A Guide to Scope 3 Emissions Reporting

Streamline Scope 3 Reporting with ESG reporting software

enVIZI

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Introduction

Investors are increasingly scrutinizing ESG performance – and looking for companies to rise to the challenge.

There has been exponential growth in organizations calculating and reporting emissions from their directly owned or controlled business activities (Scopes 1 & 2). And now there is a rising interest in the carbon we are not counting, which comes from all indirect impacts of an organization both upstream and downstream.These emissions occur as a consequence of business operations from sources that are not owned or controlled by that business directly – such as from the supply chain, transport to operational sites or to customers, product use, and end-of-life treatment.

Research indicates that 5.5x more emissions come from the supply chain alone, so **any organization that's serious about decarbonization should report and reduce Scope 3 emissions.**

Reporting and reducing Scope 3 emissions is of most immediate relevance to organizations who report to CDP or have committed to Science Based Targets; and it has the most impact for organizations that operate in one of the eight supply chains that account for over 50% of global emissions – namely food, construction, fashion, fast-moving-consumer-goods, electronics, automotive and freight.

Scope 3 reporting provides the opportunity for companies in key industries to multiply their carbon reduction impact by decarbonizing their supply chains.

Here's how to approach Scope 3 calculation and reporting in a systematic way, and how sustainability software like Envizi can help.

What Are Scope 3 Emissions?

GHG emissions are divided into scopes for calculation and reporting under the GHG Protocol Corporate Standard.
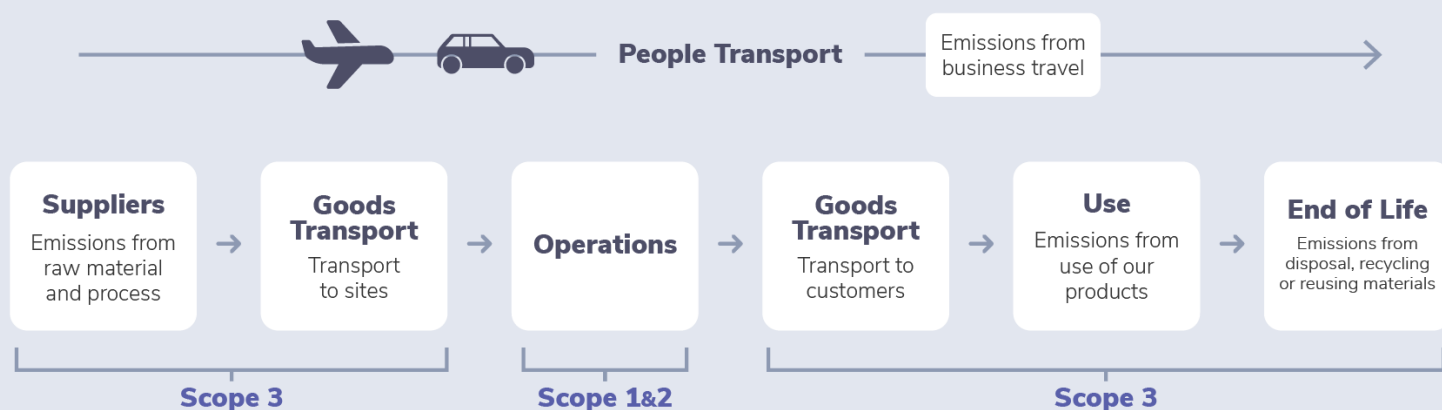
Scope 1 includes all "direct" emissions from an organization, which includes company vehicles, fugitive emissions from manufacturing processes and fuel combustion onsite (such as burning gas to produce heat).

Scope 2 encompasses "indirect" emissions from the consumption of purchased electricity, heat or steam.

Scope 3 requires organizations to look for implications of carbon emissions outside of their direct physical footprint, quantifying emissions through the value chain outside of the organization's direct control. This includes embodied emissions within resources consumed by the organization — paper used, waste produced, coffee consumed — and also the emissions of any suppliers, which are especially important to organizations that produce physical products.

Scopes 1 and 2 are the most controllable scopes for GHG accounting and reduction, and the focal point of any decarbonization journey. But for leading organizations under investor pressure and looking to expand their impact, Scope 3 emissions provide the opportunity to reach other emitters in their value chain – such as suppliers and customers – and influence them to reduce their emissions, too.

