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The PCAF Global GHG Accounting Standard for Financed Emissions: Key Considerations for Alternative Asset Managers

Background

The goal of the Paris Agreement, a legally binding international climate change treaty, is to limit the increase in the global average temperature to well below 2 degrees Celsius (and preferably 1.5 degrees) above pre-industrial levels.⁽¹⁾ As per the Intergovernmental Panel on Climate Change, to meet this global greenhouse gas (GHG) emission target, emissions should peak by 2025, reduce by nearly half by 2030, and reach net zero by 2050.⁽²⁾

Given that financial institutions fund activities across various sectors, a substantial portion of their overall emissions stem from their lending, underwriting, and investment activities, also known as financed emissions. Measuring financed emissions allows financial institutions to make transparent climate disclosures related to their GHG emissions exposure, identify climate-related transition risks and opportunities, establish emissions targets, and gauge progress.

The Partnership for Carbon Accounting Financials (PCAF) is a global, industry-led initiative that helps financial institutions assess and disclose GHG emissions associated with their financing activities through GHG accounting. Alternative asset managers (AAMs) are increasingly considering PCAF's *Global GHG Accounting and Reporting Standard for the Financial Industry* (the "Standard") as the basis for estimating and reporting financed emissions. The Standard presents certain challenges and issues to further consider for AAMs specifically.

This alert seeks to (i) provide an overview of certain provisions of the Standard published by PCAF in December 2022; (ii) walk through examples of certain implications of the Standard; (iii) provide an illustrative example of the complexity faced by AAMs in the context of the Standard; and (iv) pose several questions for AAMs to further consider as they continue to improve emissions reporting. We also provide contact information for the Houlihan Lokey team members who can assist AAMs on these and related matters.

⁽¹⁾ United Nations Framework Convention on Climate Change (2022).
⁽²⁾ Synthesis Report of the IPCC Sixth Assessment Report (AR6) (2023).

Overview

The Standard supplements the GHG Protocol's *Corporate Value Chain (Scope 3) Accounting and Reporting Standard* and provides detailed methodological guidance for the measurement and disclosure of GHG emissions associated with seven asset classes: listed equity and corporate bonds, business loans and unlisted equity, project finance, commercial real estate, mortgages, motor vehicle loans, and sovereign debt.

The GHG accounting follows several straightforward formulas by asset class, as summarized below:⁽³⁾

Asset Class	GHG Accounting Formula ⁽⁴⁾
1. Listed Equity and Corporate Bonds	Company Emissions $\times \frac{\text{Outstanding Amount}}{\text{EVIC or (Total Company Equity + Debt)}}$
2. Business Loans and Unlisted Equity	Company Emissions $\times \frac{\text{Outstanding Amount}}{\text{EVIC or (Total Company Equity + Debt)}}$
3. Project Finance	Project Emissions $\times \frac{\text{Outstanding Amount}}{\text{Total Project Equity + Debt}}$
4. Commercial Real Estate	Building Emissions $\times \frac{\text{Outstanding Amount}}{\text{Property Value at Origination}}$
5. Mortgages	Building Emissions $\times \frac{\text{Outstanding Amount}}{\text{Property Value at Origination}}$
6. Motor Vehicle Loans	Vehicle Emissions $\times \frac{\text{Outstanding Amount}}{\text{Total Value at Origination}}$
7. Sovereign Debt	Sovereign Emissions $\times \frac{\text{Outstanding Amount}}{\text{PPP-Adjusted GDP (International USD)}}$

The methodologies in the Standard apply the same general attribution principles across all asset classes:⁽⁵⁾

1. Financed emissions are always calculated by multiplying an attribution factor (specific to that asset class) by the emissions of the borrower or investee.
2. The attribution factor is defined as the share of total annual GHG emissions of the borrower or investee that is allocated to the loans or investments.
3. The attribution factor is calculated by determining the share of the outstanding amount of loans and investments of a financial institution over the total equity and debt of the company, project, etc., to which the financial institution has lent money or in which it has invested capital.

(3) *The Global GHG Accounting and Reporting Standard for the Financial Industry—Executive Summary (December 2022).*

(4) EVIC refers to enterprise value including cash.

