

Collaborative Distribution:

How CPG manufacturers and retailers can save millions and embrace the green revolution

by Chris Kane



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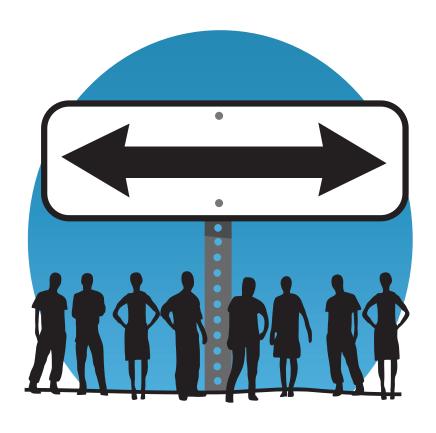
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A collaborative distribution strategy.

I can tell you right now that you're almost certainly paying more than you need in freight charges. I can also guess that you're thinking hard about the "green" revolution that's snapping at the heels of everyone in business. The good news is that **there's a way to reduce costs** and step up to the plate when it comes to being a responsible participant in a sustainable global supply chain. There's a catch, of course. You're going to have to be prepared to revolutionize the way you think about CPG product distribution.

I can't understand why people are frightened of new ideas.
I'm frightened of the old ones.
John Cage



A collaborative distribution strategy, cont'd

A collaborative distribution strategy can help consumer packaged goods (CPG) manufacturers and their retail customers save money, tighten up the supply chain, and give a green appeal consumers will love.

Right now, CPG manufacturers, who buy billions of dollars worth of transportation every year, have a wonderful opportunity. Using the right partnerships, there's the chance to save money, lower stock-outs, reduce road congestion, and shrink carbon footprints all at the same time. But a substantial shift in mindset is required to make it happen, because it involves reorganizing a substantial stretch of the supply chain in order to store goods in the same warehouse and transport them in the same truck as rival vendors' goods.

I am talking about something a great deal more revolutionary than simple freight consolidation. This is a collaborative model that requires the active participation of manufacturers, retailers, and third-party logistics providers (3PLs). It will produce an improvement in supply chain efficiency so remarkable that sustainability will simply be one of several natural by-products.

Current distribution networks are redundant.

Transportation alone accounts for 29 percent of the U.S. carbon output today and a whopping 70 percent of petroleum usage.

(Source: American Shipper)

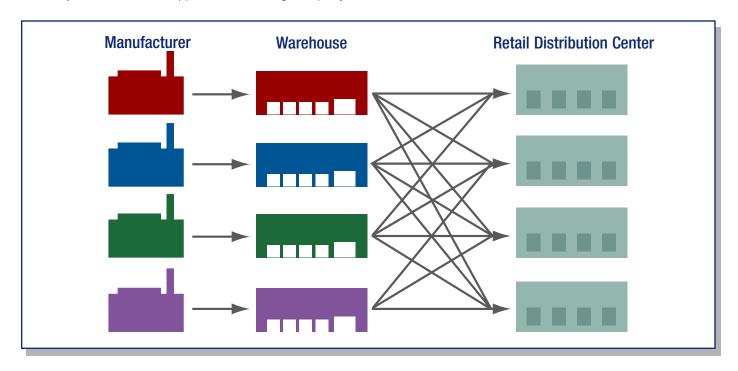
We've created a monstrous dinosaur of freight transportation whose giant body blocks up our roads, burns through huge quantities of precious fuel, and emits noxious gases that threaten our continued ability to populate this planet. We can no longer afford to feed this outdated beast. We must provoke change, and **start now**.

The current model for CPG product distribution is PART OF THE PROBLEM, not the solution.

Small and medium-sized CPG manufacturers supply a dizzying number of retailers — from Mom'n'Pop stores to big box outlets. Currently, most park their goods in a company-run or third-party warehouse, ready to be sent as needed to the retailer's distribution center, or direct to the store. Most often, because almost no store or DC is big enough to need an entire truckload of your products, these shipments move as less-than-truckload freight (LTL).

