



Furniture goes “green”

Mary Ellen Mika

Buyer demand and government “green” programs help industry develop and supply “green” products

AS THE WORLD’S largest office furniture manufacturer, Steelcase is committed to embedding sustainability in every aspect of our business. Such a commitment requires a shift in thinking – a redefinition of quality that embeds sustainable thinking into each phase of product development, the processes used, and the services offered. As a responsible global manufacturer, we believe environmental literacy, research and continuous learning are critical to competing in the global marketplace and to being a positive, restorative force in our global community.

Our customers not only expect authenticity in our sustainability message, they expect excellent value in our products and services. Through our work – even the mistakes – we are learning things that advance the science and practice of sustainability within our company and without. Our partners and suppliers, inspire us with their resourcefulness and willingness to seek new ways to deliver greater value to our customers and better our environment.

One of the key ways our suppliers bring value is through the growing use of voluntary incentive-based environmental “regulatory” programs. When government becomes proactive and decouples enforcement from incentive programs, we see first hand how powerful market forces lead to cost-effective, sustainable solutions. Incentive-based systems achieve more than enforcement could alone. In the global economy, we see significant change in the way business is conducted – with an emphasis on efficiency and innovation that extends through the entire value chain, starting with our suppliers.

Through a pilot program offered by Environment Canada and a similar, fully active program offered by the U.S. Environmental Protection Agency (EPA), a number of our North American suppliers have had the opportunity to become “leaner and greener” and ultimately, help Steelcase do the same.

A couple of our suppliers participated in an Environment Canada “Lean & Green Utilization Pilot” program which involves a third party “lean and clean” assessment of their operations. We have experienced positive

results from this pilot program, but due to Environment Canada’s changing priorities, it is not known whether there will be adequate funding for the program to continue.

Some of the comments from suppliers and assessors in Canada are as follows:

“A guiding principle at Woodlore has been to conduct our business with integrity and a dedication to excellence. We are committed to continual improvement, including a sustainable use of resources through waste reduction, reuse, recycling, clean manufacturing processes and energy conservation. Participating in Environment Canada’s Lean & Green Utilization Pilot has provided a framework for verifying the effectiveness of our environmental initiatives, through benchmarking and measurement. We expect that identifying new opportunities for improvement, coupled with increased awareness by staff and management, will allow us to fulfill our desire to be an environmentally responsible company. We will continue to work with our suppliers and expect them to participate with us in all green initiatives. Ultimately we all benefit in our business partnerships by providing “environmentally preferable” products.”

Wayne Donison, Customer Service & Quality Manager,
Woodlore International, Brampton, Ontario

“A key ‘lean and clean’ assessor for the program, ‘The Lean & Clean’ assessment at CPI Plastics in the Toronto area, confirmed our experience gained conducting cleaner production and energy efficiency assessments at other small manufacturing enterprises, large manufacturers, and commercial institutions. Specifically, even at well-managed facilities such as CPI’s flagship location, there invariably are creative opportunities for significant financial, environmental and social gains with rapid returns on investment.

By conducting the assessment in collaboration with the manufacturer’s production and management staff, the resulting robust and practical solutions tend to be rapidly implemented. In addition to the environmental and financial benefits, social benefits are secured by passionately engaging staff in the continuous improvement process

and by improved working conditions associated with reductions in the use of potential toxins in the work place.

At the supplier’s facility, reducing material and energy consumption is easily perceived to increase the wealth available to benefit the facility’s staff. Also, the environment is one of the top concerns for most people. Therefore, the enthusiasm and interdepartmental/cross-functional cooperation experienced while serving on conservation teams tends to develop functional relationships with benefits to the organization far beyond the scope of the initial project.”

Bruce Taylor, President,
Enviro-Stewards, Elmira, Ontario

The “green supplier” programs piloted in Canada and operating in the US are quite similar. Both focus on reducing waste (whether traditional lean manufacturing ‘waste’ or environmental ‘waste’) and therefore, reducing costs.

From the EPA’s website, (greensuppliers.gov), “The Green Suppliers Network . . . works with large manufacturers to engage their small and medium-sized suppliers in low-cost technical reviews that employ “clean and clean” methodologies to increase productivity, reduce waste, and boost profitability. A Green Suppliers Network review is not a regulatory inspection or an audit program. Rather, the Green Suppliers Network technical review identifies potential reductions in environmental impact at a facility.” It is up to the discretion of the supplier whether to act on the recommendations.

As the US EPA website “green supplier” reviews illustrate, and as Steelcase has experienced, customers of the small manufacturers benefit as well.

