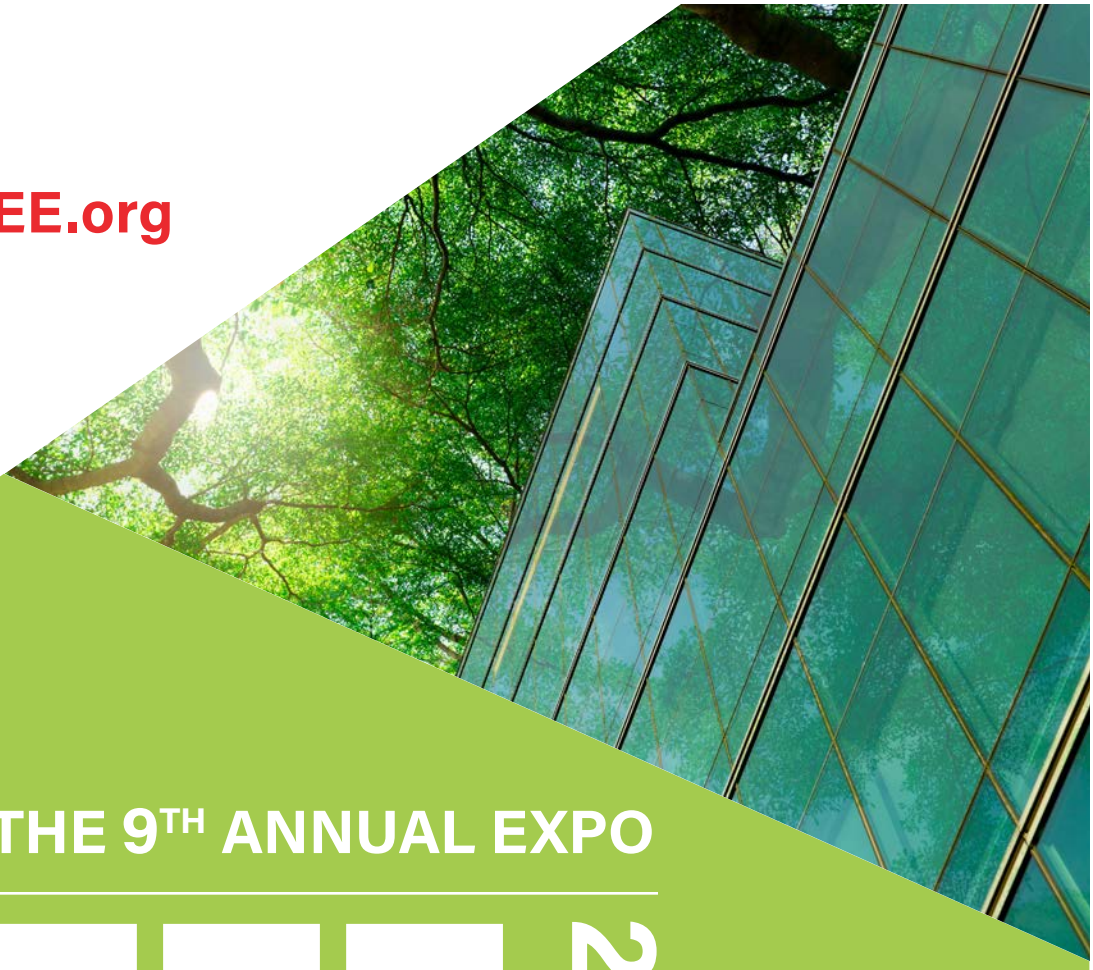
www.theWAEE.org



JOIN US AT THE 9TH ANNUAL EXPO

WEEE 2022

Wisconsin Energy Efficiency Expo

October 19, 2022 | 7 am – 4:30 pm

Potawatomi Hotel & Casino
1721 W. Canal Street
Milwaukee, WI 53233

CONFERENCE & EXPOSITION PROMOTING EFFICIENCY & CONSERVATION

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Thank you to our Expo Partners

Slipstream is a nonprofit that discovers, tests, and scales climate solutions in buildings and communities. Its headquarters is in Madison with staff across the U.S. Slipstream's work spans the next generation of energy efficiency and renewable energy training, research, and programs that move us farther, faster toward a clean energy economy.

We Energies provides affordable, reliable, and clean energy to more than 2.2 million customers in Wisconsin. We're focused on strengthening the fabric of the communities we serve by building and maintaining safe, resilient infrastructure, while reducing greenhouse gas emissions. With our continued investments in solar, wind and battery storage, we're a national leader in the decarbonization effort. Our goal: net carbon neutral by 2050.

