fixed Income Portfolios

Existing practices for assessing the climate impact of fixed income portfolios normally assess all bond types by using an ownership and intensity approach. This typically includes using debt outstanding, enterprise value and revenues for normalisation adjustments. However, this approach raises several methodological issues[1] for investors.

## Our Unique Approach

South Pole Group's specialised approach provides investors with a robust methodology for calculating the climate impact of fixed income portfolios. Our methodology breaks down diversified fixed income portfolios into each type of bond, applies tailored approaches per category and compares each category against the equivalent group in the benchmark.

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*"Investor can no longer ignore climate change. Some may question the science behind it, but all are faced with a swelling tide of climate-related regulations and technological disruption. We believe all investors should incorporate climate change awareness into their investment processes."*

**Philipp Hildebrand**

Vice Chairman, Blackrock

We use a unique approach to compare each type of bond using separate methodologies to estimate emissions. This enables investors to screen across multiple types of holdings (e.g., corporate, sovereign, sub-national and supranational bonds). We then identify a common denominator to aggregate the emissions and provide one total carbon footprint for the entire portfolio.

**Analysing the carbon footprint of four types of bonds in fixed income portfolios**

| Fixed income portfolio | 1. Carbon Footprint Analysis | 2. Climate Risk Analysis |
|---|---|---|
| Main types of securities: | | |
| **Non-Financial Corporate Bonds** (listed and nonlisted) | Financed emissions ("Leverage Debt Outstanding" approach to determine ownership) | |
| **Financial Corporate Bonds** | Financed emissions (debt outstanding approach) | |
| **Sovereign Bonds** (Treasury notes and government bonds) | Financed emissions (adjusted debt approach) | **Country level climate risk model** |
| **Supranational Bonds and Agencies** | Financed emissions (debt outstanding approach) | |
| **Output** | **Aggregated total carbon footprint of all assest classes** | **Country risk reports** |

[1] The ownership approach assumes that by "owning" shares in a company, an equity investor owns a share of the GHG emissions of that company. Hereby, an investor's "ownership" of the emissions of a company is calculated based on the enterprise value or the market cap of the company. Then, an investment's footprint indicates how many tonnes of $CO_2e$ an investor would finance in relation to the respective ownership in a certain company or portfolio. However, for fixed-income investors, this allocation logic gets stretched and requires some methodological adjustments. Emissions are rather allocated in relation to the investor's share of total debt outstanding.

## Global team

We are a truly global provider of sustainability solutions and services. Our team is made up of over 130 skilled and enthusiastic professionals from over 20 different countries, based in offices spanning 6 continents.


Regional offices Headquarters Representations

Climate impact/renewable energy projects

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