

The Association of Energy Engineers with Case Western Reserve University, proudly presents

T H E F O U R T H

Ohio Energy Education Conference

Keynote Speaker Lt. Governor Lee Fisher - OHSB221 and Energy, Jobs and Progress

Friday, May 9, 2008

Conference: 8am - 4pm • Case Western Reserve University Mills Science Center, Adelbert Road

To register online, please visit www.positivelycleveland.com/energy.

Another beneficial conference to the region in cooperation with Positively Cleveland + Engineering Process Systems

SPONSORED BY Positively Cleveland • EPS, Ltd. • Direct Energy • The Ohio Energy Office • Cleveland Public Power • The Association of Energy Engineers
Solar Lighting and Roof Systems • AMP-Ohio • juwi GmbH
J.F. Good Company • Shaw Environmental, Inc. • Wilkes & Company
Air Technologies • Mastroianni & Associates/ PACO Pumps • Mark Elliott Company • Victaulic® • Virginia Air

Sustainable energy solutions can positively impact your bottomline. Enhanced techniques and improved sustainability models can help significantly cut energy costs.

Spend a day in a consultative environment with local experts to learn how you can implement cost-saving strategies NOW and earn green certification along the way with alternative energy ideas and alternative ideas on energy.

Don't let your profits go up in smoke. This conference has helped companies like yours find sustainable solutions to saving energy and energy efficiency. The technology, strategies and practical renewable energy solutions are available to assist you in cutting energy bills without risk.

Attend "The Alternative Alternative" and spend the day in an environment that provides practical applications of the techniques that you have been reading about. Find out how to make friends with green energy techniques and increase your efficiency in a learning environment with a hands-on approach from experts.

Special pre-conference tour and hospitality:

Early registrants will gain access to a behind-the-scenes tour of the Great Lakes Science Center. On Thursday, May 8 at 6pm, take an inside look at use of solar and wind technology, and find out the strategic reasons for the utilization of on-site renewable power.

Take a look at what else you will learn at this comprehensive conference:

LEED - (Leadership in Energy and Environmental Design) and building commissioning

STEAM SYSTEM EFFICIENCY - Your energy dollars literally can go up the stack, through the roof and down the drain

FINANCING ALTERNATIVE ENERGY TECHNOLOGIES - Step-by-step public and private financial modeling

SUSTAINABLE DEVELOPMENT - Is your organization on board?

ELECTRIC AND NATURAL GAS - Adaptive strategies in an ever-changing global environment and preparation for the end of 2009 and electricity "re-regulation"

CHILLED WATER TECHNIQUES - Both creative and practical

POWER QUALITY - Speaks to the new labeling requirements being enforced. Understanding "Arc Flash" as a growing concern and learn how to address it.

COMPRESSED AIR - Often referred to as the fourth utility and costs you more than you think

ENERGY MONITORING AND MANAGEMENT - Energy monitoring is essential to LEED certification and energy savings. Learn what to monitor, how to monitor, how to use the monitoring to save energy dollars and earn the M&V LEED credit.

*Earn 0.6 CEU's awarded by AEE - Association of Energy Engineers.
Get 50% off first-year dues for AEE membership (application at conference).*

BE ONE OF THE FIRST
TO REGISTER TO ENSURE YOUR
PLACE ON THE GREAT LAKES SCIENCE
CENTER TOUR, THURSDAY, MAY 8 AT 4PM.

Sponsors

Direct Energy is one of the largest competitive energy retailers in North America with more than 5 million customer relationships, including more than 225,000 residential and commercial customers in Ohio. Direct Energy is part of Centrica, plc, and is listed on the Fortune Global 500® as the eighth largest utility and the 238th largest corporation in the world.

Cleveland Public Power, in business since 1906, Cleveland Public Power is the largest municipal power company in the State of Ohio and the 35th largest in the nation. Boasting one of the most modern power systems, our reliability is rated at 99.99%. Because we are a municipal electric company, operating only in the city of Cleveland, our owners are also our customers -- the citizens of Cleveland.

J.F. Good Co., the industrial division of Famous Enterprises, is a full line distributor of pipe, valves, fittings, instrumentation and specialty piping equipment. Comprehensive inventories provide solutions for all levels of fluid equipment applications. J. F. Good has two fully equipped Valve Automation facilities, staffed by factory authorized, experienced valve technicians. We provide on-site technical support; free technical training, energy management surveys, application analysis, field service assistance and work with our core manufacturers to address all piping applications. In the spring of 2005, we launched a new state of the art, fully automated 350,000 sq. ft. central distribution center in Sebring, Ohio. All of our programs are fully documented within our ISO9001 certified procedures. J. F. Good is positioned to provide The Total Package in the engineered fluid products arena.