Welcome | 8:30–9 am

Welcome to WEEE
Jerry Eaton | WAEE President

Jerry Eaton is the president of the Wisconsin Association of Energy Engineers (WAEE), JEaton Consulting, LLC., and Vice President of the Association of Energy Engineers, Midwest Territory. He is an energy executive with over 25 years of experience in the field of energy efficiency, utilities, engineering, facilities management, and professional training. Jerry is a Professional Engineer (PE), Certified Energy Manager (CEM), and Certified Plant Engineer (CPE). He has a MS in Engineering Management—UCF, Bachelor's Degree in Nuclear Engineering—UW Madison. Jerry is a US Navy Veteran (21 years) and enjoys playing pickleball (a lot).

Welcome to Milwaukee
Erick Shambarger | City of Milwaukee

Erick Shambarger is the Director of Environmental Sustainability for the City of Milwaukee, where he leads the Environmental Collaboration Office (ECO). ECO develops practical solutions that benefit Milwaukee's environment and economy. Mr. Shambarger oversees implementation of the Refresh Milwaukee sustainability plan and coordinates Milwaukee's involvement with local, national and global partnerships on environmental sustainability. He oversees all of ECO's programs, including the Milwaukee Energy Efficiency (Me2) program, the Milwaukee Better Buildings Challenge, Water Centric City initiative, the HOME GR/OWN program and green infrastructure work. He led development of the City's Green Infrastructure Plan that was adopted in 2019 and is currently the Project Manager for the forthcoming Climate and Equity Plan. He also negotiated the City's largest solar energy project to date, a 2.25MW solar system on a city-owned landfill. Mr. Shambarger also launched Wisconsin's first Commercial Property Assessed Clean Energy (PACE) program that has financed over $38m in projects in the City. He is also co-founder of the Wisconsin Local Government Climate Coalition (WLGCC.org). Prior to his current role, he served as City Economist in the City's Budget and Management Division. He holds a Masters of Public Affairs degree from the University of Wisconsin and certificates in Water Technology; Energy Analysis and Policy; and Business Communications.

Welcome to Potawatomi
Jerrald Hauber | Energy Manager

Jerrald Hauber is the Forest County Potawatomi (FCP) Community Energy Manager. The Forest County Potawatomi Tribe remains focused on their long-standing goal of reducing their energy use and carbon footprint. Over the past several years, Potawatomi has implemented a number of energy efficiency initiatives to significantly lower its energy usage and reduce carbon emissions, including the recent installation of a 300kW solar system.

Keynote Presentation | Noon–12:45 pm

Introduction of Keynote
Jennifer Szedziewski | We Energies

Jennifer Szedziewski is an account manager with We Energies serving large industrial, educational, and healthcare customers in Southeastern Wisconsin. She also leads discussions on renewable energy options for meeting sustainability goals and driving towards energy efficient operations. Jennifer is a Professional Engineer with a BS in Civil Engineering, Certified Energy Manager, and recent MBA graduate.

Keynote Speaker
Rachel Schneider | Molson Coors

Rachel Schneider joined Molson Coors in June 2022 as the VP Sustainability & EHS. Prior to joining Molson Coors, she held numerous sustainability and strategy positions at Harley-Davidson, most recently leading the Inclusive Stakeholder Management team. Rachel made the switch to the corporate sustainability world in 2010 after a 15-year legal career. She was an equity partner in the Environmental Law Group of Quarles & Brady LLP (Milwaukee office), specializing in environmental and other regulatory compliance matters, with an emphasis on remediation, transactions, and crisis management.

Keynote Speaker
Ryan Brown | Molson Coors

From nuclear weapons to beer, **Ryan Brown** has been at the forefront of technology for the last 30 years. Ryan currently serves as the Technical Services Manager at Molson Coors in Milwaukee, where he is responsible for utilities, facilities, engineering, maintenance, and environmental operations. Under his leadership, the brewery is one of the 2022 Focus on Energy Efficiency Excellence Award winners. Prior to Molson Coors, he spent 19 years at Anheuser-Busch in various positions in California and New York. Ryan is an electrical engineer from the University of Notre Dame and began his career at the Los Alamos National Laboratory.

Molson Coors Energy Excellence Award
Lisa Stefanik | Focus on Energy

Lisa Stefanik is a seasoned professional with more than 25 years of work experience. She has a passion and enthusiasm for energy efficiency and renewable energy, which led her to her current role as the Managing Director of Wisconsin's Focus on Energy Program. Lisa has lived and worked in Wisconsin a majority of her life. She equates her strong work ethic and interest in sustainability from her time working on and helping to manage her family's farm in Albany, WI. Prior to coming to work at APTIM, the company that administers the Focus on Energy Program, Ms. Stefanik was involved in the energy industry as an energy program evaluator and consultant, a Policy Advisor to the Public Service Commission of WI, and a Marketing Manager for the Focus on Energy Program. Lisa earned her Master of Business Administration degree from University of Wisconsin-Whitewater and her Bachelor's degree from UW-Madison in Sociology, with concentrations on Analysis, Research, and Environmental Studies.

Lisa Stefanik, Managing Director of Focus on Energy, presented **Molson Coors Beverage Company** with the 2022 Focus on Energy Excellence in Energy Efficiency Award in recognition of their ongoing energy efficiency initiatives and conservation efforts.

