

Green Chemistry in Michigan and the American Chemistry Council's Perspectives



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Overview

- What is Green Chemistry?
- Promotion and Encouragement
- Research & Development, Education, & Outreach
- Incentives
- Looking Ahead in Michigan



What is Green Chemistry?

- “Green Chemistry” is ***product stewardship done right.***
- Makes health, safety, and environmental protection ***an integral part of the full life cycle*** of chemical products.
- Objective of Green Chemistry should be to protect health and the environment ***in a robust economy.***
- Green Chemistry is ***a way of doing business,*** not a government mandate.



What is Green Chemistry?

- Green Chemistry principles are at the heart of the ***everyday business*** of chemistry.
- ACC's Responsible Care® commitments include evaluations of chemical products & their uses.
- Chemistry helps ***make lives safer, healthier, and more productive.***
- ACC member companies practice Green Chemistry and Green Engineering in their operations.



Promotion and Encouragement is Essential for Green Chemistry

- ***Innovation cannot be legislated.***
- Both Green Chemistry and Green Engineering can, and should, be ***promoted & enhanced*** by appropriate policy decisions. Michigan has a unique opportunity to do so!
- Successful Green Chemistry/Green Engineering is achieved through ***inter-disciplinary collaboration*** in business, government, and academia.



Research & Development, Education, & Outreach

- Collaborative mechanisms may include:
 - sharing of expertise
 - financial support for research
 - information exchange
 - public education
- Federal agencies, private sector, professional associations and universities are working on Green Chemistry strategies.
- ***Michigan should continue this effort!***



Research & Development, Education, & Outreach

- Chemists ***need to understand toxicology*** and the ***interaction between*** health and environmental protection and toxicology.
- Michigan should ***support education*** in the methods and principles of Green Chemistry.
- Michigan should ***encourage innovative research*** in Green Chemistry and Green Engineering.



Research & Development, Education, & Outreach

- ***Substitution is not always feasible & not always the right choice.***
- Substitution is one of a number of risk management options.
- ***Important difference between “informed substitution” and “regrettable substitution”.***



Incentives

- “Green Chemistry” does ***not pick “winners” or “losers”***.
- Green Chemistry should help ***remove barriers and create objective tools*** that foster new products and promote consumer/customer awareness.
- One significant challenge is the difficulty in becoming ***economically viable and gaining initial access to a competitive marketplace.***



Looking Ahead in Michigan

- **Gov. Granholm's Executive Directive 2006-6**
 - Encourages R&D
 - Creates Green Chemistry Support Program
 - ACC supports these concepts!
- ACC can facilitate contact with the chemical industry.