



INTERNATIONAL
TRADE
ADMINISTRATION

Sustainable Manufacturing Initiative (SMI) and Public-Private Dialogue

U.S. Department of Commerce

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Manufacturing and Services

September 16, 2010

Presentation Outline

1. Why We Have this Initiative
2. Current Projects
3. Upcoming Work
4. Questions

Manufacturing and Services (MAS)

- One of the four sections of the International Trade Administration
- Primary liaison with U.S. industry with a goal of enhancing U.S. competitiveness
- Offices organized by industry sector
- Federal Government's chief advocate for the manufacturing and services sectors across policy areas (regulations, trade, etc.)

Industry and Sustainability

Sustainability is a key competitiveness issue for U.S. manufacturers.

Industry Needs

- Material and Natural Resource Costs and Supply Pressures
- Proliferation and uncertainty of Environment/Health Regulations both domestically and internationally
- Customer Demands – “greener” products, more data (OEMs, government, retail, consumer)
- Access to Capital

Industry Demands

- Centralizing and delivering information on USG programs/resources
- Enhancing awareness and education on sustainability and its benefits

The SMI Mission

Goals - Identify U.S. industry's most pressing sustainability needs and challenges and coordinate public- and private-sector efforts to address industry's sustainability priorities.

Priorities - Addressing the “triple bottom-line”:

- People: sustaining, creating jobs in old and new fields
- Planet: energy efficiency, pollution prevention, waste reduction
- Profits: manufacturers' competitiveness, profitability

Value-Added - Spread awareness of, and create USG resources that can enhance U.S. industry's competitiveness; and, leveraging MAS industry expertise to build a platform for new market and jobs expansion.

The SMI **convenes**, **collaborates** with and **connects** U.S. businesses on issues where sustainability and competitiveness intersect

1) Creation of an Interagency Working Group on Sustainable Manufacturing

- Department of Commerce (DOC)
 - International Trade Administration (ITA)
 - National Institute for Standards and Technology (NIST)
 - Economic Development Administration (EDA)
- Environmental Protection Agency (EPA)
- Department of Energy (DOE)
- Department of Labor (DOL)
- U.S. Department of Agriculture (USDA)
- Council on Environmental Quality (CEQ)
- General Services Administration (GSA)
- Department of the Treasury
- Department of State
- Department of Justice (DOJ)
- Department of Defense (DOD)
- Office of Management and Budget (OMB)
- Department of Education
- Small Business Administration (SBA)
- Department of Veterans Affairs (VA)
- Federal Trade Commission (FTC)
- National Aeronautics and Space Administration (NASA)

Project #2: Sustainable Business Clearinghouse

- Need for central portal of programs/resources across government agencies
- Searchable based on issue, industry, and type of information
- More than 800 sites in database. Has been expanded to include state resources.
- Online now @ www.manufacturing.gov/sustainability





Helping U.S. businesses by

Promoting Trade and Investment
Strengthening Industry Competitiveness
Ensuring Fair Trade

Browse by organization

U.S. Commercial Service
Manufacturing and Services
Market Access and Compliance
Import Administration



The Sustainable Business Clearinghouse was created to provide U.S. companies with a central portal for information on programs and resources that can assist them in enhancing their competitiveness and profitability in environmentally sustainable ways.

The Department of Commerce has started by collecting information on Federal-level government programs/resources in this searchable clearinghouse. We plan to expand the clearinghouse to include state-level resources, and we encourage state government programs, or firms that receive state-sponsored services, to contact us with information on these programs.

If you know of a federal or state government site that you feel should be included in the clearinghouse or if you have any comments or questions, please email us [here](#).

[Click here](#) for instructions on how to use the clearinghouse.

Don't know where to start? In addition to the clearinghouse, we maintain a list of key federal programs and resources that support sustainable business practices [here](#).