Shaw Environmental, Inc., is a diverse engineering, construction, technology, fabrication, environmental and industrial services organization with 22,000 employees in strategic locations around the world. Shaw is also one of the nation's largest providers of solid waste services and solutions and has developed a successful portfolio of landfill gas-to-energy projects. Additionally, Shaw provides renewable energy development services to clients through its engineering services, construction, and products divisions and can provide turnkey project financing.

Victaulic®, the world's leading maker of grooved and plain-end mechanical piping components. Victaulic® introduces Vic-Press 304 for air, water and process service using light-wall 304 stainless. Does not require welding, threading or flanges, and can be installed at cost comparable to threaded Schedule 40 black or galvanized pipe.

Wilkes & Company provides process piping, plumbing and HVAC contracting services to industrial, institutional and commercial customers in the United States and Canada. In business for more than 80 years, Wilkes delivers experience-driven techniques that help you better manage your physical plant and energy costs. Wilkes provides alternative energy services with its joint venture firm EPS, Ltd.

Mark Elliott Company has represented Baltimore Air Coil Company for over 25-years. We specialize in hydronic heat transfer products, plus repair/replacement of cooling tower and heat transfer systems. Please visit us at www.markelliottcompany.com.

EPS, Ltd. is an independent engineering and energy management company that provides the specialized skills and practical know-how that high energy-consuming facilities need to employ in order to prosper in today's business climate. EPS, Ltd. offers facility managers a range of service options, including utility rate management, design engineering and mechanical/piping/electrical contracting. EPS also provides a full array of on-site renewable energy applications including wind up to 1-MW, solar photo-voltaic and water heating, micro-hydro and bio-fuels. EPS' staff includes LEED Accredited Professionals, Professional Engineers with registration in 34 states and journeymen installers. Visit their Website at www.bestuseofenergy.com.

Air Technologies®, with 14 branches throughout the Midwest, is one of the nation's largest distributors of industrial compressed air equipment. In addition to Atlas Copco air compressors and air treatment products, Air Technologies offers consulting services, air surveys, 24/7 service, piping systems, remote monitoring equipment and control systems. The more than 40-year old firm also provides compressed air as a utility, a concept rapidly gaining popularity across the region.

Mastroianni & Associates, Inc., Specializing in PACO Pumps/SULZER a 20-year-old manufacturers' representative firm, also offers water flow control and measuring equipment, pipe expansion and vibration control devices, as well as heating and humidification equipment. The company's headquarters are in Cleveland, Ohio. Please visit their Web site, www.mastroiannihvac.com.

Virginia Air Distributors represents York Unitary Products Group and ClimateMaster Geothermal Heat Pumps in five States, with fifteen branches to serve your indoor comfort requirements. With over twenty years of full line commercial and residential product stocking experience, Virginia Air Distributors strives to be recognized as the very best in Service, Support and Responsiveness. Everything we do must be Customer driven and for the benefit of our Customer. When working on a tough project, call Virginia Air.

Solar Lighting and Roof Systems, Inc is the manufacturer of the Daylighter Solar Roof Light, an interactive daylighting system that will dramatically reduce operational costs, increase building value, while creating a safe and productive environment.

juwi GmbH Founded in 1996, juwi GmbH (juwi) has been in business for twelve (12) years with its headquarters in Mainz, Germany. The company is owned wholly by the Juwi Holding AG, which is owned equally by its two founders, Matthias Willenbacher and Fred Jung, who launched their first wind power projects in southwestern Germany in 1996. It has grown steadily under their leadership to its current international operations in Germany, France, Spain, Czech Republic, Costa Rica, and the United States. With annual revenues of more than \$400 million, the international juwi-Group is one of the leading firms in the renewable energy sector in Germany.

Conference + Schedule of Sessions

7:30am – 8:15am

Registration and Continental Breakfast

8:15am – 8:30am

Introduction and Overview

Tim Janos, Director of Special Projects, AEE

Glen Ginesi, President, EPS

Matt Zone, Cleveland Councilman and Utilities Committee Chairman

Andrew Waterson, Cleveland Energy Innovations

Kelly Brewer, Vice President, Positively Cleveland

9:00am – 11:35am

Please Select your Session

LEED (Leadership in Energy and Environmental Design) & Building Commissioning

Bill Doty, Doty & Miller Architects

Learn how and why to be certified and how to blend commissioning into a LEED project. Based on well-founded scientific standards, LEED emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. Commissioning ensures systems are designed, installed, functionally tested and capable of being operated and maintained to perform in conformity with the design intent.

