

Impacts of High and Volatile Energy Costs on Energy Intensive Industries

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Review of April 9-10, 2008, Energy Workshop at WVU

- Workshop title
 - Impacts of High and Volatile Energy Costs on Energy Intensive Industries: Coping Strategies and Future Research Needs
- 53 attendees
 - Faculty and administrators from WVU
 - Sloan Industry Center directors from the University of Kentucky, University of South Carolina, University of Minnesota, Virginia Tech. University, Carnegie Mellon University, University of Pittsburgh, Georgia Tech. University, and Massachusetts Institute of Technology
 - State and Federal Government representatives, including DOE, NETL, and WV Division of Energy
 - Industry representatives

April 9-10,2008, Workshop Agenda

- Day 1
 - Individual presentations
 - Industrial Energy Opportunities
 - Cross Industry Sustainability Issues
 - The Value Proposition for Energy Efficiency in the Industrial Sector
 - Panel discussions
 - Energy Supply
 - Industrial Manufacturing Industries
 - Materials Industries
 - Transportation Industries

April 9-10,2008, Workshop Agenda (continued)

- Day 2
 - Individual presentation
 - Correlating Corporate Stock Prices with Energy Costs
 - Breakout sessions
 - Company Level Coping Strategies to Deal with High and Volatile Energy Costs
 - Public Policy / Regulatory Approaches to Dealing with High and Volatile Energy Costs
 - Science and Technology Approaches to Dealing with High and Volatile Energy Costs

Workshop Report

- Synopsis of individual presentations and panel discussions from day 1 of workshop (can access at www.iofwv.nrcce.wvu.edu/)
 - Listed under “News” on the right side of the web page.
- Breakout session results from day 2 of workshop
 - Company level coping strategies to deal with high and volatile energy costs
 - Results were grouped into three categories
 - Individual organization energy related planning focusing on alternative fuels and sources, energy efficiency ideas, supply contracts, energy efficiency programs, energy use benchmarking and supply chains, energy efficiency incentives, recycling and waste reduction, and energy audits
 - Energy efficiency networking and education outside the firm
 - Influence and utilize government industrial energy efficiency incentives and programs

Workshop Report (continued)

- Breakout session results (continued)
 - Public policy / regulatory approaches to dealing with high and volatile energy costs
 - Power system regulation
 - Taxes and subsidies
 - Energy efficiency standards
 - Program and policy development, including both process and content recommendations
 - Educational programs

Workshop Report (continued)

- Breakout session results (continued)
 - Science and technology approaches to dealing with high and volatile energy costs
 - Co-generation technologies / energy recycling / waste heat recovery
 - Environmental issues
 - Fuel flexibility / alternative fuels and feedstocks
 - Business strategies and public policies
 - Industrial energy efficiency strategies and technologies

Looking Ahead

- As a result of subsequent iterations of feedback on the workshop and workshop report, it was decided to identify key future research and study areas which flowed naturally from the workshop
 - Education and training
 - Academic (Example: Educational and training programs for the next generation of engineers)
 - Non-academic (Example: Employee training on energy efficiency awareness)

Looking Ahead (continued)

- Key future research and study areas (continued)
 - Industry corporate / organizational planning
 - Benchmarking energy use, energy assessments, on-going energy auditing
 - Supply chain management
 - Science and technology approaches
 - Selling renewable energy audits
 - Marketing green products
 - Materials and energy recycling
 - Public policy development and outreach
 - Educational forums for policy makers
 - Develop policies to promote smart and efficient use of energy

Planning for Second Energy Workshop

- Second two-day workshop on “Volatile Energy Costs, Uncertain Economy, and Future Environmental Regulations: Linkages, Coping Strategies, and Research Needs” is planned for April 22 and 23, 2009, at West Virginia University.
- Workshop will reflect the current uncertainty with respect to these three topics.
- New administration’s energy planning and the American Recovery and Reinvestment Act of 2009 will be addressed.
- Workshop agenda
 - David South (President of Technology & Market Solutions) to give opening address on workshop topic

2009 Energy Workshop Agenda (Continued)

- Panel to discuss impact of workshop topic on “Industry / Corporate Planning”
 - Panel members: Robert Bessette (CIBO), Don Gallion (FCX Systems), Ravi Madhavan (University of Pittsburgh), and Jim Rock (PPG)
- Panel to discuss impact of workshop topic on “Science and Technology”
 - Panel members: Larry Banta (West Virginia University), Sajjad Ahmed (PPG), Curt Peterson (West Virginia University), and Keith Pauley (MATRIC Research)

2009 Energy Workshop Agenda (Continued)

- Panel to discuss impact of workshop topic on “Environmental and Energy Issues”
 - Panel members: Carl Irwin (WVU – NRCCE), Ann McIver (Citizen’s Energy Group), Todd Ritchie (Alcan), and Earl Kline (Virginia Tech. University)
- Panel to discuss impact of workshop topic on “Public Policy Development and Outreach”
 - Panel members: Jay Cole (WVU), Marilyn Brown (Georgia Tech.), and Kevin Leydon (WVU)

2009 Energy Workshop Agenda (Continued)

- Facilitated brainstorming sessions (small group discussions)
 - Discussion groups will brainstorm on challenges and solutions to the volatile energy prices, an uncertain economy, and future environmental regulations.
 - They will refine and prioritize research projects and develop “Project Summary Sheets” for each potential research project.

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