Decarbonization Across the Value Chain

People Transport — Emissions from business travel

Suppliers
Emissions from raw material and process

Goods Transport
Transport to sites

Operations

Goods Transport
Transport to customers

Use
Emissions from use of our products

End of Life
Emissions from disposal, recycling or reusing materials

Scope 3 | Scope 1&2 | Scope 3

Scope 3 and Supply Chain Emissions

Much of the discussion on Scope 3 focuses on the supply chain, and is sometimes referred to as 'supply chain emissions'. This is because, according to a 2020 World Economic Forum and BCG report, just eight supply chains (food, construction, fashion, fast-moving consumer goods, electronics, automotive, professional services and freight) account for over 50% of global emissions – with a significant share indirectly controlled by only a few companies.

This statistic is a reminder that organizations must consider climate impacts beyond the sphere of their own direct operations if they wish to make a difference.

This graphic shows how supply chain emissions from Scope 3 compare with direct emission by industry.

Your Impact Lies in Your Supply Chain

SECTOR	RATIO OF SUPPLY CHAIN TO DIRECT EMISSIONS
Retail	10.9
Hospitality	7.9
Manufacturing	6.5
Food, Beverage & Agriculture	5.9
Services	5.9
Biotech, Healthcare & Pharma	5.8
Infrastructure	4.8
Transportation Services	2.1
Apparel	2.1
Materials	1.3
Power Generation	1.3
Fossil Fuels	0.4

AVERAGE: 5.5

Source: CDP's Changing the Chain: Global Supply Chain Report 2020

Scope 3 Categories

Upstream Scope 3 Emissions

1. Purchased goods and services
2. Capital goods
3. Fuel- and energy-related activities
   (not included in scope 1 or scope 2)
4. Upstream transportation & distribution
5. Waste generated in operations
6. Business travel
7. Employee commuting
8. Upstream leased assets

Downstream Scope 3 Emissions

9. Downstream transportation & distribution
10. Processing of sold products
11. Use of sold products
12. End-of-life treatment of sold products
13. Downstream leased assets
14. Franchises
15. Investments

Source: GHG Protocol Scope 3 Standard

For reporting purposes, under the guidance of the GHG Protocol, Scope 3 emissions consist of 15 categories and fall into either 'upstream' or 'downstream' emissions types as shown in the table.

The most relevant Scope 3 emissions categories vary greatly both between and within industries (see figure below).

Scope 3 Emissions: Breakdown by Industry
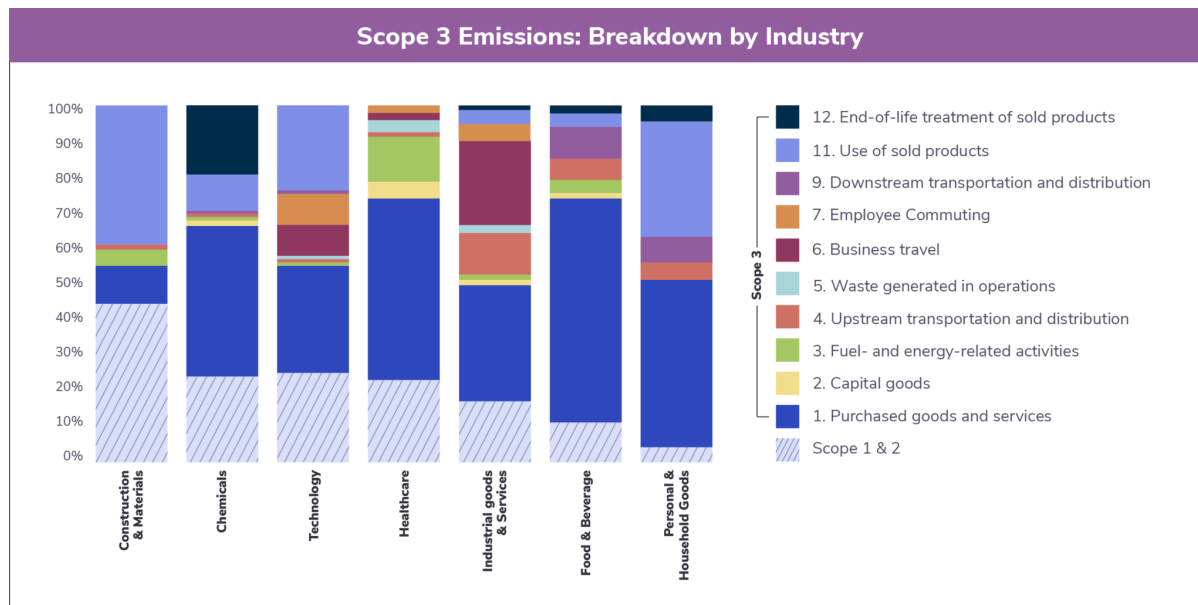
Source: Quantis

