

Cut Costs & Carbon with Sourcing Optimization

Why it's time to embrace sustainability in procurement

Over the past few years, there has been a significant increase in the prioritization of corporate Social Responsibility (CSR) in procurement, particularly initiatives focused on environmental sustainability. In fact, the Global EY Chief Procurement Officer Survey 2022 showed that 80% of surveyed CPOs were planning to recalibrate their strategies to place sustainability at the center of their priorities.

This shift towards sustainability is also reflected in the findings of Keelvar's 2023 Voices of Sourcing survey, which revealed a 20% increase in procurement professionals who rank sourcing sustainable suppliers as of the highest importance: up to 54% from 34% the previous year. This means that reducing Scope 3 emissions, which come from the activities of suppliers, is now a responsibility that falls on the shoulders of procurement teams.

The key here is to find innovative sourcing solutions to meet sustainability goals. However, many logistics service providers (LSPs) today don't have specific targets or ways to measure their CO2 emissions. As a result, change will have to be driven by the buyers of these services. Incentives will play a crucial role in motivating LSPs to address climate change. These incentives will be communicated and implemented through smarter sourcing strategies that reward sustainability and discourage pollution.

Procurement teams in large companies are in a unique position to lead the way and encourage sustainable supply chains. If they don't take on this leadership role, LSPs may be slow to make the necessary changes on their own. However, there are challenges to consider. Sustainability goals must be balanced with other important business objectives, ensuring well-rounded decision-making.

Taking actionable steps

To achieve sustainable sourcing, businesses need to strike a balance between cost, service, supplier qualification, and environmental goals. This is where next-generation sourcing technology becomes crucial. It helps gather the necessary data and align incentives towards sustainable practices. Accurate estimation of CO2 emissions and effective incentive management can drive significant changes. However, it's important to use these technologies wisely and adopt them thoughtfully.



% Highest level of importance to sourcing teams



This ebook provides insights into the importance of sustainability in procurement and offers actionable steps for businesses to optimize their sourcing practices to minimize emissions. It highlights the role of technology, particularly sourcing optimization tools, in supporting sustainable decision-making and tracking emissions throughout the value chain.

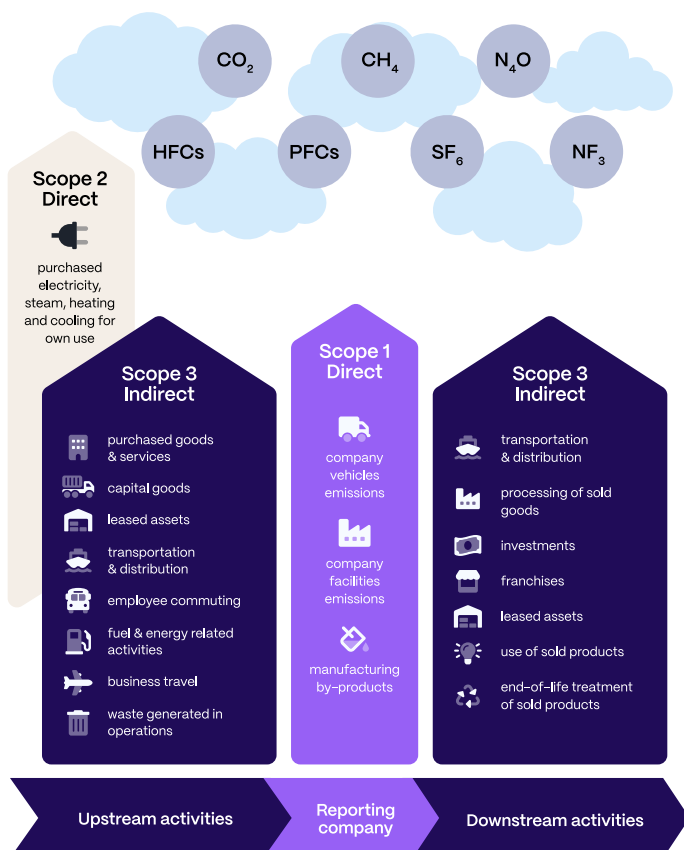
Decoding carbon emissions

While the reasons for climate change are well-documented and diverse, the transport and logistics sector plays a substantial role – accounting for around a quarter¹ of global CO₂ emissions. By 2050, the European Environment Agency expects global logistics to account for up to 40% of global carbon dioxide emissions if strong and effective actions are not taken.