(5) *The Global GHG Accounting and Reporting Standard for the Financial Industry (December 2022), page 40.*

For purposes of this alert, we will focus on only the first two asset classes listed above. While the basic formula is the same for each, a closer read of the Standard clarifies that for listed equity, EVIC is based on the public market value of equity securities, whereas for business loans and unlisted equity (areas in which most AAMs are highly active), the Standard clarifies that EVIC is based on the book value of debt and equity.

Implications

The Standard applies simplistic formulas and is generally easy to follow. Ease of implementation is no doubt an extremely important goal for wide adoption.

Nevertheless, for AAMs in particular, the distinction between public and private is important to consider. Below, we consider three hypothetical scenarios and the potential impact on GHG reporting.

Framework

In the following illustrative scenarios, the hypothetical company EmitCo has 5 units of GHG emissions, the following starting balance sheet, and allocated GHG emissions for a 20% equity holder and a 50% debt holder:

Assets = 30	Debt = 10
	Equity (Book and Market Value) = 20
20% Equity Owner's Allocated GHG = $5 \times (20 / (10+20)) \times 20\% = 0.67$	
50% Debt Holder's Allocated GHG = $5 \times (10 / (10+20)) \times 50\% = 0.83$	

Scenario One: Impairment of Older Business

EmitCo has a long history and a balance sheet weighted toward older assets. Recently, EmitCo took a large impairment charge on its legacy business, resulting in a 40% decline in the book value of its equity. There is no fundamental change in the fair market value of the business, as the impairment is related solely to legacy assets that were no longer driving value.

If EmitCo Was Public (Asset Class 1)	If EmitCo Was Private (Asset Class 2)	Comparison to Baseline ⁽⁶⁾
Debt = 10, Public Equity = 20	Debt = 10, Private Equity = 12	FMV ⁽⁷⁾ Unchanged; BV ⁽⁸⁾ of Equity ↓40%
<u>GHG Impact:</u> 20% of Equity Value = $20\% \times 20 = 4$ Allocated GHG = $5 \times (4 / (10+20)) = 0.67$	<u>GHG Impact:</u> 20% of Equity Value = $20\% \times 12 = 2.4$ Allocated GHG = $5 \times (2.4 / (10+12)) = 0.55$	<u>GHG Accounting Impact</u> Private company equity investor records lower allocated GHG.
50% of Debt = $50\% \times 10 = 5$ Allocated GHG = $5 \times (5 / (10+20)) = 0.83$	50% of Debt = $50\% \times 10 = 5$ Allocated GHG = $5 \times (5 / (10+12)) = 1.14$	Lender to private company records higher allocated GHG.

(6) Comparisons are discussed relative to the unchanged EmitCo scenario in each case.

(7) FMV refers to fair market value of equity; for purposes of this alert, there is no distinction between FMV and fair value.

(8) BV refers to book value as shown on the balance sheet.

In this example, an accounting impairment causes an increase in allocated GHG for debt investors (lenders) and a decrease in allocated GHG for equity investors for private investments when compared to the same company if it was public.

Scenario Two: Passage of Time and Increase in Fair Market Value

EmitCo has been successful over the past several years, and the fair market value of its equity has doubled. It has distributed excess cash flow as dividends, and as a result, its book value of equity is unchanged.

If EmitCo Was Public (Asset Class 1)	If EmitCo Was Private (Asset Class 2)	Comparison to Baseline
Debt = 10, Public Equity = 40 <u>GHG Impact:</u> 20% of Equity Value = $20\% \times 40 = 8$ Allocated GHG = $5 \times (8 / (10+40)) = 0.80$ 50% of Debt = $50\% \times 10 = 5$ Allocated GHG = $5 \times (5 / (10+40)) = 0.50$	Debt = 10, Private Equity = 20 <u>GHG Impact:</u> 20% of Equity Value = $20\% \times 20 = 4$ Allocated GHG = $5 \times (4 / (10+20)) = 0.67$ 50% of Debt = $50\% \times 10 = 5$ Allocated GHG = $5 \times (5 / (10+20)) = 0.83$	FMV ↑100%; BV of Equity Unchanged <u>GHG Accounting Impact</u> Public company equity investor records higher allocated GHG. Lender to public company records lower allocated GHG.