Door Prizes

Jackery Portable Power Station and Solar Panel

Two Jackery Explorer 240 Portable Power Station and 60W Solar Panel ($500 value)
Must be present to win.

Donated by: Wisconsin Association of Energy Engineers (WAEE)

BP Gift Cards

Four $250 BP Gas Gift Cards.
Must be present to win.

Donated by: Wisconsin Association of Energy Engineers (WAEE)

Green Bay Packers Shareholders Meeting

Four tickets to the Green Bay Packers Shareholders Meeting in 2023.
Must be present to win.

Donated by: Paul Van de Sand (2), and Richard Feustel (2)

Miller Neon Signs

Two Miller Neon signs.
Must be present to win.

Donated by: Molson Coors Brewery

Milwaukee Brewers Baseball Tickets

Four tickets to a 2023 Milwaukee Brewers game.
Must be present to win.

Donated by: Hunzinger Construction Company

UW-Madison Badger Basketball Tickets

Two tickets to a 2022–23 UW-Madison Badger Basketball game.
Must be present to win.

Donated by: Paul Van de Sand

WAEE & Member Awards

WAEE Chapter Awards

AEE National | **Exposition of the Year** (2017, 2019, 2022)
AEE National | **Young Energy Professional** (2018)
AEE National | **Chapter of the Year** (2013, 2016)
AEE National | **Best Student Chapter** (2016)
AEE National | **Best Chapter Meeting—WEEE** (2015)
AEE National | **Best Chapter Website** (2014)
Most New Members (2008, 2010, 2013)
Energy Engineer of the Year (2014)
Energy Manager of the Year (2011, 2013)
Renewable Energy Project of the Year (2013)

Midwest Regional Awards

Energy Engineer of the Year (2011, 2016)
Energy Professional Development Award (2011, 2013)
Energy Innovator of the Year (2011, 2013)
Young Engineer of the Year (2009)

International Awards

Energy Engineer of the Year (2014)
Energy Manager of the Year (2011, 2013)
Renewable Energy Project of the Year (2013)

Expo of the Year

Jerry Eaton, WAEE President, was honored to accept this award on behalf of WAEE at the Association of Energy Engineer's (AEE) World Energy Conference and Expo in Atlanta, GA on Sept 20, 2022. **This is WAEE's third National Best Chapter Conference and Expo award.**

WAEE Membership Information
www.theWAEE.org

- Free monthly meeting & webinar attendance
- Free WEEE Conference & Expo admission
- Free WEEE Conference Exhibit Space

Schedule and Sessions
(details on pages 10–19)

7 am **REGISTRATION**

7–8:30 am **BREAKFAST BUFFET | EVENT CENTER**

7:30–8:30 am **NEW PRODUCT / TECHNOLOGY BRIEFS**

8:30–9 am **WELCOME TO WEEE | Jerry Eaton,** WAEE President

WELCOME TO MILWAUKEE | Erick Shambarger,
Director of Environmental Sustainability, City of Milwaukee

WELCOME TO POTAWATOMI | Jerry Hauber,
Energy Manager

9–9:15 am **EXHIBITOR VIEWING**

9:15–10 am | TRAINING SESSION 1

Your path to smarter energy **Steve Nieland** | EnTech Solutions PROSPERITY ROOM	**Global and local energy technology transitions** **Scott Olsen** | Olsen Consulting, LLC INSPIRE ROOM	**Building integrity and energy savings by air sealing** **Torrance Kramer** | Accurate-Airtight Exteriors CLARITY ROOM	**What is arc flash and why is limiting its effects important?** **Mike Bukovitz** | Tech4 LLC PROGRESS ROOM	**Next steps to an affordable clean energy transition** **Tom Content** | Citizens Utility Board EXHIBIT ROOM

10–10:45 am **EXHIBITOR VIEWING | DOOR PRIZE DRAWING**

10:45–11:30 am | TRAINING SESSION 2

The nature and benefits of energy audits in industry **Pawel Olszewski** | UW–Oshkosh PROSPERITY ROOM	**Is the operation of your dust / fume collection system truly energy efficient** **DuWayne Bohrer** | Hastings Air Energy Control, Inc. **Kevin Rohde** | IVEC Systems INSPIRE ROOM	**Is immersion cooling the next LED light bulb?** **Chad Cape** | LiquidCool Solutions CLARITY ROOM	**Why training of BMS operators is KEY to controlling energy cost** **Xiaohui "Joe" Zhou** | Slipstream PROGRESS ROOM	**How the Inflation Reduction Act will impact the HVAC industry** **Bruce Lindsay** | Trane Technologies EXHIBIT ROOM

