















The Green Chemistry and Commerce Council (GC3): Year in Perspective

Sixth Green Chemistry and Commerce Council Cupertino, CA May 4, 2011





## Highlights

#### o GC3 marketing and outreach

- Quarterly newsletters (to more than 600 people)
- Webinars
- Outreach and recruitment to new sectors – retail, electronics, health care, pharmaceuticals
- Reflected in new faces at GC3

# Highlights

#### Transition to a membership organization

- Finalization of member guidelines
- Collection of dues (about \$75,000)
- 66+ official members with many more still participating in groups, webinars, etc.
- Focus on building business participation

#### Move towards project groups from working groups



#### GREEN CHEMISTRY

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CHEMICALWATCH

#### The GC3: stakeholder collaboration on safer products

Responding to concern in the US about the impacts of REACH on supply chain availability of chemicals information, and challenges in advancing safer chemistry, a group of companies, plus other government and nonprofit stakeholders, worked with the Lowell Center for Sustainable Production (LCSP) at the University of Massachussetts Lowell to create the Green Chemistry and Commerce Council (GC3). Associate Professor Joel Tickner explains its work.

The GC3's membership includes more than 50 firms and business-oriented NGOs sharing a common mission: to implement green chemistry throughout supply chains, share strategies to overcome barriers and reduce environmental focuprints, promote education and information on safer chemicals and products, and to identify existing and needed information on toxics hazards, risks, exposures and safer alternatives. The organisation has talked to more than 100 businesses, government agencies and nonprofits about these challenges.

The GC3 has a series of working groups focused on delivering practical reports and projects that advance collaboration on safer chemistry. One of these is an academic/ was written collaboratively by more than a dozen companies, NGOs and the US Environmental Protection Agency. It provides tools and examples in support of improved supply chain communication between suppliers and their customers, and in the development of more sustainable products. The report was driven by many of the efforts already underway within supply chains to actively share relevant chemical information between fabricators, formulators, and their suppliers. It provides clear signals to suppliers on the needs that fabricators and formulators have for chemical data and the consequences of not providing such data.

Retailers are increasingly the target of media and consumer campaigns on chemicals of concern in products. They are powerful actors in stimulating market transitions away from chemicals of concern. However, they often do not have the understanding or resources to understand product chemistry or alternatives. A third working group is developing a web resource for the retail industry that identifies tools and systems to manage the chemical ingredients of the products they are selling. Building on the group's report: "Best practices in product chemicals management in the retail industry" (\* Best practices ), this web resource is being developed to assist retailers in developing chemicals management systems by

topics this year will include advancing green chemistry education, driving innovation through transparent chemical data and analysis, green chemistry and safer materials in the electronics sector, and new collaborations to advance safer materials.

Companies that can show the business case for green chemistry adoption and that distinguish themselves in the marketplace will be in a good position to gain competitive advantage from increasing consumer preference for safer products. But despite these trends, there are still significant barriers to the efforts of leading edge companies attempting to implement safer products. Informational, technical and policy barriers often present insurmountable challenges, particularly for small firms. As such, organisations like the GC3 can help firms identify examples and models for overcoming barriers, and promote policies and market changes that encourage adoption of safer products.

The GC3 experience has demonstrated the power of cross-sectoral and supply chain collaboration in overcoming common scientific, design, application, and incentives challenges. While a big vision is a prerequisite for advancing innovation in safer products, a pragmatic approach that recognises the challenge of actual, on the ground implementation of green chemistry

## **GC3** Publications

- Meeting Customers' Needs for Chemical Data: A Guidance Document for Suppliers, February 2011
- Compilation of Terms Marketing Green Products: A Green Glossary, November 2010.
- Two book chapters on GC3.
- Press and stakeholder recognition of reports

#### Meeting Customers' Needs for Chemical Data

A guidance document for suppliers





February 2011 • Version 1









Version 1.0

Commerce Council

November, 2010

There is no one organization that officially defines terms used in the marketing and sale of green products. Instead, there are a multitude of organizations ranging from government to industry to independent certifiers, to nonprofit organizations. This leaves consumers confused by what are often unwarranted or overblown claims of sustainability or environmental friendliness, a phenomenon known as greenwashing. Innovators and leaders in the production of sustainable products also struggle with greenwashing as they try to differentiate their products in the marketplace. In the absence of definitions of "green" or current guidelines for words and terms used to market and sell green products, product manufacturers making safer, more environmentally sustainable products have few tools to identify their products from others.

