



Scope 3 – Category 15 GHG Emissions

April 26, 2023



New challenges and opportunities are quickly reshaping finance companies. As a result, financed emissions have grown extremely large and complex, touching almost every asset class and financial activity, from simple small business loans to the financing of carbon-intensive factories and construction projects. It is critical for organizations to build operating models and techniques to understand the sources of greenhouse gases and minimize scope 3 emissions.

This webcast covered the methodology, data, and calculation concerns for estimating and assessing funded emissions, greenhouse gas (GHG) Protocol, and Partnership for Carbon Accounting Financials (PCAF).

Panelists addressed the following topics:



Overview of PCAF methodology

PCAF is a global partnership of financial institutions who work together to develop and implement a harmonized approach to assess and disclose the GHG emissions associated with their loans and investments. PCAF is the recommended methodology by Task Force on Climate-Related Financial Disclosures (TCFD) to estimate financed emissions. It is in line with the GHG Protocol, and it establishes comprehensive global standardized frameworks to measure and manage GHG emissions from private and public sector operations.

The importance of financed emissions

Financed emissions constitute a considerable portion of global GHG emissions. They are accountable for more than 99% of financial institutions' overall emissions. In addition to increasing global climate risk, unaccounted financed emissions expose financiers to reputational and financial risk. Financed emissions estimation is an integral part of target setting and transition risk assessment per TCFD requirements.

Sources of company emissions

GHG emissions are divided into three categories for businesses and organizations –

- Scope 1: It comprises direct emissions from activities such as fuel combustion or direct emissions from refrigerant use.
- Scope 2: It includes indirect emissions related to power use.
- Scope 3: It includes indirect emissions from all upstream and downstream activities.

Scope 3 is further divided into 15 groupings, with category 15 focused on investment-related emissions, referred to as financial emissions. The primary distinction between the scopes is that the emissions that are owned or controlled by a financial institution or a company are under scope 1 and 2, whereas scope 3 emissions are the result of a company's activities but occur from sources that are not owned or controlled by the company.

High-level financed emissions methodology

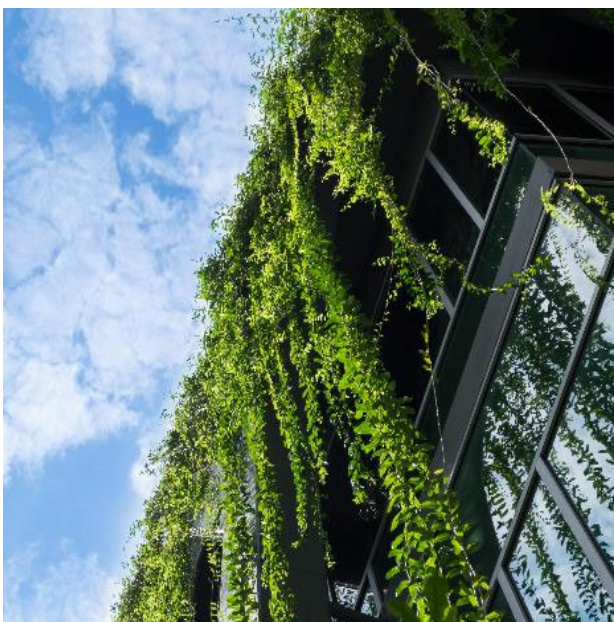
PCAF provides a methodology to estimate financed emissions for six asset classes including listed equity and corporate bonds, business loans and unlisted equity, commercial real estate, project finance, mortgages, and motor vehicles. Although the calculations are different for each of these asset classes, mainly because of different data elements, there are two main components. The first is the attribution factor which is defined as the share of emissions of the borrower or investee that is allocated to the loans or investments. The second component is emissions which are calculated per asset class, with specific requirements across data quality tiers.

Data requirements for financed emissions estimation

PCAF, in addition to providing methodologies for calculating finance emissions, provide a range of quality scores for each asset class, ranging from one to five, with a score of one indicating the highest certainty or granularity of the estimation and five indicating the least specificity. Thus, lower quality ratings rely on extrapolation statistical data and fewer counterparty specific information, whereas high quality scores demand extensive counterparty specific energy consumption emissions and financial data.

PCAF Global GHG Accounting and Reporting Standard

PCAF is well recognized for its finance emissions guidelines, but PCAF's global GHG Accounting and Reporting Standard includes two additional elements. It provides standards for measuring GHG emissions connected with capital market facilitation operations that are typically off-balance sheet and not listed on book, such as loans and investments. It also serves as a standard for measuring and reporting GHG emissions from re/insurance underwriting portfolios ("Insurance-Associated Emissions Standard").