For example, vehicle manufacturers who produce fossil-fuel-powered cars would expect a significant portion of Scope 3 emissions to come from downstream category 11, "use of sold products", whereas in food and beverage / FMCG manufacturing, a significant portion of emissions would come upstream from category 1, "purchased goods and services". Within the commercial real estate sector, a real estate firm that develops buildings will have a very different Scope 3 category mix than a real estate investment trust that only invests in existing buildings.

Scope 3 Reporting:
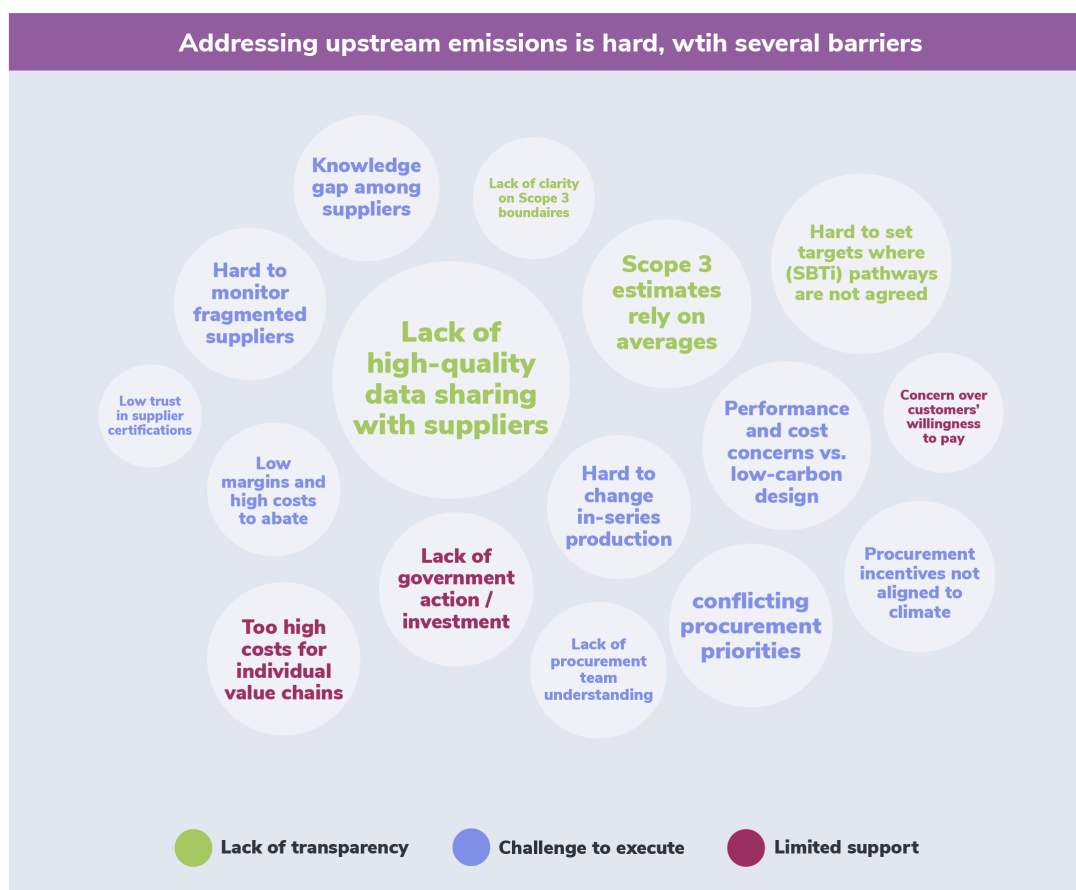# The Challenge and Opportunity

Scope 3 Reporting: the challenge

Scope 3 emissions present a significant opportunity for organizations to engage their suppliers to accelerate decarbonization globally. Supply-chain measures put in place by relatively few end-consumer companies can yield a signification flow-on affect by reducing emission for numerous organizations in the value chain.