Despite its substantial contribution, different countries vary in their enforcement of legislation requiring LSPs to report their greenhouse gas (GHG) emissions or implement measures to ensure annual reductions. Consequently, many service providers have not prioritized investing in emissions reporting, and few can accurately report GHG emissions at the customer or shipment level. For those that do report, they often rely on imprecise default values instead of capturing primary data directly from their assets.

Furthermore, although some companies have made public commitments to reduce GHG emissions by setting Science-Based targets, the focus tends to be limited to Scope 1 and Scope 2 emissions (emitted from their own operations) while excluding Scope 3 emissions, which encompass indirect transportation. Research has demonstrated that Scope 3 emissions can account for up to 70% of a company's total GHG emissions, surpassing the combined impact of Scope 1 and 2 emissions.

By neglecting Scope 3 emissions, companies miss a substantial opportunity to make significant reductions to their carbon footprint.



There are three scopes of emissions that are typically tracked:

- Scope 1:** Direct emissions from an organization's own operations
- Scope 2:** Indirect emissions from purchased electricity or heat
- Scope 3:** Indirect emissions that occur upstream or downstream, such as those from suppliers

Tracking emissions in all three scopes helps identify opportunities for reducing emissions throughout the value chain. However, Scope 3 emissions can be challenging to track and quantify because they often involve multiple players across complex supply chains.

¹ <https://www.eea.europa.eu/ims/greenhouse-gas-emissions-from-transport>

Costs vs carbon: Implications for sustainable procurement

To incorporate impactful sustainability measures into their processes, businesses need to shift their mindsets. In many cases, sustainable sourcing can be more expensive, and cost is king. Therefore, it's important for businesses to find a balance between cost, speed, quality of service, and environmental goals that work for them.

The challenge of reporting and making decisions that factor in carbon emissions alongside the impact on profit and loss (P&L) is significant. These challenges can include:

Data availability

Companies may not have access to accurate and comprehensive data on their total supply chain emissions, making it difficult to make informed decisions about effectively reducing their carbon footprint.

High costs

Sustainable sourcing can be expensive if companies need to invest in new manufacturing processes, suppliers, and transportation options to reduce their emissions.

Greater complexity

The complexity of supply chains can make it difficult to accurately track emissions and understand how different sourcing decisions impact the environment. It can also be challenging to communicate sustainability goals and achievements to business stakeholders.

Assessing trade-offs

Companies may face trade-offs between reducing carbon emissions and maximizing profits. For example, a sustainable sourcing decision that reduces emissions may lead to higher costs or longer lead times, which could negatively impact P&L.

Stakeholder engagement

Without strong buy-in from c-suite, suppliers, and customers, it can be challenging to implement sustainable sourcing practices and achieve meaningful reductions in carbon emissions.

Regulatory compliance

As governments around the world introduce more regulations and policies aimed at reducing carbon emissions, companies may face additional compliance requirements and reporting obligations that add to their workload and costs.