Schedule continued

11 am–12:30 pm **LUNCH BUFFET | EVENT CENTER**

11:45 am–Noon **ANNOUNCEMENTS | Jerry Eaton,** WAEE President

Noon–12:45 pm **KEYNOTE PRESENTATION**

Introduction of Keynote | Jennifer Szedziewski, Account Manager, We Energies

Keynote Speaker | Rachel Schneider, VP Sustainability, Molson Coors

Keynote Speaker | Ryan Brown, Technical Service Manager, Molson Coors

Molson Coors Energy Excellence Award | Lisa Stefanik, Managing Director, Focus on Energy

12:45–1:30 pm **EXHIBITOR VIEWING | DOOR PRIZE DRAWING**

1:30–2:15 pm | TRAINING SESSION 3

Leap from basic benchmarking to emissions inventory, strategy, and targets **Rock Ridolfi** | Rivion PROSPERITY ROOM	**Emerging building policies in Milwaukee and Madison to support resilience and climate action** **Jessica Price** | City of Madison **Pamela Ritger de la Rosa** | City of Milwaukee INSPIRE ROOM	**The cost of not going solar** **Dan Steinhardt** | Arch Electric CLARITY ROOM	**Power quality in renewable energy systems** **John Houdek** | Allied Industrial Marketing, Inc. PROGRESS ROOM	**Steam system 101: Understanding your energy systems better** **Jay Ehrfurth** | Three Element Training EXHIBIT ROOM

2:15–3 pm **EXHIBITOR VIEWING | DOOR PRIZE DRAWING**

3–3:45 pm | TRAINING SESSION 4

Energy treasure hunts: The best way to find, rank, and develop energy projects **Alex Dodd** | Grumman/Butkus Associates PROSPERITY ROOM	**Distributed energy technology platform** **Neal R. Verfuerth** | Energybank Inc. INSPIRE ROOM	**Compressed air efficiency—savings on the demand side** **Frank Melch** | Zorn Compressor & Equipment CLARITY ROOM	**Market transformational impact of the Inflation Reduction Act** **Svein Morner** | HGA Architects and Engineers PROGRESS ROOM	**University water management** **Tim Wissing** | Badger Meter EXHIBIT ROOM

3:45–4:15 pm **EXHIBITOR VIEWING**

4:15 pm **GRAND PRIZE DRAWING | CEU CERTIFICATES | $10 POTAWATOMI MATCH PLAY COUPON**

4:30 pm **ADJOURN**

TRAINING SESSION 1 | 9:15–10 am

Your path to smarter energy

Steve Nieland | EnTech Solutions

TRAINING SESSION 1—PROSPERITY ROOM

With rising energy costs, government mandates, resiliency issues becoming more common, declining renewable energy costs and environmental stewardship becoming more widely discussed, clean energy is top of mind for industries across the US, but often, companies don't know where to start. Building out a sustainable energy program can be difficult, which is why we created Path to Smarter Energy; a step-by-step guide for organizations who are looking for a place to start. It includes an initial energy usage assessment through battery energy storage and beyond, aligning with financial, operational and environmental goals. In this presentation, we will discuss what Path to Smarter Energy is and how companies can get started.

About Steve

Steve Nieland is Vice President of Innovation for EnTech Solutions, the energy division of Faith Technologies Incorporated. In his role, Steve is responsible for identifying technologies, policies, and differentiated approaches to drive innovative product, process and partner solutions for energy system delivery, monitoring and performance. Steve holds degrees in electronics and chemistry as well as having additional studies in paper science, computer science and electrical engineering. He has been certified by ASQ as an ISO 9000 lead auditor and lead implementer. Steve has served in the past as local chair for the American Chemical Society, as a member of the Executive Committee for the University of Wisconsin -Stevens Point Academy of Letters and Science, as a member of the Biopharma Sustainability Roundtable, and as a business consultant and management mentor.

Global and local energy technology transitions

Scott Olsen | Olsen Consulting, LLC

TRAINING SESSION 1—INSPIRE ROOM

Mr. Olsen provides a brief overview of US and European natural gas markets along with reviewing the huge technological changes happening in the electric utility industry, the auto industry and the building design and construction industry. Increasing temperatures and the "you will be assimilated" war impacts are also noted. Options such as energy efficiency, demand management, carbon management, tax credits and the critical importance of feedback for quality control in the building construction industry are reviewed. Issues that the speaker thinks need more consideration are also presented.

About Scott

Scott Olsen has over 30 years of providing productivity improvements in commercial and industrial facilities. His work with HVAC&R and energy efficiency includes positions at A&E firms in MN and WI; state government; commercial building control firms; and an Investor Owned Utility (IOU). He lived and worked in Oslo, Norway for two years, three months in Germany and several weeks in Ukraine. His Mechanical Engineering undergraduate degree focused on thermal environmental engineering in commercial buildings. Scott's 20 years with an Investor Owned Utility informs his thoughts on the significant technology changes impacting the electrical grid and society. Scott's Master's degree in Public Administration and Policy with focus on Energy Analysis & Policy provides a global view on energy use in society. The program encompassed energy using sectors, economics, engineering, the environmental, and policy approaches. Scott believes energy use benchmarking is an excellent tool for quality control and continuous improvement for leaders in commercial building design and construction. His extensive field experience provides a valuable perspective on theory vs practice in commercial buildings.