Current distribution networks are redundant, cont'd

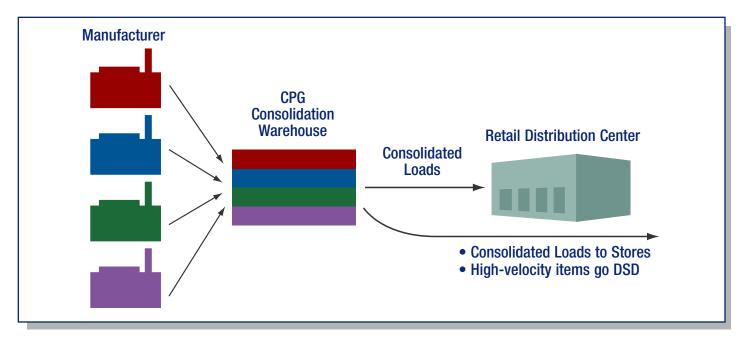
LTL, of course, costs more per pound than a full truckload. For now, most people think that's just the nature of the business. As a result, however, the trucks making those deliveries are themselves not full, making the trip inefficient for everyone – the CPG supplier, the trucking company, and the retailer. Here's what that looks like:



Part of the problem is taking a narrow view. Under this arrangement, each supplier is interested only in its own line of supply to the retailer. It's like taking a taxi to the airport, only to discover that five of your friends were going at the same time, and you could have paid less (and burned less fuel) to ride a shared shuttle bus.

Current distribution networks are redundant, cont'd

What would happen if CPG manufacturers were prepared to allow their orders to ride in the same truck as orders from other CPG manufacturers when those loads are destined for the same store or retailer warehouse? **Everyone would save, and the amount of energy used to transport the goods would be substantially reduced,** along with pollution and congestion. As a result, this part of the supply chain would look more like this:



What I'm proposing is a radically new model that focuses on warehousing as well as freight. Not only would different loads destined for the same end point be consolidated in order to maximize trucking efficiency; the collaboration would start further back up the supply chain so that loads could be consolidated as early and often as possible. Logistics managers would work with their 3PLs to decide how to transport and store goods prior to picking and packing so the interests of the whole range of suppliers — not just a single supplier — were best served.

Current distribution networks are redundant, cont'd

The 3PLs will adopt **new roles as warehousing and freight matchmakers** in this new collaborative model for product distribution. But the retailers and manufacturers will also have to adapt. Retailers will have to start thinking about how to consolidate all their orders in a smart way. Instead of letting each department order separately, they will have to proactively coordinate full truckload deliveries that marry products ordered by different buying groups. And manufacturers will have to rethink logistics operations so that each individual supplier has a view of its slot in the larger supply chain.

This more collaborative approach will require radical changes in the way we order and distribute CPG products. Changing entrenched practices won't be easy, but the rewards are substantial and necessary, both for our businesses and our planet. We all need to wake up to the ineffectiveness of what we're doing now, and the opportunity to **take a whole new direction**.

"By taking a meaningful look at the substance of collaboration, shippers and carriers can make significant progress toward meeting 'green logistics' objectives."

C. John Langley Jr., Ph.D., Professor of Supply Chain Management, Georgia Tech

Sounds great - but won't it cost money?

Admittedly, what often presents a challenge is the up-front investment required to change any given scenario to a greener one. For example, blowing extra insulation into the walls of your home, or replacing ill-fitting windows, will end up saving you a ton of money and use up far less of our planet's precious resources. But you have to invest thousands of dollars up front, then recoup that money in savings over time.

In building a leaner, greener supply chain for CPG products, everyone will have to share the burden of going green — but that also means that everyone will benefit from the financial savings. Furthermore, green supply chains are coming whether you like it or not, and now is the time to get ahead of your competitors in presenting a sustainable supply chain profile to the world.

In any case, under the scenario I'm proposing, the up-front cost to CPG manufacturers will be almost nothing. That's because your 3PL and transport provider can organize freight so that it costs less up-front for everyone. As a neutral third party, a logistics services provider is ideally suited to pull all the complex strands of freight operations together and twine them into one, collaborative, efficient stretch of the supply chain.

Combined with the need for sustainability and cost reductions, collaboration can be a formidable competitive weapon for manufacturers, retailers, and logistics service providers, alike.

Clifford F. Lynch, executive vice president, CTSI







Haven't I heard about this before?

Strategies like **freight consolidation** certainly cut costs and take trucks off the road, but supply chain collaboration is a more comprehensive shift that offers both lower freight bills and operational simplification. When you talk to shippers who've tried simple freight consolidation, for example, the reality is that they end up with fiendishly complicated freight bills, with every route, time, and commodity billed differently. A logistics services provider who is committed to genuine collaboration will be able to greatly simplify the billing, offering a flat-rate, per-pallet charge within a given radius of its centralized, multi-user warehouse. That will lower costs for everyone because every truck that leaves the facility will be stuffed full, meaning no one is paying for hauling empty space.

