



Supply Chain
Design & Planning

6 Ways to Increase Supply Chain Sustainability

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6 Ways to Increase Supply Chain Sustainability

Companies today are being held accountable for more than just financial success. Business leaders are pushed to show real impact and deliver on ESG commitments too. Neglecting sustainability can lead to higher employee turnover, customer pushback, damage to the brand, and fines from regulators.

To fully manage the total environmental impact of their businesses, companies must manage and reduce the impact not only of their direct operations but also that of all of their suppliers and those suppliers' suppliers.

Did you know that a company's supply chain emissions are on average 5.5 times higher than a corporation's direct emissions?

This focus comes at a time of mounting pressure from countries around the globe. For example, as a part of the [Green Deal](#), the EU is considering the circular economy a must-have for post-COVID recovery and requiring a closed-loop supply chain. In the United States, the [Biden](#) Administration has issued an executive order on America's supply chains that is meant to build supply chain resilience in sensitive industries.

Choosing to ignore the environmental impact of supply chains is no longer an option. Businesses must change quickly to comply with regulations, avoid fines and negative press, and ultimately to preserve and safeguard future business success.

These pressures have resulted in a flurry of urgent discussions across the C-suite around systematically driving impact without sacrificing financial performance. While nearly every company is facing increased pressure to reduce its environmental impact, the way each company goes about it might be different. This is why we created this guide to help your team identify opportunities to improve supply chain sustainability.

6 Ways to Increase Supply Chain Sustainability



Optimize Your Supply Chain Network to Reduce Environmental Impact.

Continuous supply chain design can be used to determine ideal locations for distribution warehouses and routes to serve, thus reducing miles traveled, CO2 emissions, and direct costs. The supply chain's carbon footprint can be reduced by efficiently designing supply networks and routes to market.

Intelligent [Network Optimization](#) can help companies optimize the carbon footprint of their supply chains by evaluating billions of alternatives and configurations to find and capitalize on carbon reduction opportunities. All supply chain constraints and inputs can be analyzed--and optimized--through a sustainability lens.

Constraints include emissions targets by year, available modes of transportation, capital expenditures, production capabilities, supplier contracts, asset capabilities, and carbon credits and penalties.

Inputs include projected demand, current facility footprint, supplier locations, customer assignment and flow paths, transportation emission factors by mode, return flow paths, and alternative BOMs and reusable components.

Taking these constraints and inputs into account, Coupa's AI-powered supply chain design can help you to evaluate billions of combinations of supply chain routes to find the ideal path for your business.

These inputs can be used to determine

- Emissions footprint modeling and trade-offs
- Fleet electrification and routing
- Circular economy options: returns, repairs, and recycling
- Demand for forecast improvements to reduce waste
- Facilitated connections between different parts of the organization



Baseline network



Network optimized for carbon footprint & cost-effectiveness

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Create a Circular Economy to Reduce Waste Going into Landfills

One of the quickest ways to reduce waste in the supply chain is to systematically recapture reusable goods. Many organizations have processes for pulling packing materials and cardboard back to their distribution centers. Major retailers stamp the cost of those containers or their reduction in solid wastes directly onto the shipping containers as a reminder of their value.

Electronics and the ability to repair them have become a focal point. A recent study found that only about 15% of e-waste was recaptured and repurposed in the United States last year, creating an estimated \$7.49B in wasted components in the process.

Opportunities to reuse goods and materials throughout the supply chain include

- Interleaving shipments with store and depot pick-ups to reduce deadhead
- Evaluating trade-offs of customer mail-ins versus store pick-ups
- Determining break-even points for remanufactured or repaired items
- Reusing expired or broken goods as a part of the supply chain



CHEP saw an opportunity to promote its circular goods economy initiative while consolidating supply chain stops for the least environmental footprint by optimizing supply chain design and planning. With this initiative, CHEP established a process to optimize location selection for their warehouses, stock the right inventory quantities in those warehouses, and design optimal pickup and dropoff routes to reduce drive times. As they design their network, they also model the CO2 usage, to reduce emissions.

“We have an inherently sustainable business model, but that’s not enough. What can we do beyond that? In our reports, we focused on miles reduced, but now we actually report on CO2 reduction.”

Jonathan Brooks
Senior Director, Global Supply Chain



Before Transport Lane Optimization



Optimized Transportation Lanes

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Source and Purchase Environmentally-Friendly Materials and Packaging.

