

STATE INDUSTRIES OF THE FUTURE



BROADENING THE REACH OF NATIONAL PRIORITIES

STATE IOF BENEFITS

- Facilitates a proven national process at the state level to develop and deploy advanced energy- and resource-efficient technologies to the industrial manufacturing sector
- Gives access to financial and technical assistance programs, including plant-level BestPractices
- Provides opportunities to solve key industry challenges by leveraging State, Federal, and private funding and other resources -- including the R&D capabilities of National Laboratories and local universities and colleges
- Encourages State participation in national solicitation processes
- Increases small business participation in national and regional programs
- Provides a coordinated framework to State-level industrial programs
- Promotes economic development

STATE IMPLEMENTATION

- Clear goals, plan & process using national models
- High level State buy-in with State and Industry champions and participation
- Tied to Industries of the Future, Visions and Roadmaps
- Involvement of national laboratories and key state research organizations such as universities, research institutes, state/regional trade associations
- Fosters communication and information sharing



INDUSTRIES OF THE FUTURE

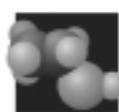
The mission of the Office of Industrial Technologies (OIT) is to support the development and deployment of advanced energy efficiency, renewable energy, and pollution prevention technologies for industrial applications. OIT's R&D portfolio is driven by the needs of the nine Industries of the Future (IOF):



AGRICULTURE



ALUMINUM



CHEMICALS



FOREST PRODUCTS



GLASS



METALCASTING



MINING



PETROLEUM



STEEL

These industries account for over half of all manufacturing energy use and 75 to 90 percent of most manufacturing wastes. The IOF strategy uses industry-developed visions and roadmaps to outline the technologies needed to reach future energy efficiency goals. Through this process, cost-shared government-industry funded research is brought to a sharp focus for the benefit of US industry. The IOF strategy fosters partnerships between government and industry to pursue pre-competitive, high risk research. This research focuses on improving the energy efficiency of industrial processes, while addressing high priority roadmap targets.

THE ROLE OF THE STATE IOF

State Industries of the Future is an opportunity to deliver the process and accomplishments of the national IOF strategy to a larger and more comprehensive set of customers. IOF at the state level brings together local industry, academia, and state agencies to address the important issues confronting U.S. industry today, as defined by U.S. industry.

State IOF utilizes the industry visions and roadmaps (technology priority areas) that are already complete for the nine target IOF industries. The idea is not to recreate the national efforts, but rather expand these opportunities to a larger number of partners, and reach many smaller businesses and manufacturers who were not initially involved at the national level.

THE PROCESS

States interested in pursuing a state-level Industries of the Future strategy are encouraged to take the following steps:

- Identify and profile the state's key industries, including at least one national IOF industry, which have significant energy and environmental impacts
- Identify a champion who is motivated toward the success of the initiative
- Create an implementation team (state agencies, industry, and academia)
- Create a clearly stated implementation plan
- Sign a State Compact -- an agreement among state leaders, industry leaders, and national leaders toward their cooperative participation in the State IOF Program
- Establish sustained industry working groups
- Participate in national R&D solicitations, showcase events, and implement state-wide BestPractices in manufacturing plants

WEST VIRGINIA - THE FIRST STATE IOF

In partnership with OIT, West Virginia was the first state to establish a state-level Industries of the Future. In 1997, following successful work in developing a Carbon Products industry vision, Carl Irwin of West Virginia University (WVU) and Jeff Herholdt of the West Virginia Development Office worked together to design and initiate the project.

West Virginia was modeled after the national Industries of the Future strategy to be a catalyst for projects, partnerships, and programs helping to increase energy efficiency, reduce and utilize waste materials, and improve industrial productivity. Five West Virginia sectors were initially targeted: aluminum, steel, glass, chemicals/polymers, and wood/forest products. Metalcasting and mining were added in 1998.

Meetings were convened around the state with the initial five industry areas to familiarize industry leaders with visions and roadmaps developed at the national level, to discuss important issues, and to identify opportunities for joint collaboration on projects. In addition to industry representatives, the forums included state and federal officials, university researchers, national laboratory scientists, trade association representatives, and national IOF participants.

Results of the West Virginia IOF partnerships are starting to appear. Century Aluminum has made a major commitment of the IOF strategy and is now involved, with others, on two multi-million dollar projects to improve the efficiency of aluminum production. Century is partnering with large companies such as Southwire Corporation and SGL Carbon Corporation as well as with WVU and two small West Virginia technology companies on these projects. Fenton Art Glass, WVU, and the DOE's National Energy Technology Laboratory are partners on a project to develop the use of CO₂ lasers to replace a wasteful step in the production of blown hand glass. The laser-cutting technology will be implemented at a West Virginia glass company for production testing.

FOR MORE INFORMATION:

DOE Headquarters:
Sandy Glatt
(202) 586-3897
sandy.glatt@ee.doe.gov

Yolanda Jones-Frinks
(202) 586-0597
yolanda.jones@ee.doe.gov

Northeast:
Scott Hutchins (617) 565-9765
scott.hutchins@hq.doe.gov

Mid-Atlantic:
Maryanne Daniel (215) 656-6964
maryanne.daniel@ee.doe.gov

Southeast:
Tim Eastling (404) 562-0575
tim.eastling@ee.doe.gov

Midwest:
Brian Olsen (312) 886-8579
brian.olsen@ee.doe.gov

Rocky Mountains/Central Plains:
Gibson Asuquo (303) 275-4841
gibson_asuquo@nrel.gov

Far West:
Julia Oliver (510) 637-1952
julia.oliver@oak.doe.gov

ADDITIONAL RESOURCES:

OIT Website: www.oit.doe.gov

OIT Resource Center
Marilyn Burgess (202) 586-2090
marilyn.burgess@ee.doe.gov

IOF Clearinghouse
1-800-826-2086

Office of Industrial Technologies
Energy Efficiency
and Renewable Energy
U.S. Department of Energy
Washington, D.C. 20585