Building integrity and energy savings by air sealing

Torrance Kramer | Accurate-Airtight Exteriors

TRAINING SESSION 1—CLARITY ROOM

Have you wondered why certain rooms are so much cooler than others, why certain areas of a building are more prone to ice dams, or why your HVAC system runs more in one building (one floor) than another? All buildings have locations where air escapes, where some areas are worse than others. This presentation will review common locations of building air barrier failings and what can be done about it. Key areas covered includes; performing diagnostic air barrier testing on existing and new construction, how to correct common building defects, and the associated equipment used. By the conclusion of the presentation attendees will know if their building warrants testing or air barrier repairs.

About Torrance

Torrance Kramer is a Certified Energy Manager and is passionate about reducing energy cost for his customers. He has completed thousands of comprehensive energy audits on all types of buildings over the last 20 years. It became evident that there was a lack of understanding in the field of building envelope integrity. This led Torrance to focus on specializing in air barrier testing and thermal barriers. For the last 8 years, he has operated Accurate-Airtight Exteriors which provides consulting, training, testing, and repairs building air and thermal barriers.

What is arc flash and why is limiting its effects important?

Mike Bukovitz, P.E. | Tech4 LLC

TRAINING SESSION 1—PROGRESS ROOM

Learn how to improve electrical system reliability and dramatically improve employee safety via active "arc flash quenching" systems. This presentation will cover the reliability and safety risks associated with arc flash events, and present a solution which, when properly installed and maintained, can allow you to eliminate the typical NFPA 70E requirement for arc-rated PPE in type-tested equipment. Today's state-of-the-art option of "Arc Quenching", when correctly implemented can protect personnel from 3rd degree burns and critical equipment assets from catastrophic damage.

About Mike

Mike Bukovitz is the Vice-President of the Power System Solutions business of Tech4 LLC, based in De Pere, Wisconsin. A graduate of Michigan Technological University and the University of St. Thomas, Mike has been working with electrical power systems for the past 40 years, focused primarily on improving system reliability and safety. His roles have been in engineering, R&D, organizational leadership, and business development. His previous employers include Scott Paper, Siemens, Square D (Schneider Electric), and Tech4 LLC. In this capacity, he has worked on-site in power system projects in 63 different countries. Mike spent the previous two decades improving electrical power system designs and is an industry advocate for high resistance grounding and active arc flash mitigation.

Next steps to an affordable clean energy transition

Tom Content | Citizens Utility Board

TRAINING SESSION 1—EXHIBIT ROOM

Affordability and energy security are increasingly in focus as the transition to clean energy sources progresses. Hear from Wisconsin's consumer advocate, the Citizens Utility Board, on the key steps needed to making the energy transition cost-effective and affordable for all. Plus get an update on rising cost pressures, including surging natural gas costs as well as recent rate cases involving, We Energies, WPS, MGE, Alliant, and Xcel Energy.

About Tom

Tom Content is Executive Director of the Citizens Utility Board (CUB), the consumer advocate for the residential and small business customers of Wisconsin electric, natural gas, and water utilities. Tom joined CUB five years ago after a career in journalism including 20 years covering the utility sector in Wisconsin for the Milwaukee Journal Sentinel and Green Bay Press-Gazette. A series he wrote while in Milwaukee about energy and climate change was named Best Energy Writing in the nation by the National Press Foundation.

TRAINING SESSION 2 | 10:45–11:30 am

The nature and benefits of energy audits in industry

Dr. Pawel Olszewski | UW–Oshkosh

TRAINING SESSION 2—PROSPERITY ROOM

This presentation shows why energy audits in the manufacturing sector are a fundamental factor of energy transformation, linking industrial reality with wishful thinking. From one side, these changes are shaped by the ambitious sustainability policies, propagated through media. From the other side, everyday engineering practice experiences limitations, having their nature in Laws of Thermodynamics. To provide a right perspective, this presentation is structured into two parts: "big picture" short review of global energy situation and presentation of energy audit cases.

Energy audit will be discussed based on three real cases: basic assessment of a simple individual system, (air compressors), analysis of a complex energy systems (multi-chiller system), and multi-level energy mapping and flow analysis for entire manufacturing process (corn ethanol plant).

About Pawel

Dr. Pawel Olszewski serves as Associate Professor in the Department of Engineering and Engineering Technology at the University of Wisconsin–Oshkosh since its beginning in 2014. He spearheaded the design and construction of the Energy Research Industrial Lab, providing an infrastructure for advanced-level classes and applied research published in top-rated, energy-related journals.