Essentially, we would move from discreet supply chains and infrastructures to more of a shared infrastructure model. The staggering benefits of such a model make it a no-brainer for CPG manufacturers and retailers. The challenge is in making it happen.

And, yes, you *have* heard about this before. Like a lot of good ideas, there's a long lead up to meaningful adoption. We stand at the brink of that point right now.

"It amazes me, for all the talk about consolidation during my 35 years in this business, how little is actually happening. And it's such a good idea. It could make everybody green, make everybody happy, and save a lot of money."

> Tom Speh, Senior Director of MBA Programs, Farmer School of Business, Miami University, Oxford, Ohio

How would it actually work?

Put very simply, manufacturers would warehouse their goods with a view to consolidating deliveries with other manufacturers' goods going to the same final destinations. Then deliveries by different suppliers on the same routes would be consolidated into full truckloads. 3PLs would act as traffic cops to make it all work smoothly.

The concept of collaboration has been around for a long time, but to make it truly attractive, it needs to be clear that **everyone involved can reap the benefits.**

"When you talk about savings, everyone asks, 'How much of it is going to be mine?'
The concept of collaboration is easy to grasp.
It's the implementation that's the problem."

> Joe Andraski, president of the Voluntary Interindustry Commerce Solutions Association (VICS)

> You can read an interview with Joe Andraski in DC Velocity Magazine here



RETAILERS are the engine that will drive the revolution.

Inventory and transportation are no longer equal. Supply chain 101 teaches the equal trade off of inventory and transportation when redesigning a network. That's not true anymore. Maintaining a stocking location is insignificant when compared to the greenhouse gases glut of transportation. (Source: American Shipper)

Retailers can take the lead here, because they have the leverage to insist that their suppliers step up to the plate and employ leaner, greener distribution methods. In the past, there's been little incentive for the retailer to buy into supplier collaboration because they could see no immediate financial reward. Traditionally, it's the manufacturers who pay the freight bill, and therefore gain savings in freight charges, giving no measurable financial benefit to the retailers. But, with plenty of saving to go around under a collaborative system, there's every opportunity to give the retailers their share.

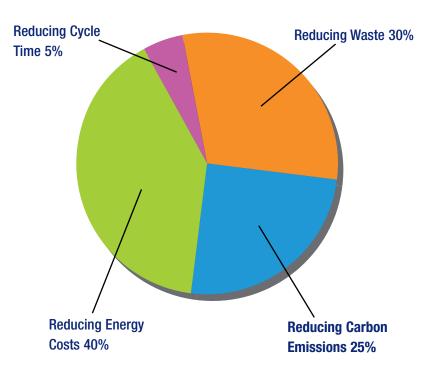
Here's an example: Retailers could get a back-haul rebate from the 3PL if the retailer was prepared to make a slight detour on the way back from delivering goods to individual stores in order to pick up loads from the 3PL's warehouse for delivery to the distribution center. **These rebates could run as high as \$750 per truckload,** which means the retailer has the option of using its own fleet for the backhaul or farming out that backhaul to a house carrier for, say, \$650, and making a little money on the move.

RETAILERS are the engine that will drive the revolution, cont'd

A critical success factor is convincing retailers that they won't suffer in terms of stock-outs. Retailers tend to rely on frequent, smaller deliveries from nearby warehouses in order to maximize the rate of replenishment and minimize the amount of stock languishing in the back of the store, or in their distribution centers. But, in fact, deliveries that were consolidated in a smart way, according to the retailer's packing requirements (e.g. dimensions of pallet), arriving once a week, say, would fill the vast majority of the replenishing requirement for a typical retailer. Other, more urgent deliveries, such as those to respond to a sudden uptick in demand for bottled water during a heat wave, could be made via LTL. But with the added visibility offered by a well-run 3PL, harnessing the power of user-friendly cargo tracking tools via the Internet, retailers would quickly get comfortable that they had the right goods in the delivery pipeline at the right time.

Any retailer that talks to the guys who run the "back door" operations, where freight gets delivered, will quickly find out that **the receiving dock would much rather get one intelligently-packed delivery a week than several scattered ones**. Part of the challenge, however, is to get the "front door" side of the retailer operation — the people who order the goods — to see the benefit of consolidating their orders. It would work better for retailer operations if there was a consolidated order for breakfast cereal, even from rival CPG manufacturers, that can be picked and shipped from a shared 3PL warehouse. That way, shelf stackers could take a single load for a whole aisle in the supermarket.