But not without hard work. There are significant barriers that exist to report and reduce scope 3 emissions. The following challenges are most commonly cited:

- Difficulty establishing boundaries between scopes
- Difficulty capturing reliable data in a systematic and auditable way across numerous suppliers and locations
- Difficulty selecting emission factors to derive accurate calculations
- Challenges engaging with suppliers to both report and reduce emissions

Source: World Economic Forum, Net Zero Challenge, the Supply Chain Opportunity 2021

Scope 3 Reporting: the opportunity

Though robust and detailed processes for Scope 3 reporting are not standard practice among organizations today, we expect Scope 3 accounting to become more mature and widely adopted, following the same steep trajectory we've seen with Scope 1 and 2.
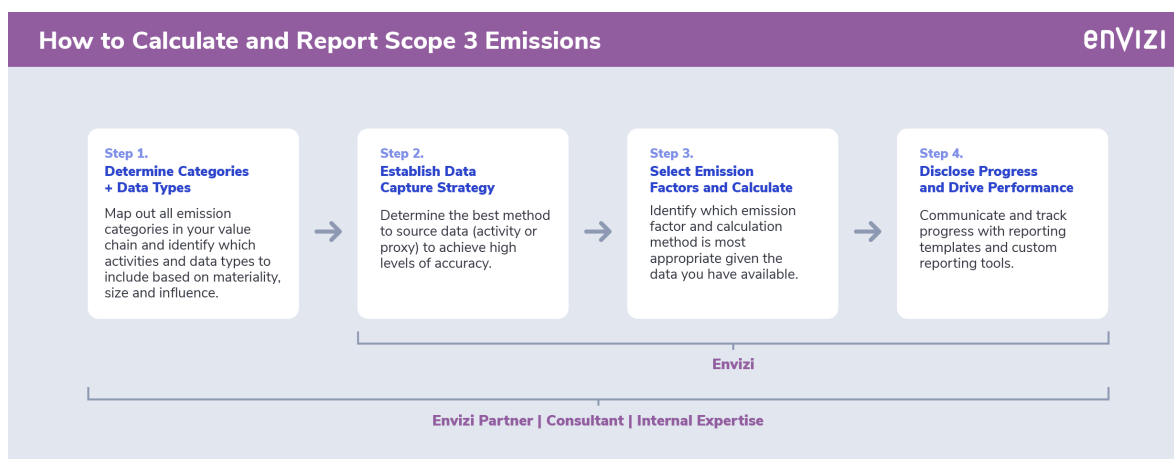
Any organization that's looking to lead in decarbonization should report and reduce Scope 3 emissions.