Photo courtesy of NASA's The Visible Earth (<http://visibleearth.nasa.gov/>)

Sustainable Manufacturing

- ▶ [Sustainable Manufacturing Home](#)
- ▶ [About Commerce's SMI](#)
- ▶ [What is Sustainable Manufacturing?](#)
- ▶ [Sustainable Business Program and Resource Clearinghouse](#)
- ▶ [Sustainable Manufacturing American Regional Tours \(SMART\)](#)
- ▶ [Sector-Specific Metrics Efforts](#)
- ▶ [2009 Sustainability Summit](#)
- ▶ [2007 SMI Kick-off Event](#)
- ▶ [News and Releases](#)
- ▶ [Contact Us](#)
- ▶ [Sign-up for Email Updates](#)

The International Trade Administration, U.S. Department of Commerce, manages this global trade site to provide access to ITA information on promoting trade and investment, strengthening the competitiveness of U.S. industry, and ensuring fair trade and compliance with trade laws and agreements. External links to other Internet sites should not be construed as an endorsement of the views or privacy policies contained therein. This site contains PDF documents. A [PDF reader](#) is available from Adobe Systems Incorporated.



US Department of Commerce Sustainable Business Clearinghouse

State

Hold down the <Ctrl> key to select multiple items

- All
- Alabama
- Alaska
- Arizona
- Arkansas

Sustainability Issue

Hold down the <Ctrl> key to select multiple items

- All
- Air Pollution/Quality
- Biodiversity/Ecosystems
- Brownfields/Land Use
- Climate Change/GHG Emissions

Industry Sector

Hold down the <Ctrl> key to select multiple items

- All
- Aerospace
- Agriculture
- Automotive
- Building Materials

Type of Information

Hold down the <Ctrl> key to select multiple items

- All
- Compliance Assistance
- Financial Assistance
- General Information
- How-To Guides

[Checklist for Corporate Energy Efficiency](#) - International Trade Administration

This page provides a checklist, including resources, on how to optimize corporate energy efficiency.

[CHP Regional Application Centers \(RACs\)](#) - Department of Energy

The Department of Energy has established combined heat and power (CHP) RACs to promote and assist in transforming the market for clean heat and power throughout the U.S. The RACs offer local, individualized solutions to customers on specific projects, provide end-user education and outreach, and lead initiatives to educate state policymakers and regulators.

[Clean Construction USA](#) - Environmental Protection Agency

Clean Construction USA is a voluntary program that promotes the reduction of diesel exhaust emissions from construction equipment and vehicles. The initiative encourages the use of innovative emissions control technologies and the replacement of old, worn out equipment by promoting retrofit incentives and providing technical assistance.

[Clean Ports USA](#) - Environmental Protection Agency

Clean Ports USA is an incentive-based non-regulatory program designed to reduce emissions from existing diesel engines and nonroad equipment at ports with comprehensive strategies and information for the diverse range of ports and their staff. This site provides a broad range of information about technologies and strategies for emissions reduction at ports.

[Coal Combustion Products Partnership](#) - Environmental Protection Agency

The Coal Combustion Products Partnership (C²P²) program is a cooperative effort to promote the beneficial use of coal combustion products (CCPs) and the environmental benefits that result from their use.

[Coalbed Methane Outreach Program](#) - Environmental Protection Agency

The Coalbed Methane Outreach Program (CMOP) is a voluntary program whose goal is to reduce methane emissions from coal mining activities. Its mission is to promote the profitable recovery and use of coal mine methane (CMM), a greenhouse gas more than 20 times as potent as carbon dioxide.

[Combined Heat and Power Application Tool](#) - Department of Energy

The Combined Heat and Power (CHP) Application tool is a free online software tool that evaluates the feasibility of using gas turbines to generate power, and the turbine exhaust gases to supply heat to industrial systems. Use the CHP tool to analyze three typical system types: fluid heating, exhaust-gas heat recovery, and duct burner systems.

[Combustion Crosscutting Technologies](#) - Department of Energy

Combustion systems account for 75% of all energy used in U.S. manufacturing. ITP's combustion subprogram conducts R&D that will improve the energy, environmental performance, and cost savings.

[Crosscutting Technologies -DOE Industrial Technologies Program](#) - Department of Energy

The Department of Energy conducts R&D on technologies that are common to many industrial processes and can benefit multiple industries. Crosscutting technologies that can improve industrial energy efficiency covered on this site include combustion, distributed energy, and technologies related to energy intensive processes, among others.