Pawel focused his professional interests on modeling and optimization of energy conversion processes in the manufacturing sector. He conducted over 80 energy audits in various production systems generating significant energy savings. Pawel also built and patented a prototype of an energy efficient flameless combustion furnace, implementable in various metallurgical processes.

Is the operation of your dust / fume collection system truly energy efficient

DuWayne Bohrer | Hastings Air Energy Control, Inc.

Kevin Rohde | IVEC Systems

TRAINING SESSION 2—INSPIRE ROOM

It's one thing to control/capture your dirty air from manufacturing processes, it's another to do it intelligently! Modern industrial dust and fume collection systems typically lack the controls and monitoring needed to be truly energy efficient.

The presentation will start off by reviewing a typical block diagram and the energy cost associated with today's collection systems. We will then describe some of today's technology advancement associated with operating high-performance industrial fume and dust collection system. The presentation will conclude with a review of case studies that highlight potential energy reduction opportunities associated with improvements to include VFDs, blast gates, and intelligent controls.

About DuWayne

DuWayne Bohrer draws on 29 years of experience in the industrial air cleaning and ventilation energy control environment. He led the group that developed the automation controls which save companies thousands of dollars by optimizing performance for new and existing systems. DuWayne believes in delivering specialized solutions based on carefully chosen equipment models to achieve value for businesses. With experience in every phase of the design-build process, DuWayne is an expert in helping businesses meet codes, standards, and regulations while delivering systems that provide the lowest cost-of-ownership.

About Kevin

Kevin Rohde, IVEC Systems, Kevin has 14 years of experience in the industrial sector and over 27 years of national leadership. With a focus on improving business processes and delivering results, Kevin's experiences give him unique insights into making business improvements from the business customer perspective. As General Manager and part owner of Hastings Air Energy Control, Kevin continually improved processes to serve the industrial ventilation air cleaning marketplace. This included introducing a proprietary energy management system to a national distribution network. Now, leading the Ivec Systems Company, he has helped refine an operational model that designs, builds, assembles, and supports industry leading Intelligent Ventilation Energy Control products and services.

Is immersion cooling the next LED light bulb?

Chad Cape | LiquidCool Solutions

TRAINING SESSION 2—CLARITY ROOM

As computers, servers, and other electronic devices get smaller and more powerful, the efficient removal of their heat is one of today's hottest topics. For decades, electronics have generally been cooled by moving vast amounts of air. Sadly, air's low specific heat capacity, combined with fans, filters, and other air-conditioning equipment, make such methods grossly inefficient. Immersion cooling, by contrast, uses a dielectric liquid to cool and protect electronic equipment without the cost and inefficiencies associated with complex HVAC systems. This presentation will provide an overview of immersion cooling technology, including what makes it more sustainable, reliable, versatile, and economical than legacy systems. It will also demonstrate why immersion cooling technology is the next LED lightbulb, presenting tremendous opportunity for energy managers/engineers, sustainability professionals and design/consulting engineers to consider for their next energy efficiency project(s).

continued on page 14

continued from page 13

About Chad

Chad Cape leads business development efforts for LiquidCool Solutions, leaning on skills gained while qualifying as an engineer in the US Navy's submarine service. In the private sector, Chad gained sales, finance and global business experience while servicing middle market and large corporate clients of JPMorganChase. A life-long Packer Backer, he and his wife, Debbie, have raised three Badgers and a Hawkeye.

Why training of BMS operators is KEY to controlling energy cost

Dr. Xiaohui "Joe" Zhou | Slipstream

TRAINING SESSION 2—PROGRESS ROOM

Advanced building controls and energy management strategies could result in an average of nearly 30% energy savings. Unfortunately, there is an industry-wide knowledge gap on how to utilize advanced building controls to capitalize on energy savings. This presentation will help you make more informed decisions, better specify and commission building controls systems, and manage and operate buildings more efficiently. In addition, the session will showcase a new building controls free training resource for energy managers and building operators and describe the benefits of ASHRAE Guideline 36.

About Joe

Dr. Xiaohui "Joe" Zhou is a Director of Research and Innovation at Slipstream with more than 25 years of experience in commercial building energy efficiency with focuses on building controls, smart buildings, grid-interactive efficient buildings (GEB), as an engineer, researcher, and project/program/facility manager. Joe is a member of ASHRAE and is actively involved in the local ASHRAE chapter as well as in the ASHRAE Technical Committee TC 1.4 Control Theory and Applications and TC 7.5 Smart Building Systems. He is a voting member of ASHRAE Standing Guideline Project Committee SGPC 36, High-Performance Sequences of Operation for HVAC Systems. Joe holds a B.S. (Zhejiang University) and M.S. (University of Connecticut) degrees in Electrical Engineering, and a Ph.D. degree in Mechanical Engineering (Iowa State University.) His past working experiences include application engineer at Johnson Controls and researcher & energy efficiency program manager at Iowa Energy Center.

How the Inflation Reduction Act Will Impact the HVAC Industry?