For those organizations reporting to CDP or committed to a Science Based Target, the challenges of sourcing, capturing and reporting on Scope 3 are immediate and real, but for any organization looking to lead on decarbonization, Scope 3 reporting should be part of the plan. The breadth of the data types can be large, and the size and complexity should not be underestimated. There's no escaping Scope 3 emissions – but getting a technology partner in place early in the process can simplify and streamline the process.
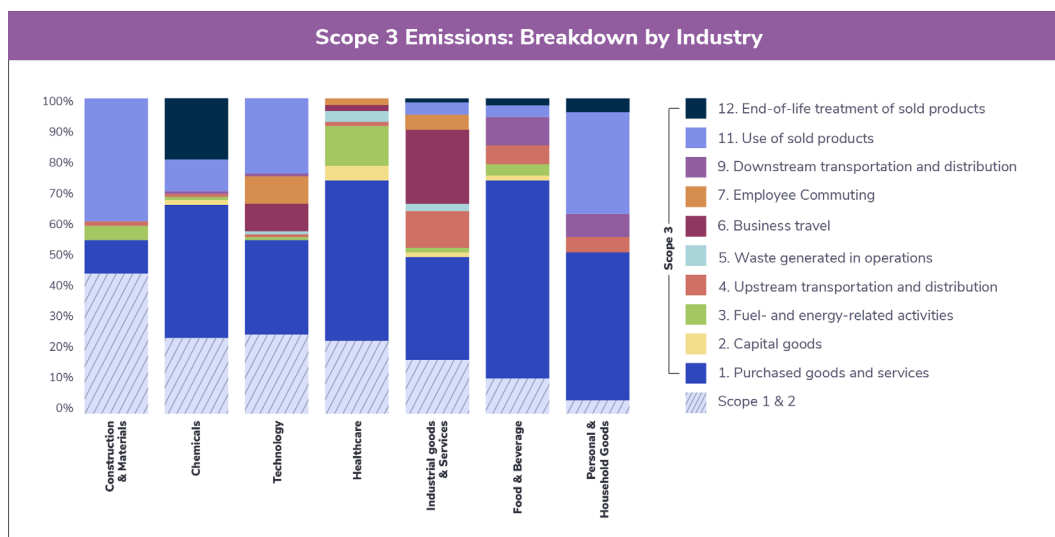
How to Calculate Scope 3 Emissions

ESG reporting software like Envizi can prepare organizations to meet this challenge, and simplify what may seem like a daunting task to calculate and report Scope 3 emissions. With over a decade of experience supporting sustainability leaders to streamline ESG reporting against all scopes, we recommend a systematic approach that's been tried and tested by our clients.

How to Calculate and Report Scope 3 Emissions

Step 1.
Determine Categories + Data Types

Map out all emission categories in your value chain and identify which activities and data types to include based on materiality, size and influence.

Step 2.
Establish Data Capture Strategy

Determine the best method to source data (activity or proxy) to achieve high levels of accuracy.

Step 3.
Select Emission Factors and Calculate

Identify which emission factor and calculation method is most appropriate given the data you have available.

Step 4.
Disclose Progress and Drive Performance

Communicate and track progress with reporting templates and custom reporting tools.

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Step 1. Determine which Scope 3 emissions categories and data types are most material (and open to influence) to your organization's footprint.

One of the biggest challenges is establishing the boundaries for your Scope 3 data; determining which emissions categories, and which suppliers / data types within each you will report. The most relevant Scope 3 emissions categories vary greatly both between and within industries. We recommend working with consultants or knowledgeable internal staff to apply the "relevance test" to determine the boundaries of your scope 3 reporting.

Scope 3 Emissions: Breakdown by Industry

Legend:
- 12. End-of-life treatment of sold products
- 11. Use of sold products
- 9. Downstream transportation and distribution
- 7. Employee Commuting
- 6. Business travel
- 5. Waste generated in operations
- 4. Upstream transportation and distribution
- 3. Fuel- and energy-related activities
- 2. Capital goods
- 1. Purchased goods and services
- Scope 1 & 2

Industries: Construction & Materials, Chemicals, Technology, Healthcare, Industrial goods & Services, Food & Beverage, Personal & Household Goods

Step 2. Establish a strategy for capturing the best information in the most efficient way.

