

▶ **Digging In: The Nuts and Bolts of  
Supply Chain Sustainability**

White Paper

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# Digging In: The Nuts and Bolts of Supply Chain Sustainability

*White Paper*

Many companies grapple with the question of how to reduce the environmental impact of their supply chain. They know that doing so will save money, cost and resources – not to mention its good for the planet. But getting from “how to” to “have done” can be an overwhelming and seemingly impossible challenge in many organizations. While companies all over the world have successfully implemented a variety of strategies to improve their supply chain sustainability, we’ve focused on some initial first steps that can be taken to start “digging in” – moving organizations past inertia and into action. The following paper covers some pertinent success stories and tips for how improvements can be achieved. Here’s a hint: you don’t have to tackle it alone.

## **Tip #1: Involve Your Suppliers**

The most successful improvements in supply chain sustainability have come from companies implementing initiatives in partnership with their most advanced suppliers. For many organizations, a good

portion of their overall environmental impact is linked with the supply chain they use as part of their product development and production. The supply chain in some companies manages billions of pounds of product over a year’s time. The key is to manage the movement of product in the most economical and environmentally friendly way. Accomplishing this means truly understanding your environmental impact and working together with suppliers to minimize it.

## **Success Snapshot**

One company gathered together the senior management teams from its 13 largest suppliers for an all-day meeting. After presenting what the company was trying to achieve, the suppliers were given a short period of time to present what success they’ve had and were asked to prepare a program specifically to meet this need over the following 12 months.

Most of the 13 suppliers approached the company with some ideas – some more than others. For this company’s specific purposes, the initiatives they focused on related to corrugate cutting, plastic reductions and money savings. As a result, the company’s supplier and purchasing teams have identified three million pounds of reduction in corrugate and two million pounds of reduction in plastics annually.

## Success in Partnering

Letting your suppliers take the lead in environmental issues, such as waste reduction and logistics efficiencies, empowers them to take ownership and responsibility for helping the partnership as a whole achieve its environmental goals. Also, providing an employee in each business location who is responsible for helping their supplier helps suppliers feel supported throughout the process. In addition, tying employee bonuses to the success of environmental initiatives incentivizes workers to make supply chain sustainability a priority.

Companies can partner with suppliers on a broad range of initiatives, including transportation and logistics efficiencies, packaging, waste reduction and product innovations.

### Tip #2: Creating Fuel Efficiencies

Some companies' fleets travel enough to circle the earth on a daily basis. For organizations like this, focusing on higher capacity equipment and fuel savings to reduce carbon footprint and costs is paramount. Implementing specific actions, monitoring and training can help tackle fuel usage.

### Success Snapshot

One company purchased new heavy-haul, 53-foot tri-axle trailers, each with a minimum payload capacity of 56,500 pounds – a 35%

improvement over their old trailers. Their energy-efficient refrigeration units also use 70% less fuel than what they replaced. The company's average MPG improved from 4.9 mpg to 5.4 mpg over three years, even with payload increases of 35%, totaling 50% improvement in fuel efficiency during that period.

Implementing the following measures can help companies achieve fuel efficiency improvements:

- Reduce engine idle time
- Place on-board computers in each unit of transportation to provide continuous driver feedback on MPG
- Purchase ultra-light units of transportation
- Set speed governors to a maximum of 62 MPH
- Set certain engines with a three minute idling shut-off, as available
- Specify state-of-the-art aerodynamic features
- Order energy-efficient automatic transmissions
- Change fuel filters monthly instead of every 30,000 miles
- Check tire air pressure daily
- Initiate a chain removal program, which can save hundreds of pounds of weight per vehicle

By approaching fuel savings from several directions, including design, maintenance, monitoring and real-time reporting, fuel

savings improvements can be made manageably. Fuel is often a significant cost for many companies – and even the largest cost component after labor for some. Challenging employees to improve fuel efficiency by posting daily who achieves the best fuel economy can quickly motivate employees to become a part of the solution.

### **Tip #3: Creating Logistics Efficiencies**

Fleet initiatives can result in annual diesel fuel consumption savings numbering in the hundreds of thousands of gallons, saving significant costs and reducing carbon footprint.

Organizations can support their suppliers in becoming increasingly aware of their environmental impacts and by creating improvement plans for meeting their needs in more environmentally responsible ways, which can result in reductions in both costs and impact.

In addition, many companies are working to maximize the lading weight in all transportation modes, and one company developed a more stringent 3PL (third party logistics) carrier selection processes, including:

#### **Over the Road**

Fuel efficient carriers

Reload private fleets when possible for miles and cost reductions

Use backhaul carriers where relevant

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Include carriers that have heavy haul capabilities, when applicable

Use consolidations for inbound and outbound shipments to reduce miles and cost

Look for opportunities to maximize loading capabilities for truckloads

#### **Rail**

Use rail lines that have reciprocal switching capabilities

Work to develop trans-load program if customers aren't rail side

Use intermodal containers when possible

Use equipment with the heaviest payload capacities

In addition, supply chain teams can see offsite warehousing closer to manufacturing plants, which helps take miles and carbon tons off the road.

### **Tip #4: Creating Packaging Efficiencies**

Making sustainability an important part of packaging helps driving material sourcing and buying decisions.

#### **Success Snapshot**

One company's purchasing team recently implemented a packaging change at its plants. Using a new design, the change satisfied several objectives in one conversion. Overcoming a recycling challenge and meeting tamper-evident

requirements, the new packaging weighs less than its predecessor, creating an annual reduction in plastic in the hundreds of thousands of pounds threshold.

### **Sustainable Forestry Initiative**

Many organization's purchasing teams have begun to frequently review their materials to ensure adequacy for their applications and for environmental considerations. One company, for example, reviewed its corrugated supplier base to verify that each supplier was using a paper source certified in the Sustainable Forestry Initiative (SFI). The SFI 2010-2014 Standard is based on principles and measures that promote sustainable forest management and consider all forest values, including unique fiber sourcing requirements to promote responsible forest management on all North American forest lands. This company found that SFI certification also extends to the market. Consumers – when they see the SFI label on a product – can be confident they are buying wood or paper products from responsible sources.

### **Conclusion**

Improving supply chain sustainability can be a seemingly daunting task. But by following the paths forged by other pioneers in the private sector – and partnering with your suppliers in the process – real improvements can be made.

### **About Enviance**

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