



DOE/Sloan Workshop Highlights (Continued from June 2008 UpDate)

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The June 2008 IOF-WV UpDate contained highlights of presentations made on Day-One of the April 9-10 workshop entitled, "Impacts of High and Volatile Energy Costs on Energy Intensive Industries: Coping Strategies and Future Research Needs." Day-Two of the workshop included small group brainstorming sessions on three important discussion topics. Some of the resulting strategies and research needs are listed below.

Discussion Topic 1: Company-Level Coping Strategies

- Reduce dependence on centralized power sources (e.g., develop co-gen technologies, investigate alternate local energy sources, and improve process efficiencies to reduce energy demand)
- Develop and implement explicit plans for energy efficiency and needs across the entire organization
- Work up the supply chain to take energy out of processing steps (i.e., work outside your organization)
- Work "off peak"
- Develop long-term energy supply contracts to hedge against energy cost increases
- Work with the U.S. Department of Energy and other entities on energy efficiency programs to distribute the risk related to developing pilot programs
- Perform baseline benchmarking on energy use
- Develop energy/carbon footprint of your organization (e.g., life cycle energy use analysis)
- Change internal reward system to include metrics that reflect energy efficiency
- Invest in and internally incent R&D projects to reduce energy use and carbon intensity
- Utilize EPA toolkit to focus specifically on energy waste (<http://www.epa.gov/lean/energytoolkit/>)
- Do continuous energy audits (i.e., be pro-active)

Discussion Topic 2: Public Policy / Regulatory Approaches

- Review and revise NSP (new source performance) and EPA requirements so as not to discourage energy efficiency projects, such as waste heat recovery and use of CHP
- Review and revise rules that limit or prohibit the use of power from a non-utility
- De-couple utility profits from gross power sales
- Fix depreciation schedules to support energy efficiency
- Develop transportation policy aimed at energy efficiency, including aggressive CAFÉ standards
- Increase efficiency requirements for new electricity generation (e.g., from 33% to 60%)
- Include more science and technology in developing energy policy
- Conduct cost/benefit analysis of public energy policies
- Need to be vigilant to ensure that interests with the most money at stake will not automatically win out (i.e., energy policy must be based on common good rather than on special interests)
- Implement CESOP (clean energy standard offer programs)
- Start university-based ROTC- and NDEA-type programs to educate future leaders on developing and running competitive, energy efficiency companies
- Educate policy makers and regulators on the value of energy efficiency policies and programs

Discussion Topic 3: Science and Technology Approaches

- Develop safe and effective ways for small co-gen units to be grid-connected
- Develop CO₂ capture and removal technologies beneficial to industry
- Research alternative fuels (e.g., biofuels, wind farms, and fuel mixes)
- Research use of waste products (e.g., plastics) for fuel or feedstocks
- Research impact of alternate energy strategies and policies on corporate performance, structural relationships, and external constituencies

EVENTS

WEBCAST: Introduction to Compressed Air Systems sponsored by the U.S. DOE Industrial Technologies Program will be held August 11, 2008. This Webcast provides an overview of the Compressed Air Challenge (CAC) Toolkit and the AIRMaster+ software tool used in SEN energy assessments. To register visit <https://www1.gotomeeting.com/register/992467891>.

WEBCAST: Introduction to Fan System Assessment Tool (FSAT) sponsored by the U.S. DOE Industrial Technologies Program will be held August 26, 2008. This Webcast provides an introduction to the Fan System Assessment Tool (FSAT) software to help you evaluate and identify fan system improvements in your facility. To register visit <https://www1.gotomeeting.com/register/316774189>.

International Pittsburgh Coal Conference sponsored by the University of Pittsburgh, School of Engineering will be held September 29-October 2, 2008 at the Westin Convention Center, Pittsburgh, PA. This conference is dedicated to providing a unique opportunity for in-depth and focused exchange of technical information and policy issues among representatives from industry, government and academia throughout the world. For more information or to register, please log on to www.engr.pitt.edu/pcc/.

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- Develop real-time energy use equipment to track and optimize plant energy efficiency
- Develop efficient load leveling/energy storage systems
- Research economic and energy benefits of co-locating plants with multi-product coal-based gasification facility
- Develop high temperature, long life materials for energy and industrial applications
- Benchmark energy use/efficiency by industry sector with diagnostic tools for ongoing auditing/improvement
- Develop energy efficiency metrics to prioritize replacement and/or modifications of plant equipment
- Supply chain level research on how energy savings opportunities can be extended beyond industry segment into inter-related geographically dispersed businesses and customers

Please contact workshop organizer WVU Professor Jack Fuller at jack.fuller@mail.wvu.edu with comments or questions.

Co-Funding Opportunities for IOF-WV Research Teams

<i>Announcement</i>	<i>Due Dates</i>	<i>Funding</i>
National Science Foundation Environmental Sustainability www.nsf.gov	Request for Proposals: Now Open Proposals Due: August 15-September 15, 2008.	Estimated Funding: TBD
National Science Foundation Energy for Sustainability www.nsf.gov	Request for Proposals: Now Open Proposals Due: August 15-September 15, 2008.	Estimated Funding: TBD
U.S. Department of Agriculture Small Business Innovation Research (SBIR) http://www.csrees.usda.gov/funding/sbir/sbir.html	Request for Proposals: Now Open Proposals Due: September 4, 2008	Estimated Funding: Phase I up to \$100,000; Phase II up to \$750,000
U.S. Department of Energy Save Energy Now: State, Regional, and Local Delivery http://e-center.doe.gov	Request for Proposals: Now Open Letter of Intent Due: September 15, 2008 Proposals Due: October 16, 2008	Estimated funding: \$9,500,000 in total funding available (\$3,000,000 for FY2009 and \$6,500,000 for FY2011) \$300,000 to \$900,000 per award
Natioal Science Foundation Partnerships for Innovation www.nsf.gov	Request for Proposals: Now Open Letter of Intent Due: October 31, 2008 Proposals Due: December 31, 2008	Estimated funding: \$9,500,000 in total funding available \$600,000 per award
Natioal Science Foundation Small Business Innovation Research Program Phase I Solicitation FY-2009 www.nsf.gov	Request for Proposals: Now Open Proposals Due: November 4-December 4, 2008	Estimated funding: \$100,000 per award

Save the Date!

The 2008 IOF-WV Symposium will be held November 18-19, 2008 at the Charleston Marriott, Charleston, WV. For registration and sponsorship opportunities contact Kathleen Cullen at (304) 293- 2867 ext. 5426 or Kathleen.Cullen@mail.wvu.edu.



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