After you've determined the boundaries of your Scope 3 reporting, the next step is to determine where you can source the data. A consultant can help you assess if you have access to primary or secondary activity data and where this data can be sourced. For example, you might already have data on purchased goods and services in your organization's accounting system, or you might be able to source data directly from your suppliers. Envizi's ESG reporting software supports this process by automating data collection from existing systems where available – helping to reduce manual errors, version confusion, or productivity loss. Envizi provides a flexible data structure to enable large organizations to easily set and change reporting boundaries, ensuring your GHG emissions calculations stay up to date as your organization changes. Additionally, we provide traceability to the source of data and an audit trail noting when changes were made to the dataset, and by whom. This helps reduce the risk of manual errors.
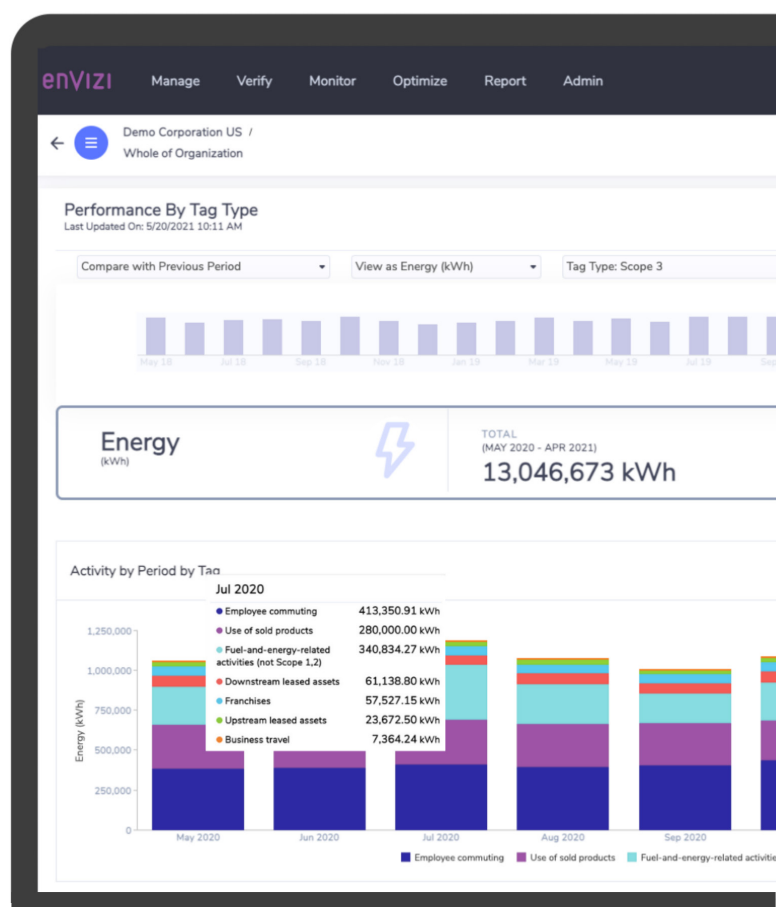

Step 3. Calculate emissions for each category using the most appropriate emission factor(s) and/or method(s).

After you've set your scope 3 boundaries and where you will source your data, you can determine which emission factor and calculation is most appropriate. Each category of Scope 3 emissions demand different emission factors and/or calculation methods, depending upon what information is available. For example, for category 1- purchased goods and services, if you only have access to spend data (dollar value) without a volume, quantity or weight for an item, you'd use the spend-based method and apply an emission factor to the dollar value to derive your emission calculation for that supplier. In other cases where you have a cradle-to-grave emission factor from the supplier, you can apply the supplier method. Envizi can capture and store publicly available emission factors from lifecycle data tables, as well as from US EPA (Climate Leaders), IEA National Electricity Factors, IPCC, as well as custom emission factors. We then apply our emissions engine and hierarchy management tools to derive GHG emissions calculations at any level of the organization – whole of enterprise, reporting group, location or sites.

