Major companies have shown that taking leadership in substituting safer alternatives for toxic chemicals can have major benefits for a firm’s competitiveness and profitability.

Six case studies are presented in a recent report by Clean Production Action – *Healthy Business Strategies for Transforming the Toxic Chemical Economy* – Avalon Natural Products, Dell Inc., Hennes & Mauritz (H&M), Herman Miller, Interface Fabric and Kaiser Permanente. The case studies illustrate how these companies embraced the use of comprehensive, environmentally-friendly strategies to eliminate toxic chemicals and materials in their products and building materials. The report includes a cross-section of products, from famous Herman Miller ergonomic office chairs, to H&M’s affordable fashion-forward clothing, to the non-toxic carpet specially commissioned by Kaiser Permanente for its hospitals.

All of the companies’ investments are paying off in different ways, including cost savings, the creation of new sub-markets, product differentiation, reduced reputation risk, and improved quality. Their efforts show a clear path for other corporations to better manage chemicals in their supply chains and products.

**H&M Fashion Apparel**

Owning and operating seven retail stores in Massachusetts alone, and 1,200 stores around the world, Hennes & Mauritz (H&M) is known for its chic yet affordable clothing for kids and adults. Less well known are their advanced chemical restriction policies designed to protect the health of their consumers by eliminating the use of over 32 categories of toxic chemicals, many of which are widely used by their competitors. The company found that cost increases occurred only at the beginning of a transition, and returned to previous levels once mass production began. Total sales of this $9 billion company are up 14% (in 2004–5).
H&M is applying the precautionary principle. In practice, this has meant working closely with our suppliers to phase out substances and materials that are, or could potentially be, harmful to our customers or the environment, from our products. In doing so, we have constantly, together with our suppliers, searched for less harmful solutions. We have encouraged our suppliers to be innovative... In doing so, we have found that almost anything is possible as long as you set clear guidelines on what is not acceptable. We have not had to compromise on fashion or quality in a way that has harmed our business. Prices may have gone up temporarily but as soon as mass production has started, the prices have gone back to previous levels. With the background of this experience, we find it important that EU legislation supports the idea of substitution when a better alternative is available. Such legislation would support us in our continued effort to eliminate hazardous substances from our products and to find better solutions that are less harmful to the environment.”

— Ingrid Schullstrom, H&M Corporate Social Responsibility Manager

Herman Miller: Furniture Designed for the Environment

Based in Michigan, a global furniture company with $1.7 billion in revenue, Herman Miller, Inc. has advanced its long-standing environmental goals with a comprehensive Design for the Environment program in the 1990’s.

The Design for the Environment (DfE) product assessment tool evaluates new product designs in three key areas: material chemistry, disassembly, and recyclability. “Material chemistry” involves three core steps: 1) identifying all the chemicals in a material used to manufacture a product — such as the steel shaft in a chair — down to 100 parts per million, 2) evaluating the hazards posed by the chemicals in the material and 3) assigning the material a score of green, yellow, orange or red. “Green” is little to no hazard. “Yellow” is low to moderate hazard. “Orange” is incomplete data. And “red” is high hazard.

A challenge goal set by President and CEO Brian Walker is that 50 percent of all sales in 2010 must be from products that meet the DfE protocol, including:
• Contain no “red” materials — i.e., contain no highly hazardous chemicals.
• Are easily disassembled.
• Maximize recycled content and recyclability of materials.
• Contain no PVC.

“Only by incorporating environment into design can we create value rather than cost.”

— Gary Miller, chief development officer at Herman Miller
Utopia Cleaners: A Massachusetts Small Business Success Story

Over 80% of U.S. dry cleaners use the solvent perchloroethylene (“perc”). In 1991, more than 30,000 dry cleaning machines nationwide used 270 million pounds of perc, two thirds of which was released into the atmosphere. Such widespread use is of concern because the National Institute for Occupational Safety and Health recommends that perc be handled as a human carcinogen. Concerns about the toxicity of this dry cleaning solvent have prompted the development of alternative processes, such as the use of water and biodegradable detergents to remove soils.

Utopia Cleaners of Arlington, Massachusetts has successfully implemented a safer alternative to dry cleaning. They replaced their perc-using dry cleaning machine with a DaeWoo wet cleaning machine, making Utopia a perc-free garment cleaning facility. Before changing to wet cleaning, Utopia annually created approximately 3,600 pounds of perc-contaminated hazardous waste. Utopia now saves approximately $900 in purchasing costs and $1,800 in hazardous waste disposal costs yearly. Additional savings occur through reduced liability for any damages associated with the disposal of perc-contaminated wastes. The existing perc system at Utopia was at the end of its useful life, and the cost of replacing this system would have been approximately $40,000. In comparison, the perc-free DaeWoo wet cleaning machine used at Utopia can be purchased for approximately $1,000. Utopia Cleaners illustrates the financial feasibility and health benefits of using safer alternatives.

“When customers come into the store, they see signs indicating that we offer wet cleaning, and they specify that they want this service. On the whole, wet cleaning has produced cleaner, fresher looking clothes for my customers.”

— Myeong-Ho Lowe, Owner of Utopia Cleaners, Arlington, MA

Interface Fabric: Choosing Good Chemicals

Interface Fabric is a leading producer of interior fabrics and upholstery products. Based in Atlanta, Georgia, with manufacturing operations in four states, Interface began to develop a system to select safe chemicals using the most current science in the 1990s. The company has now implemented a Dye and Chemistry Protocol and implemented it in the development of a 100% bio-based polymer (Terratex PLA described above).

“Given the complexity of screening chemicals, it seems reasonable to expect increased chemical costs after implementing the protocol. Instead, Interface saw recurring annual savings of around $300,000 per year. The savings came from consolidation of its chemicals supplier base, since vendors with larger accounts could offer discounted, volume based pricing.” The company’s prioritization of safer alternatives had a ripple effect on the supply chain, as its suppliers have been proactively developing more benign products for the entire market.

According to Wendy Porter, Interface director of environmental management: “Our unique knowledge gives our salesperson an edge over the competition.”

These examples and many others show that innovations that protect our health and environment can also be “good for business.” However, many businesses continue to unnecessarily use toxic chemicals and are rewarded in the marketplace because of ignorance and a poorly designed regulatory system. We need a regulatory system that will reward and support innovation and responsible business practices.
Endnotes


2 Ibid.

3 Ibid.


6 Ibid. p 31

7 Ibid. pp 19-24

8 Ibid. Direct quote from p 23

9 Ibid.

10 Massachusetts Toxics Use Reduction Institute (TURI). (1996) Cleaner Technology Demonstration Site Case Study: Utopia Cleaners. www.turi.org/content/content/view/full/3943/