Small- and Medium-Size Businesses

Readers Respond with Examples of Sustainable Development



by Richard MacLean

Richard MacLean is president of Competitive Environment Inc. E-mail: maclean@competitive-e.com. For electronic files of this and his other writings visit his Web site at www.competitive-e.com In my January 2009 column, I appealed to readers to supply me with some "breathtaking" examples of small- and medium-size businesses (SMBs) that demonstrate cutting-edge practices in sustainable development. That article was prompted by an earlier e-mail request I had sent to nearly a dozen senior colleagues that yielded so few examples as to be not only disappointing, but perplexing. As one colleague stated, "It's hard stuff to find. There's a dearth of SMB case studies." This month, we examine the response by *EM* readers.

Nineteen experts responded providing the names of 37 companies and 13 organizations active in SMB sustainable development programs. I have been writing columns and journal articles for over a decade and this was one of the best responses I've ever received. Clearly, there is a keen interest in this area, as is evident by the expanse and substance of the information provided. It is not possible to explore in detail the information collected in a single column, so instead, results are listed with direct quotes.

By far, Terry Foecke with Materials Productivity of Minneapolis, MN, provided the most thorough assessment—a nearly 2000-word analysis of 10 of the companies (see sidebar opposite for a list of companies suggested by readers). For example: "Geneq is a good example of how important sustainability innovations can be created within firms that have a good chance of achieving important impacts. The use of the Geneq chlorophyll meter allows precise monitoring of the effects and need for agricultural nitrogen additions via fertilizer."

Terry states that "because it is handheld and gives a direct read-out, farmers and applicators can essentially 'map' a

field for nitrate levels. Everyone knows that soil type and content can vary dramatically even within a single field, but the old method of sampling and chemical analysis, even if simple test strips were used, was far too cumbersome. Now, less nitrogen is wasted and yields are improved."

Steve Rice, department head for Corporate Communications at Formosa Plastics Corp., observed that "there is a paradox in searching for really good examples. The best case studies provide competitive advantage and, as such, their descriptions are obscured to protect the trade secret and business purpose. They become so vague as to be nearly worthless. My conclusion is that if the inventiveness of an SMB process or product performed so extremely well, why would the company want to share the basis of its success, thus having it replicated and eventually destroying its competitive advantage? This leaves the published examples weak, speculative and not having much business value, or all three. It is a perfect sustainable development paradox."

Georjean Adams of EHS Strategies struggled with the same search difficulties. "I was trying to find what I hoped would be a closer tie to SMBs through pollution prevention

Organizations that support sustainable development activities

The following were cited as examples of organizations that support the furtherance of sustainable development activities, specifically in SMBs.

EPA's Lean Manufacturing
Food Trade Sustainability Leadership Association
Green Suppliers Network
LocalHarvest
Oregon Sustainability Board
Organic Trade Association

Pacific Northwest's Pollution Prevention Resource Center

Purdue University's Product Lifecycle Management Center of Excellence Social Venture Network

Society of Manufacturing Engineers' Lean to Green Sustainability Tech Group Sustainable Green Printing Partnership

University of Minnesota's Center for Sustainable Enterprise Development Washington State's Department of Ecology's Lean and Environment

Companies engaged in cutting-edge sustainable development activities

The following companies were offered as examples of SMBs engaged in cutting-edge sustainable development activities. Not all fall within the strict criteria specified, but all exhibit most of the traits outlined in my January column (see "Small- and Medium-Sized Businesses: Perplexing Search for Examples of Sustainable Development," *EM* January 2009, p. 32).

Sector/Products

Company	Sector/Products	Company	Sector/Products
A•LOK Products	Watertight products	Maverick Enterprises	Biodegradable plastic products
Better Place	Transportation infrastructure	Meisel	Trade show graphics
Cincinnati Extrusion	Extruded plastic shapes	Monroe Litho	Printing
Clif Bar & Company	Foods	Numi Tea	Herbal teas
Columbia Paint	Paint and related equipment	Organic Valley	Foods
Derby City Litho	Printing	Perpetuum	Energy harvesting
Eco-Protective Products	Specialty paints and coatings	Pictura Graphics	Large-format printing
Fineline Printing Group	Printing	Portland Color	Large-format printing
Full Sail Brewing Co.	Beer	Pratt Corporation	Retail graphics
Geneq	Scientific Instruments	Recycline	Products from recycled plastics
Global Packaging Inc.	Flexographic printing	Serious Materials	Construction products
Green Mountain Coffee	Coffee	Seventh Generation	Household products
GWK		Stonyfield Farm	Foods
(Gesellschaft Wärme Kältetechnik)	Cooling technology equipment	Sustainable Harvest Coffee	Coffee
Harbec Plastics	Injection molding	TerraCycle	Products from recycled materials
Insuladd	Ceramic microspheres	Timberland	Boots and clothing
John Roberts Company	Commercial printer	United Natural Foods	Distributor of foods and related products
Liquidmetal Technologies	Amorphous alloys	VAST Enterprises	Landscape and deck pavers
Lemna Technologies	Lagoon-based technologies	Whole Foods Market	Retail grocery

(P2)—not sustainability per se, but a good first step. It appears to me that a lot of SMBs are embracing lean manufacturing (LM) and maybe this fact could piggyback the enthusiasm and marketing success with life-cycle management and sustainability thinking."

She continues, "I have found some case studies linking LM and P2, but even that has been a challenge. It's the same issue you point up—either people are making the same green products as their market niche or they are big companies. I think that is where the case studies are because companies are willing to spend the resources and can dedicate staff to work with case writers and marketing. My search has been for a direct tie with LM and not just P2/energy reduction as stand-alone projects. LM appeals to me as a disciplined approach to problemsolving involving all levels of a company. In theory, it should be self-sustaining and not as arduous as Six Sigma. It wins converts readily and has short-term results that SMBs can relate to."

The growing realization that SMBs are critical to achieving sustainable development has produced a groundswell of organizations (see sidebar opposite for examples) and literature focused specifically on SMBs and sustainability.

For example, one of the most recent and thoroughly sourced journal articles was written by Manuel Seidel et al.¹ The authors (all associated with New-Zealand-based universities) systematically explore the seven barriers faced by SMBs throughout the world:

- Undeveloped organizational culture with respect to environmental issues
- 2. Ignorance of their own environmental impacts
- Lack of knowledge and experience with environmental issues
- 4. Absence of effective environmental legislation directed at SMBs
- 5. Lack of awareness about environmental trends
- 6. Limited financial and staff resources available for environmental projects
- 7. Perceived conflicts between environmentally friendly practices and other business objectives

While space restrictions prohibit me from exploring this subject further, the information supplied by other *EM* readers and summarized here provide a good starting point for benchmarking and exploring the benefits of sustainable development should your own company be among the SMB community. **em**

Reference

 Seidel, M.; Seidel, R.; Tedford, D.; Cross, R.; Wait, L.; Hämmerle, E. Overcoming Barriers to Implementing Environmentally Benign Manufacturing Practices: Strategic Tools for SMEs; Environ. Quality Manage. 2009, 18 (3), 37-55.