Reporting, disclosure, and technology considerations

As standards and frameworks become more universal and complementary, regulators are finding it convenient to propose guidance that is easily adoptable, especially for those already subscribed to the industry framework or standard. For example, businesses that made a commitment to the TCFD or the task force for climate-related financial disclosures published separate TCFD sections. Task force on climate-related financial disclosure has a total of 11 recommendations for companies to disclose ESG metrics across four pillars: governance, strategy, risk management, and metrics & targets. Another prominent framework is Global Reporting Initiative (GRI), different than TCFD which is solely focused on climate related impacts. GRI sets forth guidance on how sustainability information in general was reported by companies, including scope 3 finance emissions. Out of these two frameworks and standards, the TCFD is the one being adopted by many worldwide regulators as a foundation for climate-related disclosures. This includes the SEC from the U.S., JFSA from Japan, and OSI in Canada. OSI in Canada has recently announced its own set of required climate-related disclosures.

U.S. Regulatory commitments are increasing and are even more focused on climate related risks. Notable developments in 2022 included:

- FDIC proposed principals for climate-related financial management for large banks
- SEC proposed to enhance and standardize climate related disclosures for public companies
- DOJ/EPA announced a new environmental justice strategy
- FRB proposed principles for climate-related financial risk management
- FRB planned launch of a pilot climate scenario analysis
- FSOC recommendations for agencies to coordinate and improve the availability of climate-related data needed to assess risk
- NY DFS proposed guidance on climate-related financial risk management
- DOL final rule under ERISA permitting consideration of ESG factors in selecting retirement investments

In addition to the SEC proposed rule, which covers skill-based emissions, there is similar federal guidance on how banks should handle climate sale analysis to better address and manage climate errors, which is currently undergoing a pilot exercise with six large banks, including Bank of America, Citibank, and others. Related legislation, such as the Inflation Reduction Act, which tries to increase energy financing through tax incentives, might provide opportunities for businesses to diversify their portfolios to include less carbon-intensive assets. As a result, their future finance departments will be reduced. This is extremely significant for the financial sector, and it has far-reaching consequences.

Establishing an operating model

The offices were established primarily to streamline reporting processes and to coordinate senior leadership with associated business divisions on various goals. These organizational structures and responsibility assignments take on greater significance when accounting requirements for financial dimensions are included. While the ecosystem for emissions data is still growing, the accuracy of the data will come under more scrutiny due to its alignment with SOX-like insurance. Businesses are making changes to their current governance structures to include committees at the management and board levels to supervise data and reporting strategy in response to this. This entails delegating tasks to watch for new legislation and determining whether they will change current policies, data methods, or even organizational structure.

Establishing data controls

Technology solutions like Workiva can help speed reporting by automating a significant portion of the data ingestion and final output, as opposed to arranging these operations manually in Excel. Other technological tools, such as Salesforce Net Zero cloud, can be used to manage an organization's carbon footprint and emission targets. Platforms like Microsoft Sustainability Cloud can also be utilized to streamline the complete data integration, computation, and reporting processes. The best technology choice will rely on an organization's current infrastructure. However, every solution is adaptable to fit the needs of any organization. Companies must take data fidelity into account before selecting an effective technology solution. All data elements that are disclosed during ESG Reporting are passed through a series of controls throughout the data lifecycle to ensure accuracy, privacy, and completeness.