Bruce Lindsay | Trane Technologies

TRAINING SESSION 2—EXHIBIT ROOM

President Biden signed the Inflation Reduction Act of 2022 on August 15. In the massive piece of legislation, there was a provision to permit thermal energy storage systems to qualify for a 30% investment tax credit starting in 2023. There was another 10% investment tax credit if the system exceeds 40% US content. There was another 10% investment tax credit if the project is located in an area with a coal mine closure or a coal-fired power plant shutdown. Our ice storage systems will qualify for the 40% investment tax credit.

The Inflation Reduction Act also now permits schools, local government, and state government to utilize the tax credits. The IRA has additional provisions to incentivize prevailing wage and apprentice programs. All of this is very fresh and our corporate finance and tax teams, along with our tax consultants, are digesting this. The Treasury Department or IRS will be publishing guidelines, but we expect this will not be soon. Nonetheless, our internal analysis indicates the thermal energy storage systems will be the lowest first cost option and the lowest operating cost when compared to a conventional chiller plant.

About Bruce

Bruce Lindsay, PE, CEM is the Business Development Team Leader for Thermal Energy Storage, Trane Technologies. He works with utilities, regulators, engineering firms, and building owners to design and install thermal energy storage systems to take advantage of changing electric rates as we move to renewable energy and electrification of buildings. Trane is pioneering the use of ice storage to heat large buildings instead of natural gas.

Prior to joining Trane Technologies, Mr. Lindsay served as the Energy Manager at Brevard Public Schools in central Florida. He managed the utility services for 84 schools totaling 13M square feet. Of the 84 schools, 20 had ice storage systems. He provided engineering overview for facility upgrades of $200M over six years.

Mr. Lindsay worked for the Electric Power Research Institute and was the Executive Director of the EPRI Thermal Storage Application Research Center at the University of Wisconsin-Madison. He managed national programs to develop thermal energy systems and provide training to utilities and engineering firms.

Mr. Lindsay is a Life Member of ASHRAE. He is currently the President of the ASHRAE Space Coast Section and Region XII Refrigeration Vice Chair. He serves on ASHRAE TC 6.9, Thermal Energy Storage, TC 9.7, Educational Facilities, and the ASHRAE Epidemic Task Force-Schools Team. He is also active in USGBC and received the 2020 Best of Green Schools-Transformation Award.

Mr. Lindsay holds a BS in Civil Engineering from Carnegie-Mellon University, an MS in Energy Resources from the University of Pittsburgh, and an MBA from Northwestern University. He is a licensed Professional Engineer in the State of Wisconsin and a Certified Energy Manager.

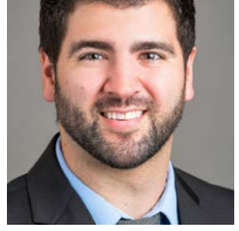
TRAINING SESSION 3 | 1:30–2:15 pm

Leap from basic benchmarking to emissions inventory, strategy, and targets

Rock Ridolfi | Rivion

TRAINING SESSION 3—PROSPERITY ROOM

Focusing on the 'E' of the ESG conversation. Many buildings and organizations have struggled with basic benchmarking of energy use, especially throughout the Covid-era. Now, they're tasked with expanding their benchmarking to include Scope 1, 2, and 3 emissions. We'll highlight FAQ from investors, owners, and building operators regarding developing an emissions inventory and baseline and implementing a strategy to achieve realistic reduction targets. We will also address related opportunities for water, waste/recycling improvements, and resilience.



About Rock

As Director of Project Operations, Rock Ridolfi oversees the core operations of Rivion's experienced building consultants, energy engineers, and commissioning agents. He approaches every project with a well-balanced, creative, and opportunistic mindset, navigating between the standard and the innovative, while maintaining focus on budget, timeline, and overall value sought by Rivion's clients.

Emerging building policies in Milwaukee and Madison to support resilience and climate action

Dr. Jessica Price | City of Madison
Pamela Ritger de la Rosa | City of Milwaukee

TRAINING SESSION 3—INSPIRE ROOM

Cities across Wisconsin are playing an increasingly important role in tackling the climate crisis. This includes a growing exploration of local policies that can reduce greenhouse gas emissions from the built environment. This presentation will highlight prospective building policies in the City of Milwaukee and Madison including PACE financing, energy benchmarking, building tune-ups, and building performance standards. We will also discuss opportunities for collaboration in development of these policies with stakeholders in our communities, energy professionals, and more.

About Jessica

Dr. Jessica Price is Sustainability and Resilience Manger for the City of Madison, where she works to develop and implement policies, programs, and strategies that advance climate resilience, sustainability, and environmental justice. Top priorities include climate action to meet Madison's ambitious climate and energy goals; investments in equitable, no- and low-carbon transportation and city fleet vehicles; and improving the energy efficiency of affordable housing and commercial buildings. Prior to joining the Mayor's Office, Jessica served as Renewable Energy Strategy Lead for the Nature Conservancy in New York. Jessica has a PhD in Landscape Ecology and an MS in Conservation Biology from the University of Wisconsin-Madison.