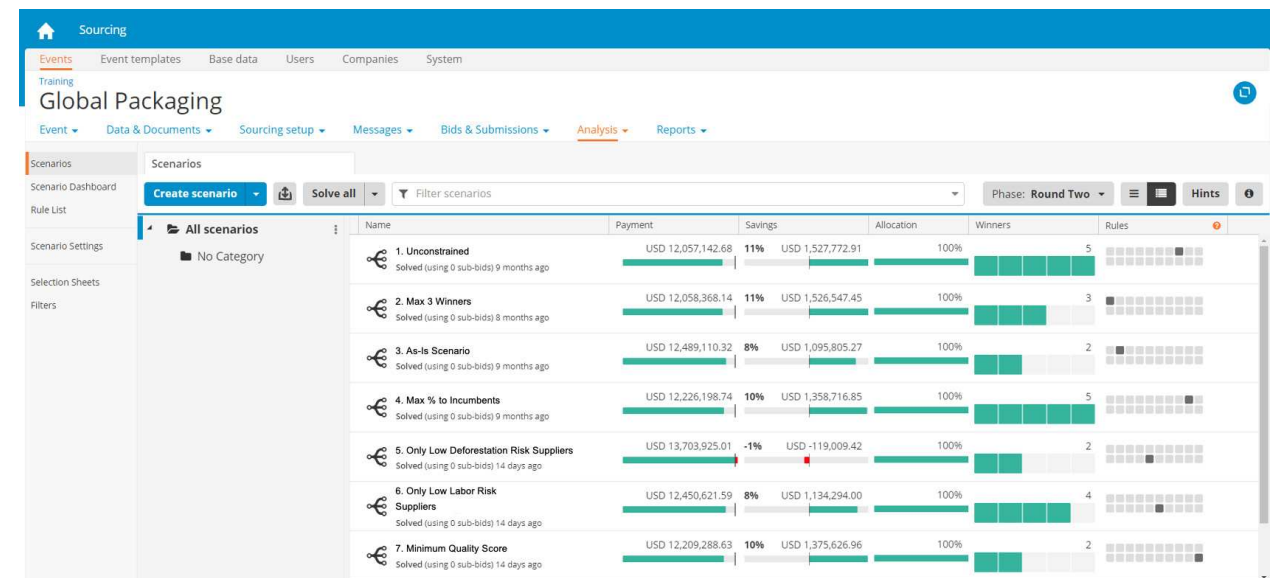
Switching to sustainable materials and packaging makes a positive impact on the environment, as well as meeting the [expectations of customers and regulators](#). The first step in making this change is to gather sustainability information in sourcing events and factor sustainability scoring into sourcing decisions, especially for packaging supplies and suppliers of packaged goods.

Some of the biggest opportunities for improvements lie in sourcing practices. Modern Sourcing practices are incredibly flexible and scalable. Data that were formerly collected with spreadsheets and then manually consolidated for analysis can now be automatically collected and analyzed as a part of the sourcing process. This change opens the door to inclusion of many more criteria such as diversity and green status, minimizing CO2 emissions, and much more.

Make Sustainability Criteria a Default Consideration in Your [Sourcing](#) Process:

- Collect supplier diversity certifications and sustainability plans as part of pre-event vetting.
- Use data providers such as Ecovadis for an enriched view of ESG criteria such as child labor risk flagging and supplier sustainability (market leaders including Ecovadis and more are easily available in the [Coupa App Marketplace](#)).
- Participate in community sourcing events by pooling spend with the community for greater diversity impact as well as better contract terms and greater savings. Find a calendar of [upcoming sourcing events](#) here.
- Think creatively about proxies for difficult-to-assess criteria, such as prioritizing nearby suppliers to minimize transportation costs.

Optimize Sourcing Award Decisions to Meet Operational and ESG Requirements



Take the Supplier [ESG value assessment](#) to Understand Opportunities to Maximize ESG Impact with Sourcing

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Better Predict Demand and Align Supply to Optimize Inventory Levels

For each item sitting in a supply closet or warehouse, there are unseen costs. Excess inventory and wastage not only hurt the company financially but also hurt the environment through needless use of natural resources in producing and distributing those items. Integrated BSM can help companies intelligently manage inventory through the supply chain, and avoid duplicate purchasing with real-time checks against items already in inventory. Coupa's AI-powered demand modeling can be used to better predict demand, meet customer needs, and avoid over-supply.

One example of enhanced prediction involves a world-famous beer company. Working with Coupa, the company was able to measure the correlation between summer temperatures and the amount of beer sold. This calculation was used to better predict how much beer would be sold in a particular city--information critical to optimizing distribution and inventory levels across the entire supply chain.

To optimize inventory through the supply chain, companies must incorporate several kinds of information:

- Historical data regarding inventory on hand and the cost of wasted goods
- Demand forecasts and data on demand and supply-side variability
- Form and function of inventory--safety stock vs. cycle stock
- Lead times and lead time variability
- Service level expectations

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Hold Suppliers Accountable with Performance Standards and Contract Terms

One of the best ways to avoid the risk of non-compliance and penalties from regulators is to implement a supplier due-diligence program and to include terms in supplier contracts to require proper procedures and controls for sustainable, ethical operations.. Incorporating due diligence on sustainability into supplier vetting and in contracting practices can help to avoid delays and omissions. Robust 3rd-party risk management and [contract management](#) can let you put these practices in place without undue delay or strain on compliance or legal teams.