Lighting Innovations 2008

Lewis S. Sternberg LC, Consultants in Lighting, Inc., David Johnson, LC, Technical Consumer Products, Inc., Ted Tracy, Future Electronics, Lumileds Lighting, Andy Kundmueller, Solar Lighting and Roofing Systems, Daylighting Technologies and Savings

Lighting technology is changing at a rapid pace. New products and features are being introduced almost daily. Hear and see these new energy saving techniques from lighting experts within the field. The hottest topics today are daylight harvesting, compact fluorescent lamps and LEDs. This promises to be a most informative session.

Compressed Air

Hank Van Ormer, Air Technologies

A leader in compressed air systems and applications for more than 30 years, Van Ormer has conducted more than 100 workshops and written 200+ technical articles on compressor system operation and maintenance. He and his staff have reviewed 2,200 air systems and have managed the implementation of 1,200 air improvement projects. Those audits identified projects that could reduce operating costs of air systems by an average of 35% with a typical payback of 12-18 months. Such projects also improved system reliability and air quality and eliminated key production bottlenecks. You will learn the energy costs of your air system, the pros and cons of oil-free systems, how new VSD technology is best applied, how to reduce air demand, air system control management and techniques of drying, storage, and piping as well as enhancing system air efficiency, quality and reliability.

Alternative Energy Technologies, Application and Financing

Kevin Bonzo, Shaw Environmental, Inc., Glen Ginesi, EPS, USDA, Office of Energy, Dick Zuchariason, juwi GmbH

Wind energy. Landfill gas and biogas energy opportunities. Learn to finance your project -- public or private. Discover tax credits, emission credits, grants and special financing options.

Power Quality & Solution Application

Mr. Tom Rey, Schneider Electric

Define what a power quality event is and how it happens. Identify and eliminate power quality effects including non-linear electric equipment and harmonic distortion on end user's electrical distribution system. Understand "Arc-Flash." Employer are required to conduct hazard assessment in accordance with 29CFR1910.132(d). Electrical inspectors across the country are now enforcing the new labeling requirements set forth in the 2002 National Electric Code (NEC). Arc flash is a growing source of concern for manufacturers and other employers, and OSHA has begun citing companies for arc flash violations.

11:35am - 12:00pm

Networking and Vendor Displays

Conference & Schedule of Sessions (continued)

12:00pm – 1:30pm

Lunch and Keynote Speaker Lt. Governor Lee Fisher

Prof. Norman Tien, Dean of Engineering, CWRU

1:35pm – 3:45pm

Electric and Natural Gas Use and Procurement

Direct Energy, Jim Maddigan, Senior Pricing Manager, EPS, Michael D. Spacek, PE

In 2004, we thought if prices approached, \$10/MCF, \$50/Barrell, and \$1.50/gallon, the energy world would come to an end. We now know that is not true. However, prices are higher and your strategies must change with the ever-changing energy world. To make matters more interesting, the local electric “rate stabilization plan” ends this year. Learn to prepare for the end of electric transition and keep your natural gas costs in check.

Natural gas prices have been fluctuating wildly in recent years. What can businesses do to mitigate the impact? Learn how to effectively manage your energy costs by getting an in-depth look at the many products available that can be customized to your business objectives.

- NYMEX – *what is it, how it fluctuates and what it means to you*
- *Natural gas market drivers - to which you should pay attention*
- *An in-depth look at the variety of pricing products, such as triggers, caps, collars, floors and others*
- *Matching the benefits of various products to your business' specific operational and energy requirements*

Sustainable Development

Bill Doty

Sustainable Development is extremely unique and even personal to many organizations. Much of this definition comes from the organization's perception of itself and where it aspires to be in the future. These perceptions are deeply rooted in the organization's strategic business plan that becomes the cornerstone of its sustainable development. Is your organization on board?

Chilled Water Systems

Felix Theys, PE, Vice President, EPS

Learn creative yet practical chilled water techniques including types of equipment, design considerations, performance efficiency enhancements and maintenance requirements. Determine if leasing versus making chilled water is right for you.

New this year: A roundtable discussion on indoor air quality. Join Felix and discuss ASHRAE 90.1, 62, and 55.

