



CARBON EMISSIONS MANAGEMENT

Organisational Boundaries & Emissions Materiality

From Verisae, Inc. | November 2009



ABSTRACT:

How will you quantify emissions across tentacle-like organizational boundaries? It is advised to account and track carbon emissions to a spectacular level of detail. Else, your distributed enterprise may face the consequences of an inventory caught in the materiality paradox and fraught with brand, corporate, and financial risk.

PAUL HEPPERLA VP of Sustainability Solutions

He brings more than 20 years experience solving customers' carbon and energy management challenges. He believes more discussion of emissions materiality is warranted among companies working to manage carbon inventories. Getting it right is priceless. Getting it wrong is costly.



CARBON EMISSIONS MANAGEMENT Where A Carbon Footprint Starts, Ends, and the +/- 5% Paradox

INTRODUCTION

Regulatory bodies worldwide are beginning to mandate carbon emissions management and reporting. An enterprise carbon footprint is a mosaic of emission sources, spreading across a global stage, and extending to the asset level throughout hundreds of facilities. Not only are you challenged with optimizing your organizational boundaries but you may also be miscalculating emissions due to a misunderstanding of materiality, to which you may face some grievous consequences.

Have you thought strategically about your organizational boundaries?

Organizational boundaries set the requirements for emission calculations. They define your enterprise structure from the perspective of emissions reporting. They determine the proportions of your Scope 1, 2, or 3 emissions to allocate to your footprint and in what proportions. Boundaries are based on either the equity share or operational control approaches.

The equity share approach is based upon each entity's make up a larger enterprise and its share of economic interest. The percentage would reflect the extent of rights or ownership each entity has based on its profit and loss as reported against the parent enterprise. The control approach requires 100% reporting of all emissions from all operations under the entity's operational or financial control.

The organizational boundaries established for your initial carbon baseline are of strategic and financial importance. Deciding between equity share or control approach across multiple divisions, subsidiaries, partnerships, or joint ventures involves a dizzying array of discussions, radical collaboration among partners and related third parties. It demands extreme transparency.



How to quantify emissions across your tentacle-like organizational boundaries?

It is advised to account for emissions to the lowest level possible. This means tracking to a spectacular level of detail. Else, you may face the consequences of an inventory that is fraught with brand, corporate, and financial risk. If you are publicly announcing your baseline or promoting reductions, you must answer the following with great certainty. First, you must audit your carbon inventory and verify its accuracy. Second, you must communicate transparently to all interested parties who may inquire.

Have you accounted for 100% of your material greenhouse gas emissions?

Most organizations begin measuring emissions using spreadsheets and manual data collection. Perhaps, you're basing your approach on a well known reporting protocol or a commandeered template. Maybe, you are starting with "educated guesswork" to piece together your carbon story.



You're wondering:

- 1. How do Scope 1, 2, & 3 emissions affect my emissions?
- 2. How do third party logistics considerations affect my emissions?
- 3. How does each facility's determination of materiality affect my emissions?

Progressive enterprises do leverage carbon accounting software. Unfortunately, even these leaders may be defining organizational boundaries without a strategic mindset. The approach an enterprise takes with their carbon reporting is not unlike tax or financial reporting. "C" Corporations report differently than "S" Corporations. Likewise, the equity share approach has a different impact on your carbon footprint than operational control.

These inherent uncertainties of materiality can be a result of rounding errors, numerical mistakes, or non-specific emission sources. Still this only accounts for emissions materiality at the facility level unless there is a push to collect asset level data. Any difference between true emissions and derived emissions due to the inaccuracy of materiality will account for a variance of +/- 5%.

What is less the damaging carbon emissions reporting error:

- An error at the asset level (lbs of CO2e),
- An error at the facility level (tons of CO2e), or
- An error at the enterprise level (MTs of CO2e) ?

UNPRECEDENTED ENTERPRISE EMISSIONS VISIBILITY

The source of greatest enterprise risk is the "guessed carbon footprint". It relies on assumptions and estimates without the automated sourcing of emissions data. It is not practical, cost effective, or acceptable risk to aggregate emissions data across locations, assets, or the supply chain partners without the proven enterprise tools.



Sustainability Resource Planning (SRP) platform offers:

- Visibility and opens communication channels
- An integrated carbon solutions to mitigate risk
- A means to optimize organizational boundaries
- Ways to collaborate outside of your own enterprise

It is tracking emissions sources to the asset level that will unlock a data-driven foundation for informed decision making. Gain unprecedented visibility of your true carbon liabilities or assets. Verisae offers an enterprise carbon accounting ("ECA") solutions to enable your distributed enterprise to measure, monitor, and actively manage carbon emissions—globally.

ABOUT VERISAE

Verisae (www.Verisae.com) develops, markets, and licenses Sustainability Resource Planning (SRP) ™, an enterprise solution that empowers organizations to make "sustainability actionable". Verisae helps measure, manage and monetize energy costs and carbon emissions. SRP covers the core functions of sustainability needs by combining multiple business processes and systems into one database to use across the enterprise. Our platform improve operational efficiency, make sustainability initiatives actionable, and reduce energy costs carbon emissions for distributed enterprises and energy companies.

ENVIRONMENTAL MANAGEMENT

Carbon Emissions Manager

• Scope 1 & 2 Emissions

• Scope 3 Emissions

Sustainability Project Manager Water Manager Waste Manager

ENERGY MANAGEMENT

Energy Supply Manager

- Utility Bill Processing
- Active Energy Response
- Utility Contracts Management
- Energy Spend Manager

Energy Demand Manager

- Real-Time Energy Management
- Active EE Dispatch
- Energy Efficiency Projects

ASSET MANAGEMENT

Service Manager

- Service Provider Management
- Financial Management

Asset Manager

- Facilities Management
- Equipment Management
- Asset Monitoring & Alarming
- Parts & Inventory Management

Procurement Manager

- Rebates & Incentives Management
- Total Capital Planning
- Equipment Procurement

Given the heightened priority of corporate sustainability, Verisae is positioned right now to enable organizations to establish a carbon footprint baseline, outline energy management options, and provide a comprehensive corporate sustainability action plans in a manner of months. All of which can be implemented with metrics in place to highlight bottom-line cost savings and return on investment timelines.

Today, Verisae delivers a broad range of sustainability solutions to over **40 global clients** with a service network of **7,500 third party service providers** consisting of **60,000 application users**. Our integrated sustainability platform actively tracks over **2,100,000 million assets** across **20,000 sites**. We help measure, manage and monetize energy costs and carbon emissions. We are uniquely position to help organizations prove return on investment (ROI) for sustainability initiatives.

VERISAE WORLDWIDE HEADQUARTERS

100 North First Street, Suite 701A	MAIN	WEB
Minneapolis, MN 55403 USA	612 455 2300	www.verisae.com

EMAIL sales@verisae.com