The US Federal Trade Commission (FTC) has attempted to establish baseline environmental marketing criteria with its "Guides for the Use of Environmental Marketing Claims," known as the "Green Guides;" but the latest update of these guides was published in 1998, with a 2009 update still to be released. There is currently a rising tide of legal and regulatory actions aimed at products pitched as "environmentally friendly," as consumers and the FTC have begun challenging whether such claims live up to their billing<sup>1</sup>.

In an effort to gain some clarity about the definitions of terms commonly used to market and sell "green" products, the Green Chemistry and Commerce Council (GC3), a business to business network of firms across sectors dedicated to advancing safer chemicals and products has developed a "Green Glossary." Terms that are commonly used to market and sell green products were researched and a number of these were selected for inclusion in Version One of the Glossary. Initially, definitions of terms were gathered from various sources including government, industry, certifiers, and the nonprofit sector. The variety of definitions for single terms, none of which is "official" highlights the challenge that has made greenwashing so prevalent. For Version One of the Green Glossary we have included definitions most likely to be used and respected by companies trying to differentiate their products as safer. The definitions included are for the most part from either government or highly regarded non-profits.

The Glossary provides a definition or definitions of a term, the source of the definition government, guideline, standard, label, industry, government, NGO - as well as a website, notes, and opportunities for misuse. The opportunities for misuse often illustrate the limitations of the definition.

<sup>&</sup>lt;sup>6</sup> O'Connell, Vanessa. "Green" Goods, Red Flags: Rash of Earth-Friendly Claims Spurs Rising Number of Lawsuits and FTC Actions," *The Wall Street Journal*, April 24, 2010, under "Business"

http://online.wsi.com/article/SB10001424052702304506904575180210758367310.html (accessed September 14, 2010).

🥹 Federal Trade Commission Proposes Revised "Green Guides" - Mozilla Firefox		FX
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For Release: 10/06/2010 Federal Trade Commission Proposes Revised "Green Guides"	E-mail this News Release If you send this link to someone else, the FTC will not collect any personal information about you or the recipient.	
Seeks Public Comment on Changes that Would Update Guides and Make Them Easier to Use	Related Items:	
The Federal Trade Commission today proposed revisions to the guidance that it gives marketers to help them avoid making misleading environmental claims. The proposed change are designed to update the Guides and make them easier for companies to understand and use. The changes to the "Green Guides" include new guidance on marketers' use of product certifications and seals of approval, "renewable energy" claims, "renewable materials" claims.	<sup>16</sup> C.F.R. Part 260: Guides for the Use of Environmental Marketing Claims: Request for Public Comment on Proposed, Revised Guides, FTC File No. P954501	
and "carbon offset" claims. The FTC is seeking public comments on the proposed changes un December 10, 2010, after which it will decide which changes to make final.	til  Text of the Federal Register Notice (with table of contents)	
"In recent years, businesses have increasingly used 'green' marketing to capture consumers' attention and move Americans toward a more environmentally friendly future. But what companies think green claims mean and what consumers really understand are sometimes	<ul> <li>Green Guides Summary of Proposal</li> <li>Additional Information about</li> </ul>	
two different things," said FTC Chairman Jon Leibowitz. "The proposed updates to the Green Guides will help businesses better align their product claims with consumer expectations."	Green Guides Review     Text of the Federal Register     Notice as Published Avith	
The Green Guides were first issued in 1992 to help marketers ensure that the claims they are making are true and substantiated. The Guides were revised in 1996 and 1998. The guidance they provide includes: 1) general principles that apply to all environmental marketing claims; 2)	table of contents added)	
these claims; and 3) how marketers can qualify their claims to avoid deceiving consumers.	Media Advisory: October 5, 2010 FTC to Hold Media Phone	
The proposed Guides issued today include changes designed to strengthen the ETC's	Briefing on Proposed Changes	<u> </u>

# GC3 Education

- Quarterly webinars (attended by 40-50 people)
  - Green Chemistry Education
  - Overview of EPA safer alternatives activities
  - California Draft Consumer Product Alternatives Regulations
  - Nike's green chemistry activities
- Trips to Washington DC, Fall 2010, Winter 2011
  - Meetings with EPA, Congressional Staff, NSF
- Panels and presentations at major conferences/webinars



### Annual GC3 Innovators Roundtable Meetings

o 2005: Charlottesville, VA

- o 2007: Lowell, MA
- o 2008: Beaverton, OR

o 2009: Broomfield, CO



o 2011: Cupertino CA







## GC3 Project Groups

#### • Business and Academic Partnerships

Model business-academic collaboration to advance alternatives to phthalates in wire and cable.

