

WV Manufacturers Association Annual Meeting
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Canaan Valley Resort

**Industries of the Future West Virginia -
What's in it for WV Companies?**

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Background on IOF-WV

- IOF-WV is a state-level version of the DOE's national IOF program that does partnership, cost-shared projects with energy intensive companies.
- IOF-WV projects include aluminum, steel, glass, chemicals/polymers, wood/forest products, metalcasting, mining, and cross cut technology companies.
- IOF-WV has been operating since 1997 and many WVMA members are participants.

Background (continued)

- We have had five annual symposia and Karen has been on our symposium program several times.
- We have been invited each year for the past two years to have IOF-WV day at the Capitol and we participated in the 2002 Manufacturers Day at the Capitol.
- West Virginia initiated the nation's first state IOF program.

IOF-WV Projects

- We currently have projects on-going with Century Aluminum, Pechiney Aluminum, Weirton Steel, Wheeling-Nisshin, Fenton Art Glass, Marble King, Bayer, Dyna-Tech Adhesives, HK Casting, Westvaco, JH Fletcher, Consol, Applied Industrial Solutions.
- Since 1998, the cumulative R&D value of IOF-WV projects is \$14,978,340.

Benefits of IOF-WV Projects

- Potential energy savings at Century Aluminum estimated to be \$15 million per year.
- Reduced energy costs at Weirton Steel estimated as \$20 million since 1998, equivalent to \$8/ton cost reduction.
- Potential 25% reduction in crack-off waste and rejects for handglass industry.
- Approximately \$1.5 million in energy savings opportunities per year at Bayer Corporation.
- Spent Foundry Sand Recycling Project resulted in savings of \$500,000 over a two-year period for HK Casting.

Sustaining IOF-WV

- Several proposals are currently under review:
 - *Development of Energy Efficient Polymer Additive Blends and Processes*
 - GE Specialty Chemicals, Basell USA, PAZ, CAZ, and WVU
 - *Energy Efficient Processes for Making Tackifier Dispersions used to Make Pressure Sensitive Adhesives*
 - Dyna-Tech Adhesives, Charles Ross & Son Company, Mays Microsystems, Argonne National Laboratory, Tulane University, and WVU

Sustaining IOF-WV (continued)

– *Fiber Reinforced Polymer Composite Utility Poles*

- Ashland Distribution Company, EPRI, Nautilus, Bedford Reinforced Plastics, Owens Corning Science & Technology Center, American Electric Power, and WVU

– *Condition Assessment of Logs Using Ground Penetrating Radar*

- Allegheny Wood Products, Taz Hardwoods Company, The Burke-Parsons-Bowlby, Jim. C. Hamer Company, B.A. Mullican Lumber and Manufacturing Company, and WVU

Sustaining IOF-WV (continued)

- Two Research Challenge Grant proposals in IOF-WV areas are in preparation.
 - Advanced Industrial Materials Research Center
 - Polymer Extrusion-Compounding Research Center

Renewing IOF-WV

- After five years it's time to review, renew, and reassess program priorities.
- Reorganization of technology programs within DOE.
 - Broaden scope of state IOF programs to include renewable energy technologies, distributed energy, electricity infrastructure and reliability, biomass, vehicle technologies, hydrogen and infrastructure, building technologies, and weatherization
 - Emphasize performance metrics
 - New “buzz words” are *energy intensity* (BTU/\$ shipment) and *carbon reduction* (18% reduction in carbon intensity by 2012)

Renewing IOF-WV (continued)

- Develop WV Industry Roadmap
 - Industry specific technical issues
 - Crosscutting technical issues
 - Business climate issues
- Critical Issues survey is a starting point – your response is appreciated!

Vision for IOF-WV

- In five years ...
 - There will be at least 15 on-going co-funded projects enhancing the competitiveness of West Virginia companies and the development of new downstream manufacturing businesses.
 - There will be at least two university-based R&D centers that support advanced manufacturing technologies in West Virginia.

What's in it for your Company?

- There are lots of low or no-cost benefits
 - WVU Industrial Assessment Center
 - Plant-wide Energy Assessments
- Open doors to co-funding opportunities to reduce energy costs, minimize waste, and increase productivity
- Team with university researchers and national lab experts
- Influence R&D priorities in the WV Industry Roadmap

Conclusions

- MOU between the state of West Virginia and the U.S. DOE signed at the 2001 IOF-WV Symposium.
- You are invited to the Sixth IOF-WV Symposium to be held December 11-12, 2002 at the Charleston Marriott
- Thank you for responding to the Critical Issues survey!