ESG Metrics prioritization methodology

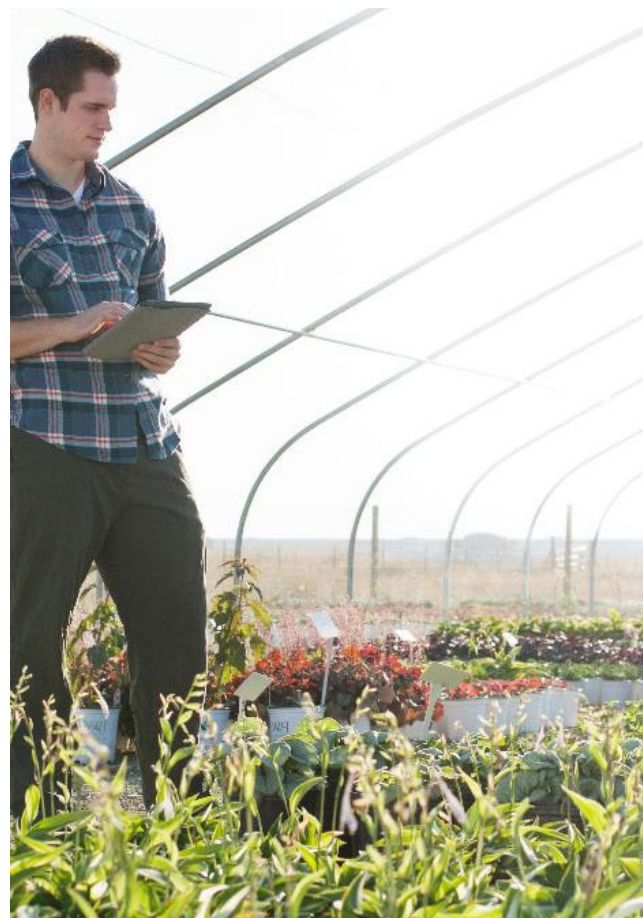
With several overlapping frameworks, standards, and rules, it might be difficult to understand the data and type of data that needs to be collected. In the case of finance emissions frameworks, such as GRI, organizations must report on all seven GHGs, including carbon. While others such as the TCFD, require organizations to report on the aggregate or CO2 equivalent figure. There are conditions in the SFC plan for companies to declare their best emissions as a value range or use an estimate if the relevant data isn't available in time for reporting. Managing these and other differences between similar measures can be difficult for organizations. By establishing a process which prioritizes metrics needed for disclosure, and then assessing required disclosures to play standards and frameworks, organizations can adopt a high-value, low-risk framework for metric prioritization and align their data reporting strategy accordingly.



Financed emissions estimation

When determining the financed emissions for businesses across various sectors, there are a number of useful PCAF methodologies. The quality score can be calculated based on data that are accessible to organizations. Major factors such as outstanding amount, company revenue, Enterprise Value Including Cash (EVIC), and verified/unverified GHG emissions, among others, can be used to construct a formula to understand their quality score as well as financed emissions. It helps the companies to implement customized methodologies and operating models to reduce emissions.

When company specific emission data is unavailable, publicly available U.S. Extended Input-Output (EEIO) Models can be used to estimate GHG emissions per unit revenue by sectors of the economy. EEIO is based on traditional economic input output models and provides a mathematical framework to quantify inter-industry transactions between different sectors of the economy or in a region. EEIO models quantify the direct and indirect environmental impacts that result from economic activities via translating the monetary flows between sectors into environmental pollution and emissions. EEIO models are well established and recommended by PCAF and GHG Protocol.





KPMG service offerings

KPMG has developed financed emissions calculation engines which provide asset class-specific accelerators to our clients and engagement teams to facilitate consistent financed emissions estimates across all PCAF-aligned asset class types.

- **Minimal Data Requirements:** KPMG accelerators require minimal asset-level data to estimate emissions at data quality scores 1-5. At data quality score five, few data points per asset (depending on the asset class) are required to estimate financed emissions while supporting gap identification to inform data coverage going forward.
- **Rapid Project Turnaround:** The minimal data requirements and computational efficiency of the accelerators allow for rapid calculations. Each engagement follows four simple steps: request for information and data collection, variable alignment and data cleaning, assumption alignment and emissions calculation, effective challenge support, and finalization.
- **Average Factor and Assumption Flexibility:** KPMG accelerators contain various publicly available average emission factors, regional statistical data, sector intensity factors, and global warming potentials. The factor flexibility allows for selection of public sources that align with other GHG inventory scopes and categories. It also calculates financed emission ranges for reporting, given the inherent uncertainty in financed emissions estimates.

Apart from the above KPMG service offerings, KPMG financed emissions services provide dedicated dashboard views across multiple levels including asset class, sector, counterparty, and geography that can serve a variety of purposes:

- Provide high-level statistics on a bank's exposure, financed emissions, and PCAF quality score
- Provide asset class-specific view on breakdown of emissions and emissions trends over years
- Inform nuanced internal and external reporting requirements by periodic refresh of financed emissions calculations
- Drive decarbonization strategies by identifying high emitting contributors and geographies



Closing comments

Many financial institutions are currently developing or revising their decarbonization strategy to reduce GHG emissions and achieve net-zero emission targets. To help them get closer to their targets, PCAF provides thorough methodology recommendations for measuring and disclosing GHG emissions. A decarbonization mindset must live within every part of an organization so that climate risks and opportunities become an instinctive part of business thinking.



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