 Facilitating Chemical Data Flow Along Supply Chains

Development of a guidance document for suppliers on the data needs of fabricators and formulators and how best to provide such

# GC3 Project Groups

#### Incentivizing Green Chemistry Along Supply Chains

A statement on incentives to support green chemistry development and adoption along supply chains

 Portal of Tools & Systems Retailers Use to Manage Chemicals in Products
 Development of a web resource for retailers that outlines various tools available to more effectively manage chemicals in products.



## **Advisory Committee**

- Berkeley Cue, Pfizer (retired)
- o John Frazier, Nike
- Lauren Heine, Lauren Heine LLC
- o Bob Israel, Johnson Diversey
- Rich Liroff, Investor Environmental Health Network
- o Roger McFadden, Corporate Express
- Plus Lowell Center for Sustainable Production

# Highlights of key GC3 activities

- Successful support for passage of America COMPETES and beginning work with NSF about green chemistry funding
- Input and support for EPA DfE transparency and alternatives assessment efforts
- Continued engagement as key actor on Green Chemistry Research and Development at Federal Level – work with Whitehouse Office of Science and Technology Policy and Senate Commerce Cmte staff
- Advancing outreach to retailers including meeting on chemicals management in the retail industry
- Development of model for industry/ academic collaboration for advancing GC research and application
- Retreat and guidance document on meeting customer's needs for chemical data.



## What's new in the past year

- Continued policy development at state level and collaboration between states.
- Companies submitting first REACH registrations as well as completing Classification and Labeling requirements. First authorization requirements
- Asia pushing the envelope on toxics
- Continued consumer concern about toxic substances in products and greater use of web-based support in product choices
- Increased retailer and chemical user engagement in demanding greater information and safety through supply chains.
- Change in Congress/continued focus on economy challenges efforts.
- Increased federal collaboration and movement towards "solutions" – bold ideas.

# State Chemicals Policy 2009-2010 Legislative Session

#### Single Chemical Restrictions

- Bisphenol A—7 states, 4 counties, 1 city enacted; 19 states, the District of Columbia, 1 county, 1 city proposed
- Cadmium—4 state enacted, 4 states proposed
- Lead—4 states enacted, 9 states and District of Columbia proposed
- PBDEs—4 states enacted, 12 states proposed

#### Product Categories

- Cleaning Products—5 states enacted, 13 states proposed
- Children's Products and Toys—3 states enacted, 24 states proposed
- Cosmetics—9 states proposed
- Comprehensive Policies to Identify, Prioritize, and Manage Chemicals of Concern
  - 2 states enacted (MN and ME), 10 states proposed

#### Green Chemistry

- CT—Enacted legislation to establish Chemical Innovations Institute
- MN enacted and MI proposed legislation to incorporate definitions of green chemistry into economic development policies

#### Establishment of Interstate Clearinghouse on Chemicals



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	European Chemicals Agency(ECHA)	. della	
CH	The Agency, located in Helsinki, Finland will manage the registration, evaluation, authorisation and restriction processes for chemical substances to		
SULTATIONS	ensure consistency across the European Union. These REACH processes are designed to provide additional information on chemicals, to ensure their safe use, and to ensure competitiveness of the European industry.		
A CHEM	In its decision-making the Agency will take the best available scientific and technical data and socio-economic information into account. It will also		
CH-IT	provide information on chemicals and technical and scientific advice. By assessing and approving testing proposals, the Agency will minimize animal testing.		
ANCE	Weekly update of Active Lead Registrants		
SLATION	The role of the Lead Registrant is laid down by the REACH Regulation and is mandatory for each SIEF.	NEWS	
)	Please note that as of 17 February 2010, ECHA will publish on a weekly basis the list of EC numbers,		
SS AND EVENTS	substance names and whether the Lead Registrant has been appointed or retains candidate status. In addition the earliest expected registration deadline that has been communicated to ECHA by LRs will		
UT ECHA	also be published.	The clock	
LICATIONS	Lead Registrants and Candidate Lead Registrants who are active in their SIEFs are advised to inform ECHA of their nominations by using the link below: <u>Lead Registrant Nomination</u>	is ticking	
KING WITH US	As the situation evolves within each SIEF, ECHA recommends that entries be regularly updated (e.g.	Consultation on	
ALS	commation of registration deadlines, update of SIEF membership numbers etc).	Multi-Appual	