Effective vetting and contracting can provide protections in many areas, including:

- Comply with modern slavery legislation, including the German Supply Chain Act
- Identify high risk vendors to comply with Anti-bribery anti-corruption legislation
- Data privacy and information security standards and legislation
- Ethical practices in compliance with your company's Supplier code of conduct
- Compliance with your company's ESG policies and standards

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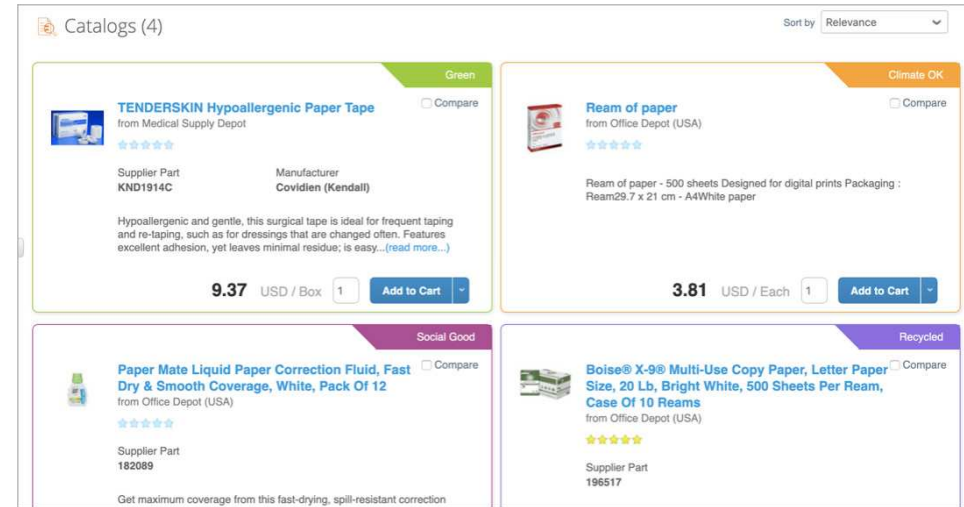
Extend Sustainability Goals to Indirect Spend Processes

Coupa's unified Business Spend Management Platform empowers supply chain managers, procurement leaders, and executives to align on ESG initiatives. When ESG data are woven across the processes used to manage all spend, shared accountability can support corporate responsibility goals for the good of the company and the world.

Make it Easy for Users to Select Sustainable Suppliers

The key to maximizing sustainability impact in indirect spend categories is the behavior of the business users who make each request for the goods and services that they need. Whenever a user has a need, there is the potential to impact ESG goals. The challenge is making it easy for users to quickly and easily channel spend to diverse or green suppliers so that they can deliver on that potential.

Coupa makes it easy for end-users to drive spend to sustainable suppliers through everyday purchasing. Customers can systematically incorporate sustainability data into their supplier records. Diverse and sustainable suppliers and offerings captured catalogs and easily available to end-users as filters into search results—providing an easy way for end-users to achieve the impact that they feel passionate about.



Digitize Spend Processes to Conserve Natural Resources

One of the benefits of digitizing BSM with Coupa is that all types of purchase orders - across direct and indirect categories - can be sent electronically to suppliers who then respond by sending their invoices electronically as well. Accounts Payable departments can use a single system and process to manage every invoice. Invoices are validated and approved automatically, and then they can be paid digitally using electronic transfers or virtual cards. This end-to-end digital process cuts out the large amounts of paper typically seen in all but the most strategic supplier relationships—invoices, paper checks, and otherwise—saving trees as well as freeing up valuable employee time.

Each Coupa customer gets a Sustainability Insights dashboard that monitors and quantifies these benefits—showing exactly how many trees and how much water, oil, and carbon have been saved by going paperless. These metrics can be included in your ESG annual reports.

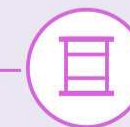
2020 Impact of Invoice Digitization Across the Coupa Community



11,452
Trees Rescued



704.5 Million
Liters of Water
Conserved



1.141 Million
Liters of Oil Saved



1.81 Million
KGs of CO2
Emissions Avoided

Join in the World's Largest Spend Community to Drive Future Innovations!

By following each of these five steps, you will drive global impact to support both your business' financial bottom line and its social obligations.

If you have an idea about how Coupa can support your ESG goals, we want to hear from you. Coupa releases over 300 new innovations per year, and we are continually innovating. Some of the ways you can get involved include

- Joining group sourcing events for sustainable and diverse suppliers
- Engaging with the ESG Spend Community on the Coupa community forum
- Joining sustainable business spend management user groups
- Co-creating the future by suggesting new product innovations

Discover the Future of Supply Chain Sustainability

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