

SAE GREEN ENGINEERING & TECHNOLOGY TRANSFER WORKSHOP – HOW CAN A **GREEN** CENTER HELP THE AUTOMOTIVE INDUSTRY SUCCEED?

Feasibility Study for Establishing a Center for Green Innovation & Technology Transfer for the Automotive Industry in Michigan

March 3, 2010

SAE Automotive Headquarters, Troy, MI

BACKGROUND

SAE International was awarded a grant from the State of Michigan Department of Natural Resources and Environment (formerly Department of Environmental Quality) with support of the Green Chemistry Roundtable, to develop a workshop devoted to exploring the feasibility of establishing a Center for Green Innovation & Technology Transfer for the automotive industry in Michigan. The workshop Steering Committee has developed an interactive program to examine the feasibility of such a center in Michigan. First, the workshop will examine existing “green” centers that might serve as models for a Michigan center. Second, four areas will be explored that could be the focus of a green center for the automotive industry:

- Materials and Research & Development
- Technology Transfer & the Supply Chain
- Education, Training and Workforce Needs
- Principles, Standards, and Regulatory Trends

Third, panel and audience discussions will examine how these areas, either individually, or all together, could be integrated into a Center in Michigan that could facilitate transition to a greener industry and be of value to the automotive industry.

AGENDA

7:30 am – 8:00 am **Registration and Continental Breakfast**

8:00 am – 8:15 am **Welcome, objectives of workshop**

Moderators: Bill Wagner, SAE International
Carol Henry, George Washington University

8:15 am – 9:30 am **Models for a Center**

Speakers:

8:15 – 8:30 John Warner, Introduction to Green Chemistry
8:30 – 8:45 Rui Resendes, Green Centre Canada, Connecting Industry with Canadian Green Chemistry Technologies
8:45 – 9:00 William Wagner, Overview of the Performance Review Institute

Panel (includes speakers):

9:00 – 9:30 Karen Edlin, Michigan Department of Natural Resources and Environment
Don Schomer, Bayer Material Science

9:30 am – 9:45 am **Break**

9:45 am – 10:45 am **Materials and Research & Development**

Speakers:

9:45 – 10:00 Optimizing Extended Supply Chains using Lean and Clean Assessments – *William Stough, Sustainable Research Group*
10:00 – 10:15 Substances of concern – Chasing a Moving Target - *Pat Beattie, Arcalis Scientific*
10:15 – 10:30 Model for Industry Collaboration - SAE Cooperative Research Program - *Gary Pollak, SAE International*

Panel (includes speakers):

10:30 – 10:45 Clinton Boyd, Sustainable Research Group

10:45 am – 12:00 pm

Technology Transfer

Speakers:

10:45 – 11:00
11:00 – 11:15
11:15 – 11:30
11:30 – 11:45

Process of Innovation / IP / Commercialization - *Neil Sheridan, Kettering University*
Ford's Existing Technology Transfer Model - *John Viera, Ford*
GM's Technology Transfer Methods - *John Bradburn, General Motors*
Green Ideas versus the Bottom Line Buyer/Decision Maker - *Dave O'Ryan, Asset Recovery & Management Group*

Panel (includes speakers):

11:45 – 12:00

Stephen Ranzini, University Bank

12:00 pm – 12:45 pm

Lunch

12:45 pm – 1:45 pm

Education / Re-Training / Workforce Needs

Speakers:

12:45 – 1:00
1:00 – 1:15

1:15 – 1:30

Benchmarking Sustainable Engineering Education – *David Allen, University of Texas*
Creating Workforce Engagement through Education, Training and Communication –
David Rinard, Steelcase
From Single Course to Greening the Curriculum - *Terri Lynch-Caris, Kettering University*

Panel (includes speakers):

1:30 – 1:45

Guy Williams, G.O. Williams & Associates

1:45 pm – 3:00 pm

Principles, Standards and Regulatory Trends

Speakers:

1:45 – 2:00
2:00 – 2:15
2:15 – 2:30

Emerging Trends in regulations/standards in the automotive industry-*Tom Murray, EPA*
Emerging issues around green standards - *Clinton Boyd, Sustainable Research Group*
Example of leadership practices working with industry to be proactive and ahead of regulations - *John Warner, Warner Babcock Institute*

Panel (includes speakers):

2:30 – 3:00

Bill Hill, retired - General Motors
Kyle Williams, Bosch
Andy Hobbs, Ford

3:00 pm – 3:15 pm

Break

3:15 pm – 4:30 pm

Panel and Audience Discussion with the Workshop Steering Committee

Panel:

Bill Wagner, SAE International
Carol Henry, George Washington University
Pat Beattie, Arcalis Scientific
Clinton Boyd, Sustainable Research Group
John Bradburn, General Motors
Karen Edlin, Michigan Department of Natural Resources and Environment
Andy Hobbs, Ford
Terri Lynch-Caris, Kettering University
Don Schomer, Bayer Material Science
Kyle Williams, Bosch

4:30 pm – 5:00 pm

Wrap Up and Next Steps