Taylor from Enviro-Stewards notes, “Completing lean and clean assessments may yield baseline supply chain information that large manufacturers such as Steelcase need for ecological footprint analysis, corporate social responsibility, socially responsible investing, greenhouse gas reporting, environmental stewardship and other initiatives.”

During the “green suppliers” review, value stream mapping is used to identify sources



of non-value added time or materials, identify opportunities to increase efficiency, and develop a plan for implementing improvements. This type of program reinforces our internal focus on lean manufacturing at Steelcase and our desire to continuously reduce our environmental footprint. Our suppliers and their processes are part of that footprint.

From a practical perspective, we need outside resources to reach as many suppliers as we would like. We have a large, global supply base and, while a dedicated internal team provides lean manufacturing assistance to suppliers, it is a finite resource. Having access to the “green suppliers” process gives us additional resources to improve our supply chain – and often inspires suppliers to share improvements with us.

Many of our suppliers are so enthusiastic about the “green suppliers” program that they’ve encouraged other suppliers (sometimes their competitors) to consider participating. Although our suppliers are not obligated to share information from the “green suppliers” review with us, many have chosen to do so. As a result of information-sharing, we’ve begun to realize how our expectations of the program have evolved from a focused “lean and green” review to an eye-opening experience in which some suppliers have discovered that ‘green’ is not only the right thing to do, it can actually save them money and open new markets.

Steve Beurkens, sales manager of H&L Advantage, Grandville, Michigan, says, “With the benefits that we have received from our involvement in the ‘green suppliers’ program, we are a much cleaner and leaner organization than we were just three short years ago. Those parameters have allowed us to reduce work in process, on-hand inventories, lead-times, and floor space, all of which help to lower internal costs. We have had occasions to offer our customers cost reductions based on these benefits, but more importantly, we

are able to fend off most price increase requests to our customers in an escalating raw material market. And we are able to respond even faster than before.”

Suppliers who focus on being lean strengthen their own financial position, which ultimately strengthens ours. We cannot make our products without our suppliers and we cannot make our products sustainable without our suppliers’ cooperation and creativity.

Keith Lane, regional account director at DuBois/JohnsonDiversey, who applied “lean and clean” principles to pretreatment systems at Steelcase, says, “The real benefit I personally received is the realization that

there are businesses out there that value a “bigger picture” approach... that “green” and overall process improvement really do mean something and that customers may be willing to partner with someone who can provide and show value. Also, the networking activity and assistance has been very valuable, discussing ideas and even finding common ground is one thing but getting help to put it into action is quite another.”

With DuBois/JohnsonDiversey’s assistance, Steelcase saves over a million dollars a year. DuBois/JohnsonDiversey offered their technical skills and essentially performed a

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“green ‘customer’” assessment after they were introduced to the “green suppliers” concept – a very creative application of the program.

The supply chain management department in a manufacturing organization is typically not the place from which to implement many of the organization’s environmental initiatives. The people at Steelcase who know our suppliers best do not pretend to be environmental experts. Conversely, those who are most knowledgeable about environmental issues typically don’t have much familiarity or leverage with our suppliers. The “green suppliers” program has given us a practical link to our suppliers when dealing with at times complex environmental initiatives. We use language we can all understand – “lean” (or waste reduction in general).

Steelcase has been applying lean principles to its manufacturing facilities since 1996 with favorable results, including a dramatic shrinking of its operations footprint. To build

on its experience, it decided to apply lean principles to other areas of the company, including its suppliers.

Pat Young, director of Product and Systems Improvement, Byrne Electrical Specialists says, “The Green Suppliers Network assessment really jump started our lean manufacturing efforts. They gave us the basic roadmap that dovetailed exactly with where we felt we should work first. Using that information we put together a Kaizen plan for the next year that addressed the areas pointed out in the assessment. As Byrne has been involved in this network, we are constantly learning where the boundaries are and how best to apply pressure to continue pushing the envelope of compliance. Byrne is now perceived by all of our customers as well versed in environmental strategies and as actively seeking to solve problems. Most discussions at an engineering level offer us a chance to offer green solutions at reasonable prices. Best of all, we understand the requirements better for our products than

our customers do. Isn’t that what it’s all about in the modern supply chain, being the technical expert for our products and leading the way in all types of improvements so that the end use customers benefit?

Byrne Electrical Specialists is taking the message to the next tier of the supply chain. As the supply chain is made aware of this desire to be environmentally sound, new products are being developed to meet those needs. Additionally, the more voices that are raised for this causes the sub-suppliers to listen more carefully because each voice speaks to a new market potential.”

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