Steam System Efficiency Optimization

Keith Chafer, Spirax Sarco, JF Good Company

For many years, steam has been the workhorse of American industry, and in many cases, the steam system is the single largest consumer of energy in the plant. Potential savings opportunities exist in every part of a typical steam system. Keith will show you how substantial savings may be identified and exploited, direct to your organization's bottomline. Specific examples and methodologies will be discussed.

Energy Monitoring and Management

Gary Morse, Square D

If you don't measure it, you can't control it. Many of us are controlled by our energy costs. Learn to take control of your costs. Energy monitoring and management is more than reading kilo-watt-hours. Demand and time of day are critical and will become more critical in the future. Equipment should only run when required and if something operates because it is not controlled, your energy, maintenance and equipment costs soar...not to mention unnecessary pollution generation to power unnecessary equipment. Monitor. Manage. Save!

This conference is a great opportunity for you to spend the night in Cleveland and enjoy the many wonderful sights that the city has to offer. The Crowne Plaza Hotel downtown is offering a discounted \$109.00 rate for single or double occupancy rooms. Call 216.771.7600 to book your room now!

Here are just a few of the things that are happening the weekend of May 9:

- *Cleveland Gladiators take on the Orlando Predators. Order tickets at www.clevelandgladiators.com*
- *The Cleveland Indians battle the Toronto Blue Jays. Order tickets at www.indians.com*
- As the conference approaches, visit www.positivelycleveland.com to plan your itinerary.

Thanks to our Promotional Friends

Green Energy Ohio is a nonprofit organization dedicated to promoting economically and environmentally sustainable energy policies and practices in Ohio. Visit our online clearinghouse of information at www.greenenergyohio.org.

Ohio Department of Development, The Ohio Energy Office, works to promote the natural linkage of energy, economics and environment. Its efforts are designed to address the energy efficiency needs of those most impacted by higher energy costs such as low- and moderate-income residents, small businesses and local governments. The Office concentrates its efforts in the commercial/industrial (including transportation), residential and education sectors.

The Association of Energy Engineers (AEE) is your gateway for information on the field of energy efficiency, energy services, deregulation, facility management, plant engineering and environmental compliance. With a full array of information outreach programs, the Association offers a variety of resource tools. AEE's strong membership base of over 8,000 professionals with 67 local and regional chapters offer recognized certification programs, including Certified Energy Managers (CEMs), Lighting, Indoor Air Quality and Cogeneration Professionals.

AMP-Ohio is the nonprofit wholesale power supplier and services provider for 108 member municipal electric systems in Ohio, Pennsylvania, West Virginia and Michigan. AMP-Ohio provides a diverse mix in its wholesale generation resources, including fossil fuel, hydroelectric, landfill gas, wind power and distributed generation. Formed in 1971, AMP-Ohio serves as the project manager for groups of member municipal electric communities participating in joint ventures to share ownership of generation and related facilities.

U.S. Department of Agriculture

Positively Cleveland is a non-profit organization working diligently to bring conventions and tourism visitors to Cleveland. Through its efforts, 14.05 million convention and leisure visitors bring dollars into the local economy. That makes the convention and tourism business one of the largest industries in Cuyahoga County. For more information, please visit www.positivelycleveland.com.

The Cleveland Green Building Coalition is a U.S. Department of Energy's Rebuild America Program and was created to inform civic, business and non-profit leaders about the economic, environmental and human benefits of environmental design and to position Cleveland to set new standards for sustainable development.

Entrepreneurs for Sustainability (E4S) has attracted a diverse community of entrepreneurial leaders who are inspired to work together to build a sustainable economy in Northeast Ohio. E4S creates and champions a diverse community of inspired entrepreneurial leaders that are shifting markets, creating new business models and launching new enterprises. E4S raises awareness among area leaders about the value of sustainability principles and provides business leaders with knowledge of how to implement sustainability principles. E4S collaborates with strategic partners to nudge and nurture sustainable industries and research in Northeast Ohio, transforming how we do business.

The Public Utilities Commission (PUCO) affects just about every household in Ohio. That's because the PUCO regulates providers of all kinds of utility services, including electric and natural gas companies, local and long distance telephone companies, water and wastewater companies, and rail and trucking companies. The PUCO was created to assure Ohioans adequate, safe, and reliable public utility services at a fair price.

