Drivers for Innovation and Marketing Safer Products
Summary Report

In November of 2005, the Lowell Center for Sustainable Production organized a conference of businesses, academics, governmental and non-governmental organizations to explore how innovation in green chemistry and design for the environment can be promoted and supported. The resulting group of over 70 people came to be known as the Green Chemistry in Commerce Council, or GC3. The GC3 currently has three working groups and this paper is a report of the "Drivers for Innovation and Marketing Safer Products" group. We are interested in drivers and obstacles for innovation and marketing more sustainable products, informing substitution with safer chemicals, and greening the supply chain.

Based on themes that emerged from the 2005 conference, and in-depth interviews conducted in the Summer of 2006 with 9 members of the Drivers for Innovation and Marketing Safer Products group representing industry, government, and environmental consulting firms, many drivers and obstacles emerged. The drivers included:

<u>Drivers</u>

Regulation
- Expanding regulatory requirements, especially at the international level e.g. REACH and RoHs. REACH will encourage dialog up and down the supply chain in a way that hasn't happened before.
- Standards, such as LEED, which has changed the building business.

Emerging Technologies
- New science-based frameworks e.g. industrial ecology, green chemistry, green engineering, green buildings.
- Some of the benefits of this new science include toxicity and hazard reduction or elimination, cost and risk reduction, new customers, customer retention and satisfaction, and new markets which all lead to an increase in sales.

Costs of "Brown"
- The costs of being "brown" drive innovation e.g. costs associated with clean up, hazardous waste removal and disposal, compliance etc.

CEO and Company Leadership

- CEO leadership e.g. Ray Anderson at Interface has been instrumental in revolutionizing the carpet industry.
- Industry leaders driving competition through change e.g. Walmart's recent announcement of major environmental initiatives and commitment to bringing their supply chain along on the journey will put pressure on other companies to take sustainability issues into consideration.
- CEO's setting green goals and evaluating employees against those goals

Pressure

- Consumer pressure as they gain awareness of product safety issues. "Green" credentials are starting to become important to customers and there is general agreement that this will continue to grow as the impact of environmental issues continues to bite.
- Pressure from NGOs.

Increased Opportunity

- Good public relations and brand enhancement opportunities for companies.

Many obstacles were also identified:

<u>Obstacles</u>

Chemical Data Gap

- Limited information up and down the supply chain – for manufacturers, retailers and end users.
- Lack of available information on environmental, health and safety impacts and risks from different exposure routes.
- Lack of data on tools to gather data on toxicology and unintended consequences.

Lack of "Green" Definition / Distinction

- No definition of "green" exists so companies are unable to distinguish themselves from greenwashers.
- No credible 3rd party certification to give public recognition to companies for steps they are taking towards sustainable products / production.
- Current perception that green means it's inefficient, of inferior quality and costs more.

Lack of Regulation

- Lack of government regulation means businesses are pushed to voluntarily replace legal materials that have potential but uncertain risks.

Lack of Incentives

- Lack of government support – both technical and moral - for companies that want to innovate.
- Companies have little incentive to green as products can't be sold on "greenness" alone. It costs to reformulate and most companies won't reformulate just to be green.

- The middle of the supply chain is hard to influence as they have little pressure (far from customer and NGO pressure) or incentive (far from gaining credit, an increase in customers or an increase in revenue) to green.

Short Term View of American Business

- Most companies in the US – compared to the EU – are focused on the quarterly return which is a short term view. Sustainability issues become more germane with a long term view.
- It's difficult to make management pay attention to future problems as currently externalities are not paid for by companies.
- CEO's are not usually rewarded substantially without high quarterly returns.

Other Obstacles

- A reduction in the number of suppliers.
- General inertia in companies to change: legal affairs departments in companies are worried about liability issues; and the "developed" world has a lot of embedded capital invested in old technologies.
- Potential for reduced product performance and higher costs for a number of reasons including that the reduction of risk is not necessarily creating an equal return on investment.

Based on these identified drivers and obstacles, there are many areas for the group to focus its attention when looking at next steps for driving innovations and marketing safer products. Some of the suggested areas of focus follow:

- Develop and promote a credible 3rd party endorsement system so companies who are producing sustainable products and processes – or who are taking steps to do so – can differentiate themselves in the market place and be identified by consumers. Many companies, including GC3 members are developing innovative technologies and products but no one knows about it. A 3rd party endorsement system could take the form of a labeling system to distinguish these companies from greenwashing. There are many varieties of labeling from product information labels such as nutrition labels to comparative labels like the energy star label where consumers can compare the energy use of competing models of household items at a glance. In this way, consumers don't need a PhD to know what's safe to use or not.
- Define "green." The term green is tainted and needs rehabilitation or a new word altogether. The idea of safe products isn't necessarily best described by calling them green as safe has a different meaning. They're "products with sustainable attributes" but that's not going to work either as sustainability is not yet understood by many people. One suggestion is to try to phase in science and high tech terms as green is seen as a 'soft' word in a world of science and engineering where you're trained to control nature.
- Mainstreaming "green". How do we mainstream so we're not conscious about environmental products; they are just the norm or the mainstream. Then the expectation is built that good companies will produce good environmental products. If companies adopted this philosophy, "greenness" becomes one more filter in improving their process, and one that is just as necessary as any other, such as cost or quality. This would mainstream green.

- Fill the chemical data gap by collaboration with chemical suppliers and other manufacturers to harmonize lists of chemicals of concern and tools for assessing safer materials. Currently the *Tools for Chemical Assessment and Safer Design* group has mobilized around this issue.
- Encourage companies to look long term. There's a growing number of firms looking long term - at future fires to put out, and potential law suits - and they're taking this into account from the beginning. The long view will lower costs when compared to those of their competitors in the long run because there are no costs down the track related to clean up, hazardous waste disposal, compliance, etc. These companies need to be showcased, e.g. the 3M Scotchgard example. 3M Scotchgard was pulled off the market and reformulated when it was found it was having the same consequences as flame retardants. Now the product is even more profitable.
- Encourage investment. The concept of corporate sustainability is attractive to investors because it aims to increase long-term shareholder value. A growing number of investors are convinced that sustainability is an opportunity for enlightened and disciplined management, and, thus, a crucial success factor. They place investments in sustainability-driven companies, identifying those firms that create long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental, and social developments. The Dow Jones Sustainable Index for example provides a bridge between companies implementing sustainability principles and investors wishing to profit from their superior performance and favorable risk/return profiles.

In early 2007, once these areas had been identified, the group decided to follow up on two of the issues: developing and promoting a credible 3rd party endorsement system and defining green. Both of these issues come together as *Distinguishing green in the marketplace.* The group has begun research into current ecolabels as a first step toward establishing a decent labeling scheme, or to see if there are existing labels, that would define green, prevent greenwashing and allow consumers to easily identify safe (or safer) / green (or greener) products.

This will be the focus of the Drivers for Innovation and Marketing Safer Products group at the GC3 Roundtable from April 25-27, 2007.