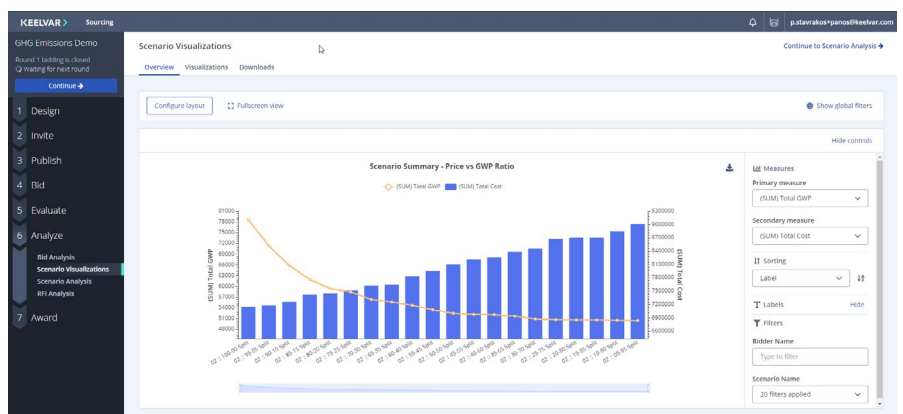
Collecting data is one challenge - using basic spreadsheets can only provide limited analysis of emissions - but using that data to help you make informed decisions quickly is another hurdle. Luckily, sourcing optimization technology can help with both, making the process more manageable.

Matching the data to the specific goods or services being purchased is a key part of the challenge, which is why Keelvar partners such as [Searoutes have developed tools that can help calculate emissions](#).

For large businesses, relying solely on spreadsheets is not enough for future success. To embed sustainability into scalable sourcing processes, robust software applications that can gather data from suppliers and automate reasoning, data cleansing, and reporting are essential.

Putting sustainable sourcing into practice

To make sustainable sourcing decisions, businesses need to implement a competitive bidding process that considers environmental factors. To effectively track Scope 3 emissions, organizations must actively incorporate this data into their procurement and supply chain processes.



Sustainability, optimized

Sourcing optimization is a powerful approach that enables the integration and analysis of supplier emission data during the tendering process. Unlike traditional eSourcing, sourcing optimization offers a solver that can analyze complex trade-offs between multiple objectives.

This mathematical solver quickly computes the best combinations of offers from suppliers, considering various factors. By incorporating sustainability as an extra dimension, businesses can assess the cost, service, and carbon impact of different sourcing strategies to inform their decision-making.

For example, suppliers may offer different options in terms of equipment, processes, and pricing, and a modern sourcing optimization tool allows them to suggest alternatives that drive innovation and performance improvements.

Keelvar's Sourcing Optimizer uses powerful scenario visualization to let users take into account GHG emissions as part of the buying criteria in addition to price and service quality, and supports solutions to many of sustainable sourcing challenges. As a result, companies with supply chains have the opportunity to better understand their carbon footprint and take steps to reduce it.

The carrot & stick approach to optimized sustainability

When you aim to prioritize sustainability for your business, you have two main approaches to consider. The first approach involves implementing penalties to discourage polluters and favor sustainable suppliers. By imposing penalties proportional to excessive emissions, your business can create a stronger incentive for suppliers to reduce their environmental impact. This is known as the "stick" approach.

Alternatively, your businesses can allocate a portion of your budget specifically for sustainable sourcing. Within this budget, your sourcing teams can optimize their choices to prioritize sustainable suppliers.

By using scenarios and business rules, Sourcing Optimizer can help identify the best options that align with sustainability goals. Suppliers with modern, low-pollution fleets are more likely to receive a larger share of this budget, creating an incentive known as the "carrot" approach.

To assess supplier performance in terms of both cost and sustainability, a scoring-based mechanism can be used. This helps businesses evaluate suppliers based on their environmental impact and overall value.

"Now is a great time to be doing this. In a lot of logistics markets, prices have come down very significantly from where they were a year or two ago. Now's a great time when you can still drive a lot of savings, you can drive that CO2 impact, and you can try to secure a better budget for next year."

– Dylan Alperin, VP Professional Services

Summary

In working closely with suppliers and utilizing their data, businesses can discover unforeseen opportunities to achieve sustainability objectives. However, without optimization, evaluating these options can be difficult.

Intelligent sourcing optimization simplifies and standardizes the sourcing process, providing easily understandable decision support analytics. In today's volatile world, businesses need to adapt to new regulations and consumer preferences. By embracing sustainable sourcing practices and leveraging advanced technologies backed by optimization, businesses can contribute to a greener future while achieving their procurement objectives.