What's the Most Important Benefit of a Lean and Green Supply Chain?



Source: Survey of Corporate Eco Forum Supply Chain Executives by InnovaStrat, Inc. (Sept. 2009)

Collaboration is hard, even within the same company.



This brings me to a crucial point. Often, the most important collaboration is the one that goes on between different operations within the same retailer — ordering and receiving. One major CPG manufacturer that produces many different lines of product discovered it was getting separate orders from its big box retailer customers. A single retailer location had a different buyer for cheese, for crackers, for cereals, and so on, resulting in separate deliveries from the same CPG warehouse to the same store — very inefficient. In order to get the retailer to persuade the buyers to talk to each other and consolidate their orders into one big one, the CPG manufacturer offered the retailer a 50-cent-per-case discount. When the retailer agreed, it saved money on goods, the CPG manufacturer cut its freight costs, and there were fewer, fuller trucks on the road — a genuine win-win.

With multiple CPG vendors, of course, the proposition is slightly harder to sell, but the principle is the same. What if the manufacturers pass on to retailers the money they'll save from switching from LTL to TL shipments wherever possible — say, \$5 a pallet? With 20 pallets in a truckload, that's \$100 per shipment, straight to retailer's bottom line. That money will be just a slice of what the CPG vendor saves, and it will result in fewer trucks making deliveries to the same store.

3PLs must act as the matchmaker.

It sounds simple, but the way things work now, the "front door" guys don't talk to logistics providers. They simply want the product to get there and don't think a whole lot about the details of how goods are being delivered. In order to foster change, 3PLs are going to have to get a foot in that front door, and start talking savings.

3PLs also need to build and run warehouses with collaboration in mind. That means providing warehouse space that can easily adapt to use by multiple suppliers, all of whom are subject to seasonal demands. It also means 3PLs must figure out what pallet and cube size any given retailer prefers, and ship all deliveries to the retailer's spec, no matter how they arrive from the manufacturer.

Another important aspect is that 3PLs are in the best position to estimate, track, and distribute the savings that come from fewer, fuller truckloads. They are also in a position to educate both retailers and manufacturers on the advantages of collaborative supply chain operations — and to advocate for change.

The collaboration scenario is most likely to succeed if a third party coordinates the consolidation of orders and deliveries. Individual manufacturers have been known to collaborate with rivals on their own, but there is an advantage when the collaboration is fostered by a neutral third party that rivals can trust.

Long-term, what you're going to see is a ton of collaborative warehousing. That's the next big thing... [W]hoever can coordinate industry-wide warehousing better is going to take a ton of money out of the supply chain for everyone.

Patrick Johnson, logistics manager,
Land O'Lakes. (Source: MyWire.com, May 2003)

MANUFACTURERS have to change their thinking.

Manufacturers will have to embrace a new way of thinking, where the flow of their goods to the retailer is only part of a wider river of product that should be delivered as efficiently as possible. They will need to take a hard look at what product is going where, and when, and how those deliveries could be better positioned in warehouses ready for consolidated deliveries. Obviously, manufacturers will also have to accept that their goods may be stored and transported right next to products from rival manufacturers. But those goods sit next to each other on the supermarket shelf already, so it shouldn't be too much of a stretch, especially if there's money to be saved in doing so.

Another important issue to be addressed is eliminating exceptions — the smaller deliveries that come as a result of inaccurate deliveries, damaged goods, stock-outs and sudden spikes in demand. Manufacturers need to focus on making sure that the right amount of product is within easy delivery reach of the retailers, even while lowering inventory carrying costs. This means working very closely with the retailer to look for innovative, practical ways to keep exceptions to a minimum while making sure the shelves are stocked.

A Collaborative Distribution Success: Topps and Kane is Able

Recognizing that several of its candy manufacturer customers were using less-than-truckload (LTL) carriers to ship to the same retailers, third-party logistics provider Kane Is Able, Inc. convinced these customers, including Topps and DeMet's Candy Company, to consolidate separate loads. Using its LoadCon software, KANE entered customers' inbound shipment requests and identified orders with similar ship-to destinations and arrival dates. LoadCon then built truckload shipments and the cost was divided among customers with product on the truck. As a result of the LoadCon program, more than 95% of Topp's LTL shipments were converted to lower-cost truckload shipments, cutting 25% off the cost of these moves.

ALL PARTIES must recognize they're in this together.

