



Energy efficiency = big \$ savings for industry!

Pennsylvania, Ohio, Kentucky, Tennessee, and West Virginia to varying degrees can be considered to be “energy states.” They have extensive energy resources, relatively low cost energy, and in many ways their industrial profiles are similar. Employment and gross state product (GSP) for energy intensive (IOF) manufacturing and production companies are significant parts of these states’ economies, as shown in the table below.

Note also that the industrial energy intensity (BTU/\$GSP) for KY, TN and WV are all above the 2004 national average of \$11,984 BTU/\$GDP¹.

the minimum that would be expected from basic routine assessments. Just a 6% industrial energy efficiency increase would result in an energy savings of 0.3 Quads for the five state region.

In electrical power equivalents, 0.3 Quads is approximately 88 billion KWh which, at 8 cents per KWh, amounts to more than \$7 billion.

In natural gas equivalents, 0.3 Quads is approximately 290 million MCF (thousand cubic feet) which at \$12 per MCF, is almost \$3.5 billion.

	PA	OH	KY	TN	WV
Annual Industrial Energy Consumption² (10¹⁵ BTUs)	1.286	1.429	0.846	0.746	0.311
IOF Employment as a Percentage of Total Manufacturing Employment	34%	41%	41%	35%	66%
IOF GSP as a Percentage of Total Manufacturing GSP	28%	37%	54%	34%	74%
BTU/\$GSP³	\$9,568.65	\$10,633.47	\$16,043.08	\$12,143.10	\$17,358.49

The U.S. DOE’s Large Energy Users Database includes 736 companies in these states (63 in WV, 103 in TN, 114 in KY, 227 in OH, and 229 in PA). Twenty of these companies received “Save Energy Now” National Energy Savings Assessments (3 in WV, 6 in TN, 4 in KY, 6 in PA, and 1 in OH).

Annual industrial energy consumption in the five state region of Pennsylvania, Ohio, Kentucky, Tennessee, and West Virginia is approximately five Quads, i.e. five quadrillion BTUs (5 x 10¹⁵ BTUs). Industrial energy assessment experts say that energy efficiency improvements of 5% to 10% are generally

The Bottom Line: Assuming that industrial energy consumption is approximately 30% electricity and 70% natural gas, a 6% energy efficiency increase could save manufacturing and production companies in the five states region more than \$4.5 billion each year!

¹ IMPACTS, Industrial Technologies Program: Summary of Program Results for CY 2004, http://www.eere.energy.gov/industry/technologies/commercial_successes.html

² Source: Energy Information Administration, www.eia.doe.gov

³ Source: U.S. DOE EERE: http://www.eere.energy.gov/states/state_specific_statistics.cfm/

EVENTS

West Virginia Manufacturers Association Annual Meeting will be held June 11-13, 2006 at Snowshoe Mountain Resort in Davis, WV. To register, or for more information, call (304) 342-2123.

Steam System Management webcast, sponsored by the US DOE “Save Energy Now” Initiative, will be held on June 14, 2006 at 12:00 pm EDT. To register, log on the <http://iac.rutgers.edu/lectures2006>.

2006 National Coal Show will be held June 13-15 at the David L. Lawrence Convention Center in Pittsburgh, PA. For more information or to register contact Steve Fiscor at (904) 721-2925 or log on to www.mining-media.com/ncs.

West Virginia Forestry Association Annual Meeting will be held July 14-15, 2006 at Canaan Valley Resort, Davis, WV. For more information or to register contact the WVFA at 1-888-372-9663 or wvfa@wvadventures.net.

West Virginia Chamber of Commerce Annual Meeting will be held Aug. 30-Sept. 1, 2006, at the Greenbrier, White Sulphur Springs, WV. Visit www.wvchamber.com/ for more information.

10th Annual IOF-WV Symposium will be held November 8-10, 2006 at the Town Center Marriott in Charleston, WV. Information regarding registration will be forthcoming.

IOF-WV Engineering Scientist Position

IOF-WV is again looking for an Engineering Scientist to join the team. This is a full-time position in the WVU National Research Center for Coal & Energy, working with all aspects of the IOF-WV program. Duties include developing interdisciplinary university-industry-government research projects; writing proposals to government agencies, private companies and foundations; and managing project teams. Contact Carl Irwin for further information.

IOF-WV Contacts

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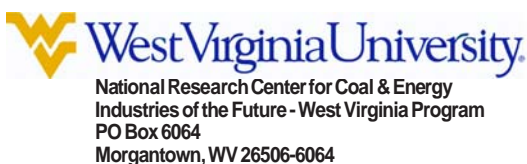
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If you prefer to receive this newsletter electronically, please email Kathleen Cullen

Co-Funding Opportunities for IOF–WV Research Teams

Announcement	Due Dates	Funding
National Science Foundation SBIR/STTR Phase I: Advanced Materials, Emerging Opportunities, Information Technology, Manufacturing Innovation www.nsf.gov	Now Open (Request for Proposals) June 13, 2006 (Proposals Due)	\$16,250,000 in total funding anticipated
U.S. Department of Energy Support of Advanced Coal Research at U.S. Colleges and Universities http://e-center.doe.gov	Now Open (Request for Proposals) June 14, 2006 (Proposals Due)	\$2,760,000 in total funding anticipated
U.S. Department of Energy Solid-State Lighting Core Technologies http://e-center.doe.gov	Now Open (Request for Proposals) June 27, 2006 (Proposals Due)	\$3,750,000 in total funding anticipated
U.S. Department of Energy Virtual Engineering of Advanced Power Generation Systems http://e-center.doe.gov	Now Open (Request for Proposals) July 6, 2006 (Proposals Due)	\$4,500,000 in total funding anticipated
U.S. Department of Energy Collaborative Energy Efficiency Research in Iron-Making and Steel-Making http://e-center.doe.gov	Now Open (Request for Proposals) August 1, 2006 (Letter of Intent Due) October 3, 2006 (Proposals Due)	\$700,000 in total funding anticipated
Dept. of Homeland Security SBIR/STTR http://www.hsarpasbir.com/	July 2006 (Request for Proposals) August 2006 (Proposals Due)	Up to \$100,000 for Phase I awards Up to \$750,000 for Phase II awards
National Science Foundation Partnerships for Innovation www.nsf.gov	Now Open (Request for Proposals) June 28, 2006 (Letter of Intent Due) August 30, 2006 (Proposals Due)	\$9,000,000 in total funding anticipated for 10 to 15 awards
U.S. Department of Agriculture SBIR www.csrees.usda.gov/funding/sbir/sbir.html	June 1, 2006 (Request for Proposals) September 1, 2006 (Proposals Due)	Up to \$100,000 for Phase I awards Up to \$750,000 for Phase II awards
NASA SBIR and STTR http://sbir.gsfc.nasa.gov/SBIR/SBIR.html	July 7, 2006 (Request for Proposals) September 7, 2006 (Proposals Due)	Up to \$100,000 for Phase I awards Up to \$750,000 for Phase II awards
U.S. Department of Energy Experimental Program to Stimulate Competitive Research (DOE/EPSCoR) Implementation Awards http://e-center.doe.gov	Now Open (Request for Proposals) September 27, 2006 (Proposals Due)	\$3,000,000 in total funding anticipated for 4 to 6 awards



West Virginia Development Office

Industrial Technologies Program
Energy Efficiency & Renewable Energy
 U.S. Department of Energy

Nonprofit Organization
 U.S. Postage
 PAID
 Morgantown, WV
 Permit No.34