[Documenting Your Environmental Management Plan](#) - Environmental Protection Agency

This document is a workbook designed to give guidelines to small businesses owners on having an Environmental Management Plan (EMP) within their business operations. The workbook is intended to

Project #3: Sustainable Manufacturing American Regional Tours - “SMARTs”



- Goal: To raise awareness of the benefits of sustainable manufacturing and other business practices
- Entails Commerce-led tours of facilities of national and local sustainability leaders
- Closes the “familiarity gap” – show companies what “going green” entails
- Connects businesses with federal, state and local resources



SMARTs 2008-2010

Over 200 companies have attended one of these tours; co-host with other federal agencies or local partners and focus on specific issues (i.e. supply chains, industry sectors, jobs, etc).

- **St. Louis, MO**
- **Grand Rapids, MI**
- **Rochester, NY**
- **Seattle, WA**
- **Columbus, OH**
- **Atlanta, GA**
- **Beltsville, MD**
- **Richmond, VA**



4) Metrics for Sustainable Manufacturing

- Need for an internationally accepted, simplified set of metrics that companies of any size can use to measure their progress and compare themselves to others
- Will provide guidance for using the results to set sustainability priorities
- Phase 1 complete; Phase 2 in progress with goal of producing a “toolkit” in 2010
- Strong support from U.S. industry; essential OECD maintains momentum to complete this on time

ORGANISATION
FOR ECONOMIC
CO-OPERATION
AND DEVELOPMENT



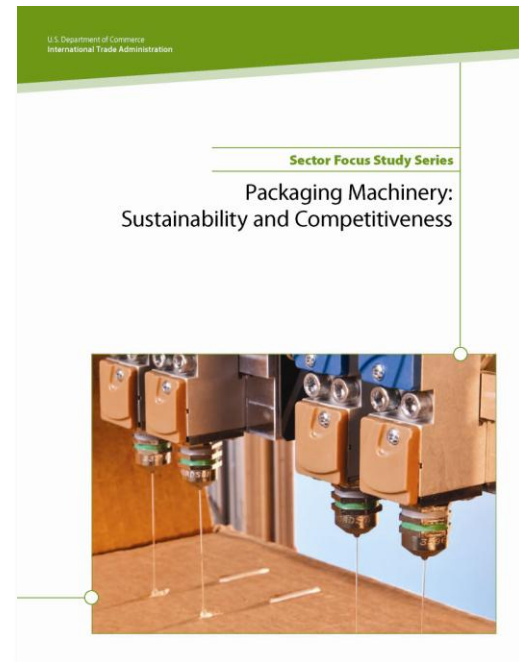
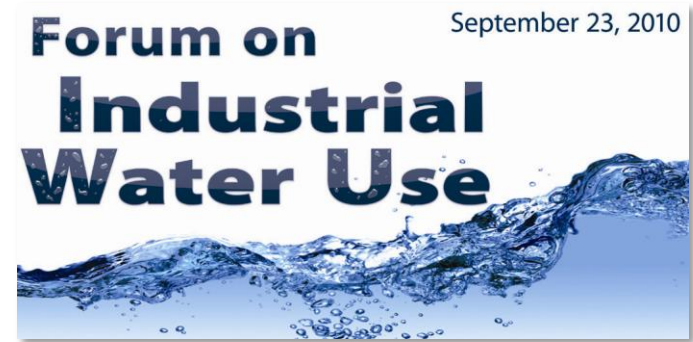
$$\text{Energy intensity (C2)} = \frac{\text{energy consumed in creation of inputs [i]} + \text{energy directly consumed [c]}}{\text{\$PPP value added [h]}}$$

$$\text{Recycled content of material inputs (B1)} = \frac{\text{total weight of recycled material [b]}}{\text{total weight of material inputs [a]} \times 100}$$

$$\text{Renewable Proportion of Energy Consumed (B2)} = \frac{\text{Renewable energy consumed [d]}}{\text{energy directly consumed [c]} \times 100}$$

Other Recent and Upcoming Work

- 2009 Sustainability and U.S. Competitiveness Summit
- Green Finance Roundtable
- Sustainable Manufacturing 101 training
- Expansion of the Sustainable Business Clearinghouse
- Industry Specific SMARTs
- Forum on Industrial Water Use
- Sectoral analysis and reports
- Chemicals in Manufacturing
- Assisting with Implementation of EO 13514
- Legislative and Regulatory Analysis



Conclusion

- Service-focused, demand-driven initiative
- Assist U.S. companies by providing resources
- Always looking for ways to cooperate with external groups and other agencies
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202-482-3704
- Our e-mail: sustainability@trade.gov
- Our Website: www.manufacturing.gov/sustainability