"Transformation doesn't happen just because someone at the top says so." - Joe Andraski

Manufacturers, retailers, and third-party logistics providers must understand that they are already collaborating in a wider supply chain — they're just doing it inefficiently. **Communication is crucial,** and will be aided by the technology that can keep track of demand planning, production, marketing, ordering, storing, and delivery. But there are other factors, too.

There are a series of basic steps that need to be taken before you can get into any kind of collaborative relationship. First, **companies must establish trust between themselves** by delivering on promises and executing the basics with excellence. Then there's the tricky business of transforming the mentality within organizations, often breaking down internal silos. It has to involve finance, sales and marketing, logistics, and procurement. **Everyone plays a role.** It may be initiated by a senior leader, but in the end **collaborative distribution has to be embraced by the entire organization.**

"Manufacturers and retailers working together might represent the single most impactful opportunity in the coming years for reducing transportation congestion, delivery delays, inefficient inventory, and harmful emissions."

> Rick Blasgen, president & CEO of the Council of Supply Chain Management Professionals

Technology makes it easier.

In order to make collaboration work smoothly, it's crucial that everyone involved in the supply chain has visibility into what's in the delivery pipeline and when it's going to arrive. Web-based supply chain management services harness the data-crunching power of the computer with the easy connectivity of the World Wide Web, meaning that accessing a clear picture of goods in transit is now just a mouse click away.

Most 3PLs and warehousing companies offer this kind of visibility to customers, avoiding the need for separate suppliers to install and maintain costly and complex information technology systems. Through visibility technology, it's easy to get a handle on what's due to be delivered and its current location, meaning that consolidating loads can be handled by smart computer programs. Even five years ago, collaboration was not this easy.

According to a report by Aberdeen Group, supply chain visibility system users are:

- 2.4 times as likely to have reduced their inventory levels within the past two years
- Three times as likely to have faster order-to-delivery times
- Twice as likely to have an on-time delivery rate of 95% or higher

Read an interview about supply chain management technology with Brad Wyland and other analysts in Logistics Management magazine.

"With the flexibility of today's technology platforms, companies have a virtual smorgasbord in front of them when it comes to solutions to help automate and improve processes."

Brad Wyland, senior research analyst for the Aberdeen Group

Green supply chains are already big in Europe!

In the UK, the Tesco supermarket chain offers its customers coded labeling that shows the carbon footprint of each product so they can make intelligent choices about the sustainability of what they buy. Tesco's chief executive Sir Terry Leahy recently promised "a revolution in green consumption" and said he wanted to bring the green movement into the mass market. The issue of climate change, he added, means the reduction of our carbon footprint becomes "a central business driver." He said he had a duty to "reposition the business for a different society" (Source: The Guardian newspaper, UK). Read Tesco's Corporate Responsibility Report here.

Retailers, manufacturers and 3PLs are really paying attention to this issue on the other side of the Atlantic. This shift in consumer attitude is coming to the US, and it's coming fast. Already, consumers are demanding changes in the goods they buy to reflect a greener attitude on behalf of suppliers. These even include a change to **greener**, **less convenient packaging**. Conscientious companies that want to be around in 10 years will get the jump on this movement now, and reap the benefits in terms of lower costs and a better public image for years to come.

"The coming years will see a new era for industry collaboration...

Some business areas that are now considered to be core
differentiators may well become candidates for non-competitive
collaboration with competitors, such as replenishment in inner cities."

- Sabine Ritter, general manager for the Global Commerce Initiative (GCI)

The "Future Supply Chain 2016" report, released by the Global Commerce Initiative and Capgemini, paints an interesting picture of just how different supply chains could look within the next 10 years. Download the report at FutureSupplyChain.com.

Even the government's going green - SmartWays

Providers of freight services can ratchet up the green aspect of collaboration by making the trucks that we use to transport our goods as energy-efficient as possible, and the US government is encouraging this.

In 2004, the US Environmental Protection Agency (EPA) launched SmartWaySM – a brand that represents environmentally cleaner, more fuel efficient transportation options. By 2012, the SmartWay Transport Partnership aims to cut diesel fuel consumption by between 3.3 billion and 6.6 billion gallons per year, the equivalent of taking about 12 million cars off the road, saving nearly \$10 billion in fuel and road maintenance.

In its simplest form, the SmartWay brand identifies products and services that reduce transportation-related emissions. However, the impact of the brand is much greater as SmartWay signifies a partnership among government, business, and consumers to protect our environment, reduce fuel consumption, and improve our air quality for future generations. Obviously, SmartWay-accredited trucking makes sense as part of the new model of leaner, greener, cheaper freight operations. Learn more about SmartWay.