U.S. Department of Energy

Registration Form

Register Online:

Go to www.positivelycleveland.com/energy

Registration Fee: \$109 per person

Includes all take-with materials and luncheon payable by corporate check or credit card. Every third registrant from the same company is **FREE!** Members of our promotional friends \$99. Cancel by 5pm on 5/5/08 for full refund. **Register by April 11 and deduct \$20 off the registration fee.**

Make Checks Payable to EPS. LTD and Send to:

EPS, Ltd.
P.O. Box 471
Huron, OH 44839-2635

PLEASE PRINT

Name _____

Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone _____ Ext. _____

Fax _____

Email Address _____

Type of Business _____

Pre-Conference Tour (Thursday, May 8, 2008 • 6pm)

- I plan to attend the Great Lakes Science Center Tour
(Limited to the first 40 registrants)

Morning Sessions (Please select one)

- LEED (Leadership in Energy and Environmental Design) & Building Commissioning
- Lighting Systems
- Compressed Air Systems
- Alternative Energy Technologies, Application and Financing
- Energy Monitoring and Management

Afternoon Sessions (Please select one)

- Sustainable Development
- Chilled Water Systems
- Steam and Heat Recovery Systems
- Electric and Natural Gas Use and Procurement
- Power Quality Solutions Application

Telephone Registration:

419.433.7048

- Charge this to credit card: Visa MasterCard Discover

Amex

Card Number _____

Expiration Date _____

Cardholder Name _____

Authorized Signature _____

Rooms Available at the Crowne Plaza Hotel Downtown Cleveland

A special block of rooms is available for the Energy Education Conference at the Crowne Plaza Hotel Downtown Cleveland.

Single/double room rates are \$109

To book your room, please call 216.771.7600 and mention the Energy Conference rate.

Book your room today!

General Directions to Case Western Reserve University:

From the east via Interstate 90, exit at Martin Luther King Jr. Boulevard.

Proceed south for about a mile to the East 105th traffic light; cross East 105th and bear right through the traffic circle, continuing along Martin Luther King Jr. Boulevard to Euclid Avenue. Turn left onto Euclid and watch for the Information Booth at the right.

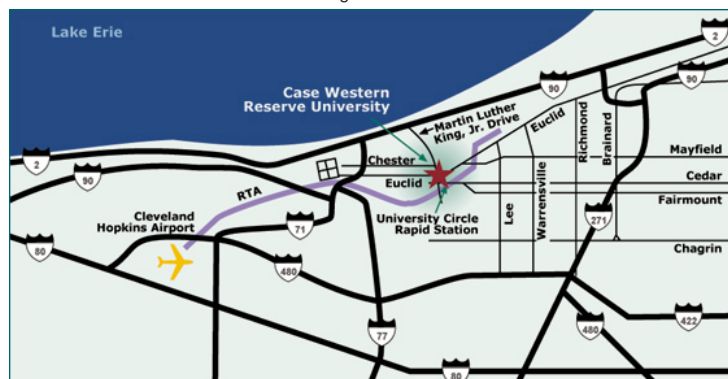
From the east via Interstate 80 (Ohio Turnpike - From Eastern Ohio and Pennsylvania), Take the Ohio Turnpike to the interchange for I-480 West (Exit 187.)

Proceed west on I-480, which merges with I-271 North. Stay north on I-271 then exit at Cedar Road (sharp right turn off exit ramp). Follow Cedar Road westbound toward Cleveland. (Case is about 20-25 minutes from this point.)

Where Cedar starts down a steep hill, look for a sign identifying Case Western Reserve University on your right at the corner of Murray Hill Road. Continue down Cedar Road under the bridge and veer to the right at the next light on Martin Luther King Jr. Blvd. Turn right onto Euclid and watch for the Information Booth at the right.

From the west via the Ohio Turnpike (Interstate 80), exit at Exit 142 and follow Interstate 90 east. Shortly after passing the downtown exits, exit at Martin Luther King Jr. Boulevard. Proceed south for about a mile to the East 105th traffic light; cross East 105th and bear right through the traffic circle, continuing along Martin Luther King Jr. Boulevard to Euclid Avenue. Turn left onto Euclid and watch for the Information Booth at the right.

From the south via Interstate 71 or Interstate 77, proceed north until I-71 (or I-77) merges with Interstate 90. Take I-90 east then exit at Martin Luther King Jr. Boulevard. Proceed south for about a mile to the East 105th traffic light; cross East 105th and bear right through the traffic circle, continuing along Martin Luther King Jr. Boulevard to Euclid Avenue. Turn left onto Euclid and watch for the Information Booth at the right.



*Parking garages available on Adelbert Road
*For a campus map visit www.case.edu/visit/map