Category 1: Purchased goods and services

Figure [1.2] Decision tree for selecting a calculation method for emissions from purchased goods and services
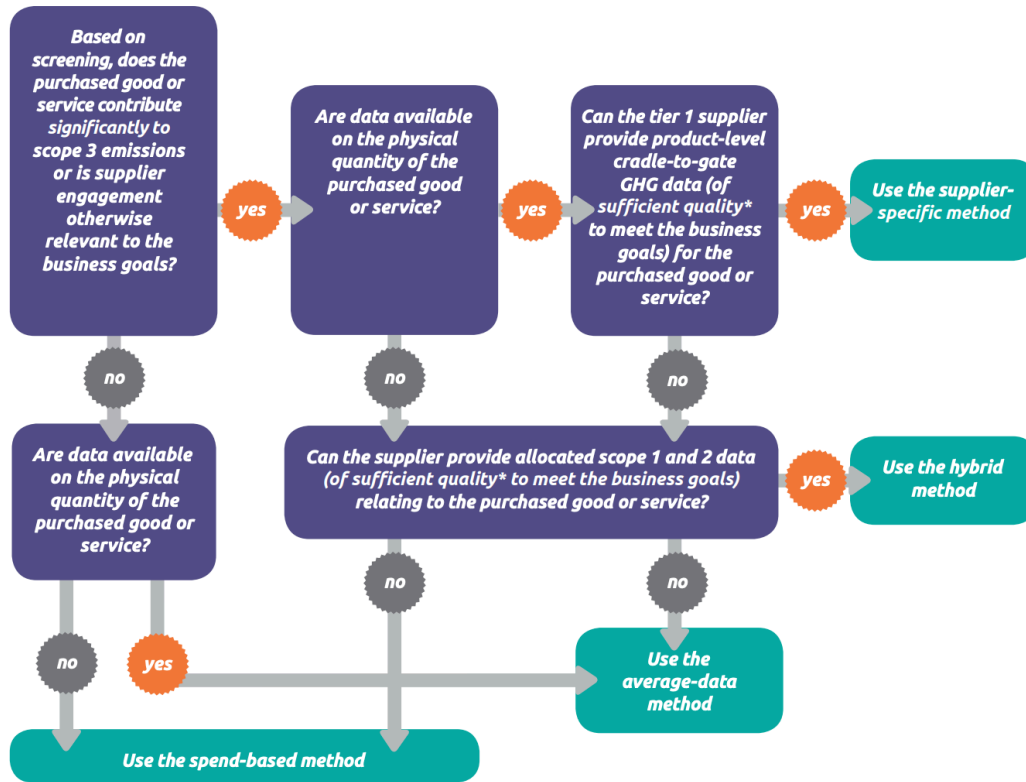
Source: GHG Protocol, Category 1: Purchased Goods and Services, Scope 3 Guidance https://ghgprotocol.org/sites/default/files/standards_supporting/Chapter1.pdf

Step 4. Disclose progress and drive performance.

Envizi organizes your GHG emissions data into a single source of truth and streamlines submissions to common sustainability guidance and reporting frameworks like CDP, GRI, ENERGY STAR and GRESB with pre-built templates aligned to their requirements. In addition, Envizi provides insight to drive performance improvement – internal reports that highlight emission reduction opportunities, workflow management tools such as KANBAN boards to encourage clear tracking and accountability for data capture tasks, and performance reports that keep key stakeholders informed of progress.
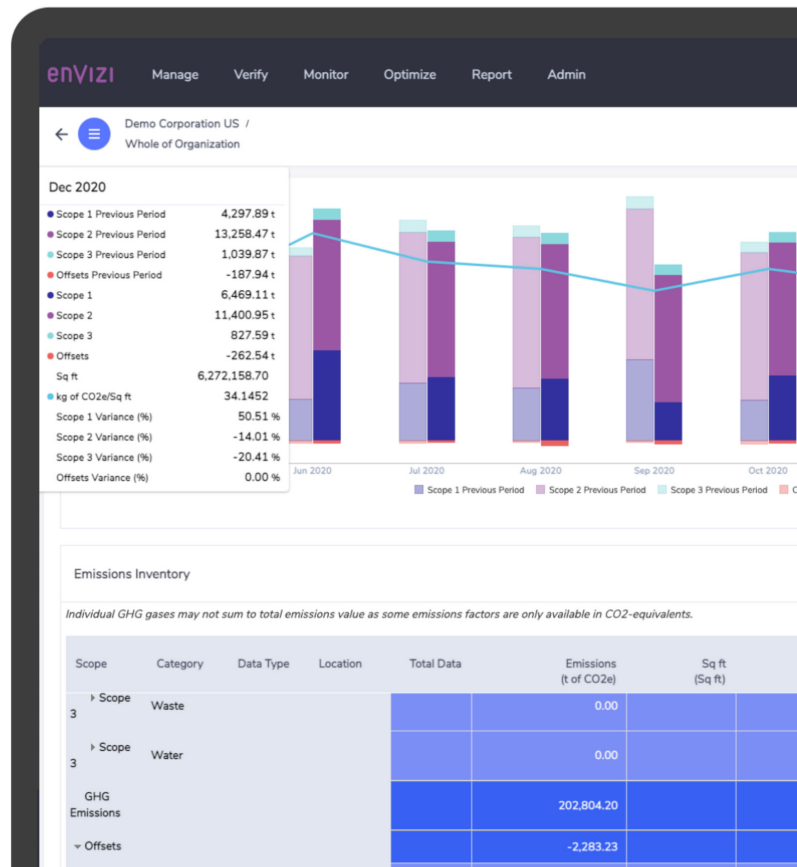
How to Reduce Scope 3 Emissions