## TSCA reform legislation reintroduced

- o Beginning of a long discussion
- Sections on Green Chemistry and safer alternatives enhanced
  - Network of green chemistry centers
  - Training and research
  - Reduced burdens for innovation in safer chemicals

# Continued EPA initiatives on green chemistry and safer alternatives

#### Advancing data transparency

- Changes to Confidential Business information requirements
- Posting of TSCA inventory on-line
- Inventory Update Rule changes
- Additional chemical testing rules
- Chemical action plans for chemicals of concern
- Advancing safer chemistry through Design for Environment
  - Formulators initiative new guidelines for transparency
  - Partnership programs for informed substitution comments on alternatives assessment process.
- ORD efforts

# CDC National Conversation on Chemical Exposures

• "A fundamental shift of emphasis is needed in our nation's approach to chemical exposures toward the development, adoption, and evaluation of safer alternatives. Preventing and eliminating problems at the source before harm occurs is a fundamental and proactive public health goal. Given that it is impossible to have full scientific certainty regarding public health risks, however, policymakers need decision-making tools that employ scientific rigor and encourage a commonsense, precautionary approach."

2008–2009 Annual Report 💣 President's Cancer Panel

### REDUCING ENVIRONMENTAL CANCER RISK

What We Can Do Now



U.S. DEPARTMENT OF HEALTHAND HUMAN SERVICES National Institutes of Health National Cancer Institute

Safer Alternatives to Many Currently Used Chemicals Are Urgently Needed.

The requisite knowledge and technologies exist to develop alternatives to many currently used chemical agents known or believed to cause or promote cancer. Many chemists require additional training to understand environmental hazards and reformulate products. Importantly, "green chemistry" alternative products themselves require longitudinal study to ensure that they do not pose unexpected health hazards.

The Panel believes that just as there are many opportunities for harmful environmental exposures, ample opportunities also exist to intervene in, ameliorate, and prevent environmental health hazards. Governments, industry, the academic and medical communities, and individuals all have untapped power to protect the health of current and future generations of Americans and reduce the national burden of cancer.

# Agency interest in advancing greener chemicals/processes

- NIOSH/OSHA prevention through design
- CPSC phthalate alternatives
- GSA Executive Order 13514
- "reducing and minimizing the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of... implementing integrated pest management and other appropriate landscape management practices; and increasing agency use of acceptable alternative chemicals and processes in keeping with the agency's procurement policies."



More in: → News 2011 January-March

ChemSec today launches a concrete tool for action on highly problematic endocrine disrupting chemicals. The first set of chemicals identified as Substances of Very High Concern under REACH solely due to their endocrine disrupting properties will be presented today in Brussels. These 22 substances, many of them commonly found in toys, food packaging, and cosmetics, have been incorporated into the SIN List 2.0.

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## Challenges for the future

- Ensuring new policy developments support innovation in DfE and Green Chemistry.
- Ensuring adequate information and tools are available to ensure companies can make informed decisions in moving towards safer materials.
- Ensuring that DfE/Green Chemistry remain priorities, adequately resourcing programs.
- Ensuring a new cadre of trained scientists
- Ensuring good communication and dialog up and down supply chains to move in the right direction.
- Making the case for GC and safer products.

# Programmatic questions as we move forward

- What are key focal areas where the GC3 can provide value added - defining deliverable work products, and advancing the mission of the GC3 and its participants?
- What projects will best engage participants actively in providing concrete impacts in practice and policy?
- How do we engage GC3 participant leadership?

### **Strategic Directions - Organizational**

- How do we expand the GC3 in new key sectors: retail, pharma, personal care, electronics, auto
- How to ensure active participation to build energy and interest in the GC3 and "ownership" over the network and projects.
- How to ensure adequate resources for coordination, administration and research/outreach.
- How to link more effectively to other efforts to avoid duplication – more and more efforts
- How to identify the "right" people in different companies to engage them in the GC3.