Green supply chains are not just about trucks. Many providers of warehousing are now ensuring that their facilities meet Leadership in Energy and Environmental Design (LEED) standards. LEED is an internationally recognized certification system that measures how well a building or community performs across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Developed by the <u>U.S. Green Building Council (USGBC)</u>, LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. In the new collaborative model for CPG distribution, shared warehouses would be LEED-certified. Participants would become part of something that is already green-friendly.

<u>Watch a video</u> of logistics analyst Adrian Gonzalez of ARC Advisory Group talking about the state of the green supply chain. (Registration required.)

What can I do to make a start?

Collaborative distribution offers a way toward the future for everyone involved in the CPG supply chain. We all need to work together to identify opportunities for consolidating orders, putting loads destined for the same delivery point next to each other in the warehouse, then picking, packing, and finally shipping them together, regardless of origin.

Manufacturers already accept the idea that their goods can sit side by side on the supermarket shelf — it would be absurd to insist that the consumer go to different stores to buy different brands of crackers. The mental shift required is to allow the same strategy deeper back in the supply chain, back to the warehouse and beyond. **Products do not compete for consumers inside a pallet stack.** There is every reason to make sure trucks are not hauling empty space and that warehouses are packing and shipping deliveries in the most efficient way possible. By opening up to a new kind of thinking about how products get delivered, we all have the opportunity to participate in a more efficient, more conscientious way of working together that really makes sense in the 21st century.

"Going forward, supply chain strategies will need to address sustainability in a serious way. To meet the challenge, businesses must be open to new ways of working."

Brian Girouard, global leader, Consumer Products and Retail, Capgemini

What can I do to make a start? cont'd

Here are things you can do right now to move your organization toward a more collaborative distribution model.

Manufacturers: Examine your supply chain and recognize opportunities to create efficiency through collaboration. As a first step, organize a meeting of relevant functions within your company to discuss the benefits of collaboration. You could also reach outside your organization — wouldn't this make a great discussion at your industry association's next conference? Collaboration is a hot topic. Walking the talk will make you stand out from competitors.

Retailers: Look at communication within your operations. Is logistics talking to merchandising about how and when product is received? Are different buying groups coordinating on potential logistics efficiencies? Old practices die hard, even when change brings obvious benefits. Still, you might find a surprising amount of grass-roots support for change, especially if you invite employees to be the catalysts for these discussions.

Third-Party Logistics Providers: You are often in the best position to recognize where collaboration can occur. But are you suggesting new ways of getting products to market that involve multiple customers working together? A collaborative distribution model will require a change to 3PL pricing and compensation approaches. As part of a new pricing model, you'll need to share the savings gained from collaboration, and make those savings clear and specific up front.

Collaborative distribution is coming because the rewards are great.

Be an early adopter, and get those rewards quickly. Like many journeys of change, the hardest part is taking the first step.

Resources

- <u>SmartWay</u>sM a U.S. Environmental Protection Agency program that fosters fuel efficient transportation options.
- <u>Leadership in Energy and Environmental Design (LEED)</u> certification system that measures how well a building or community performs across key green building standards.
- <u>Supply Chain Carbon Coalition</u> voluntary association of the world's leading manufacturers, retailers, logistics
 companies, freight forwarders, 3PLs, suppliers, government representatives, and academics that discuss ways to achieve
 more sustainable supply chains.
- <u>CODE GREEN Collaborative Distribution</u> Kane Is Able's program for enabling a collaborative distribution model for CPG product manufacturers.
- Advice on estimating carbon footprint a useful article from World Trade 100 Magazine.

About the Author

Chris Kane is the vice president of marketing and sales at KANE IS ABLE, INC. – http://www.kaneisable.com – a third-party logistics company started by Chris's grandfather in 1930 in Scranton, Pennsylvania. Before assuming his current role, Chris worked in KANE's warehousing and freight operations.

He is actively involved in many professional and community organizations, including the Center for Supply Chain Research at the Smeal College of Business at Penn State University, the Scranton Chamber of Commerce Transportation Committee, the Traffic Club of Northeastern PA, the Pennsylvania Motor Truck Association, the International Warehouse Logistics Association, the Warehouse Education Research Council, the American Trucking Association Sales & Marketing Committee, the Council of Supply Chain Management Professionals, the American Marketing Association, the Pennsylvania Transportation & Logistics Association, and the Traffic Club of New York. Chris received his B.S. degree in Marketing from the University of Scranton.