Organizations that report and reduce Scope 3 emissions, especially within the top eight emitting supply chains (food, construction, fashion, fast-moving consumer goods, electronics, automotive, professional services and freight), can use their buying power to encourage and support the suppliers in their value chain to adopt more sustainable business practices.

While each business unit plays a critical role in business decarbonization efforts, a recent Accenture piece, Getting to "Net Zero" is a big gain for CPOs, highlights the opportunity for Chief Procurement Officers to reduce emissions through the supply chain. The Accenture survey found that 62% of customers want companies to take a strong stand on issues like sustainability and, the World Economic Forum suggested that a Net Zero Supply Chain would only increase end consumer's costs by 1-4%. While customers may drive business, investors and regulators can incentivize more progressive organizational commitments. In fact, the Accenture report shows that 75% of investors now integrate ESG (Environmental, Social and Governance) principles into their decision-making and that governments – even at the highest level – are creating binding targets to achieve carbon neutrality.

As a company accelerates its net zero journey, it will become increasingly clear that solutions to reduce emissions within the supply chain will be the most challenging, yet most impactful. The procurement team, supply chain experts and Chief Procurement Officers, can lead this charge to become the unexpected heroes of your organization's decarbonization efforts.

A recent report by the World Economic Forum and Boston Consulting Group outlines key strategies organizations can use to engage and support their supply chains:

Create transparency

1 Build value chain emissions baseline and exchange data with suppliers

2 Set ambitious reduction target on Scopes 1–3 and publicly report progress

Optimize for CO_2

3 Redesign products for sustainability

4 Design value chain/ sourcing strategy for sustainability

Engage suppliers

5 Integrate emissions metrics in procurement standards and track performance

6 Work with suppliers to address their emissions

Push ecosystems

7 Engage in sector initiatives for best practices, certification, advocacy…

8 Scale-up "buying groups" to amplify demand-side commitments

Enable your organization

9 Introduce a low-carbon governance to align internal incentives and empower your organization

Source: Interviews with 40 climate-leading CEOs and their teams and experts in Q3+4 2020, BCG

Simplify Scope 3 Emissions with Envizi

Scope 3 accounting is a complex, but not impossible. Over the past 10 years, Envizi has supported our clients to account for Scope 3 emissions across all 15 categories and drive leading performance, completely out of the box, saving you the cost and complexity of developing bespoke solutions. We continually update our software in line with customer needs to ensure they stay ahead. The following sustainability software features can simplify and strengthen your Scope 3 emissions accounting process.

Data capture and automation

Envizi supports data capture against all Scope 3 categories completely out of the box. We can automate files directly from the source, helping to reduce risk and productivity loss.

Audit trails and data health checks

Envizi can ensure that all data captured is traceable to the source, including time stamps and audit trail for any changes subsequently made to that data.

Custom reports to measure and disclose progress

Baseline emissions need to be recalculated when structural changes occur in the organization that change the inventory boundary (such as acquisitions or divestments). Envizi can simplify the process for recalculating baselines.

Support for emission factors and carbon accounting methodologies

Sustainability software can capture emission factors for lifecycle databases and nationally-recognized data tables such as US EPA (Climate Leaders), e-GRID USA, IEA National Electricity Factors, NZ Ministry for the Environment, and IPCC. In addition, ESG and sustainability software can allow system administrators to define custom time-varying factors.

Project management tools

In order to make meaningful comparisons of emissions over time, a GHG inventory boundary must be established between data sets. Envizi can apply in built tools that help set and manage boundaries over time.

Global coverage

Envizi supports multi-country, multi-currency, and multi-metric reporting, and allow data capture in local units of measure and currencies and have the ability to convert to standard units simplify the sustainability reporting.

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Contact Info@envizi.com or
visit www.Envizi.com to learn more.