In this example, the increase in equity value is not reflected in the private company's book value, resulting in greater allocated GHG for lenders and lower allocated GHG for equity investors for private investments when compared to the same company if it was public. We note that the increase in public equity markets over time has resulted in some financial institutions, as lenders reporting lower financed emissions, exactly like this example shows, is possible.⁽⁹⁾

Scenario Three: Distress

EmitCo has encountered financial distress, resulting in the fair market value of equity declining significantly. At the same time, equipment and other fixed assets have not yet been impaired and may not reflect the current state of distress, leaving the book value of equity unchanged.⁽¹⁰⁾

If EmitCo Was Public (Asset Class 1)	If EmitCo Was Private (Asset Class 2)	Comparison to Baseline
Debt = 10, Public Equity = 2 <u>GHG Impact:</u> 20% of Equity Value = $20\% \times 2 = 0.4$ Allocated GHG = $5 \times (0.4 / (10+2)) = 0.17$ 50% of Debt = $50\% \times 10 = 5$ Allocated GHG = $5 \times (5 / (10+2)) = 2.08$	Debt = 10, Private Equity = 20 <u>GHG Impact:</u> 20% of Equity Value = $20\% \times 20 = 4$ Allocated GHG = $5 \times (4 / (10+20)) = 0.67$ 50% of Debt = $50\% \times 10 = 5$ Allocated GHG = $5 \times (5 / (10+20)) = 0.83$	FMV ↓90%; BV of Equity Unchanged <u>GHG Accounting Impact</u> Public company equity investor records lower allocated GHG. Lender to public company records higher allocated GHG.

(9) "Why Those Bank Emissions Numbers Are So Rosy," Bloomberg, November 8, 2023.

(10) Assumes any net losses are immaterial to historic retained earnings or otherwise not yet recorded.

In this example, the public company shows a significant shift in allocated GHG to lenders, which is logical in a distressed scenario in which creditors may ultimately own the company. The decrease in value is not reflected in the private company's book value of equity, resulting in significantly less allocated GHG for lenders and significantly greater allocated GHG for equity investors for private investments when compared to the same company if it was public.

The risk of financial distress impacting allocated GHG is particularly relevant to private-credit-focused investors and distressed debt AAMs.

A simplified summary of the scenarios and their hypothetical impact on allocated GHG to equity and debt capital providers is below:

Base Case	20% Equity Allocated GHG		50% Debt Allocated GHG	
	0.67		0.83	
Scenario: Description	Public/FMV	Private/BV	Public/FMV	Private/BV
1: Large Impairment	0.67	0.55	0.83	1.14
2: Increase in FMV	0.80	0.67	0.50	0.83
3: Distress	0.17	0.67	2.08	0.83

AAMs and the Standard

AAMs frequently deploy complex, bespoke structuring in private credit transactions. In addition, AAMs are far more likely to invest in private equity than public securities. Lastly, AAMs' investments are more likely to have warrants, conversion features, or complex waterfall structures. We expect these issues, among many others, will make the Standard more difficult to apply for many AAMs.

Some of the issues that may be encountered by an AAM include:

- Lack of a balance sheet (audited or unaudited) to calculate the book value of equity at the entity at which the credit has been extended.
- Bespoke structure and collateral basket could be interpreted as either private credit or project finance, which may have implications on the amount of GHG allocated at the project level versus the company level.
- Treatment of assets that are inside or outside a particular collateral pool.
- Allocation of company-level GHG among special purpose vehicle(s).
- Warrant coverage, share pledges, cross-collateralizations, or other guarantees that have implications on GHG allocation.

Concluding Thoughts

The Standard is a simple framework for allocating GHG emissions to investments. That said, the use of the book value of equity has implications relative to the fair market value framework. This also has implications for stress testing and scenario analysis for potential GHG emissions exposure.

AAMs, in particular, may face more challenges in applying the Standard, given the complexity of their investments. As AAMs begin and progress through their emissions reporting, there are several questions to consider. For example:

- Do you have access to readily available emissions data?
- Are you estimating emissions for investments where there is incomplete or missing data?
- Have you set a baseline for tracking emissions?
- Have you identified or disclosed an emissions reduction target? Is it science-based?
- Have you conducted a scenario analysis?

We are here to provide support as you navigate the process.

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