About Pam

Pamela Ritger de la Rosa leads efforts to reduce energy use in City of Milwaukee-owned buildings, administers the PACE program, and supports the Better Building Challenge among other efforts to advance building energy efficiency and sustainability. She also works on expanding the electric vehicle charging network in the City of Milwaukee and advancing the transition of municipal fleets to electric and other low emissions vehicles. As a member of the City-County Task Force on Climate and Economic Equity since 2019, she looks forward to helping implement many recommendations of the Milwaukee Climate and Equity Plan in this role. Pam is joining ECO after more than 8 years with Clean Wisconsin, the state's oldest and largest environmental non-profit advocacy organization, where she held the title of Milwaukee Program Director and Staff Attorney. She is a graduate of the University of Wisconsin Law School and the La Follette School of Public Affairs, and completed a certificate in Energy Analysis and Policy from the Nelson Institute for Environmental Studies at UW-Madison. Pam is also on the Advisory Board of the Midwest Renewable Energy Association and is an active member of the Wisconsin Hispanic Lawyers Association.

The cost of not going solar

Dan Steinhardt | Arch Electric

TRAINING SESSION 3—CLARITY ROOM

Demand Management 101: In a world where every cost-saving measure seems to have been exhausted, most commercial and industrial owners are unaware of the saving potential associated with solar and energy storage type systems. This presentation will review what are demand charges and how solar and energy storage systems can reduce not only energy consumption but mitigate these demand spikes resulting in a reduced utility bill. In addition, we will review how to take advantage of the Energy Investment Tax Credit before they expire.

About Dan

Dan Steinhardt is a Master Electrician and Certified Energy Manager. Dan was raised and currently lives in Plymouth, WI. He joined the Arch Electric team in early 2018 after spending 14 years in the Energy Efficient Design and Controls field. His past experiences in power monitoring, lighting, refrigeration, and automation combined with his passion for renewable energy has made him a great asset to the team and his clients.

Power quality in renewable energy systems

John Houdek | Allied Industrial Marketing, Inc.

TRAINING SESSION 3—PROGRESS ROOM

From the electrical perspective, clean energy is not always clean. Renewable energy and battery storage inverters can contribute significant harmonic distortion onto power systems and to the equipment they supply. Whether they are grid-tied or stand alone, they may affect the operation of electrical and electronic equipment they serve. Equipment that may be affected includes LED lighting, Capacitors, UPS, VFDs, etc. In addition to capacity limits vs current draw of loads, different inverter techniques and filter configurations can make a big difference in overall compatibility. This session discusses power quality aspects of renewable energy systems and offers some guidance for achieving harmony between the power source and connected loads.

About John

John Houdek is president and co-owner of Allied Industrial Marketing, Inc. (Cedarburg, WI), a company that specializes in electrical power quality. John is a resource for a variety of power quality services including problem diagnosis, harmonic analysis, filter design, computer simulation, training and seminars as well as technical marketing support for key components used for the assembly of high performance power quality (filtering) equipment.

Steam system 101: Understanding your energy systems better

Jay Ehrfurth | Three Element Training

TRAINING SESSION 3—EXHIBIT ROOM

Your physical plants and distribution systems have needs associated with their performance. However, a majority of these vital systems are encased behind the finishes and soon become an afterthought. This presentation will address the concepts of looking at the production (boiler room) and distribution (end user) as one, thereby maintaining harmony and balance throughout the entire system. We will also touch on cares and concerns when adding onto an existing system when addressing start-ups and commissioning.

About Jay

Jay Ehrfurth, PE, CEM has over 30 years of providing training and operations/maintenance consulting in the thermal world concentrating on central plants and distribution systems. Before retiring from Boldt, Jay's role as Vice President-Energy supported the repair, modification, or construction of centralized thermal facilities for hospitals, industrial, higher educational, and correctional facilities. Jay has personally managed over one billion in power related projects. Prior to Boldt, Jay served as the State Chief Power Plant Engineer for the Wisconsin DOA. Jay's responsibilities included the monitoring of central plant performance, fuel procurement, plant emissions, and construction projects for 33+ state thermal plants. Jay is a Licensed Professional Engineer (Mechanical–WI), a Certified Energy Manager, and holds an ASOPE-Master Chief's License and Technical Instructor credential. Jay is on the board of directors for the Wisconsin Boiler Inspectors Association (WBIA), and American Society of Power Engineers (ASOPE)—National and Wisconsin Region.

TRAINING SESSION 4 | 3–3:45 pm

Energy treasure hunts: The best way to find, rank, and develop energy projects

Alex Dodd | Grumman/Butkus Associates

TRAINING SESSION 4—PROSPERITY ROOM

An energy treasure hunt is a collaborative quest where your employees uncover opportunities to save energy. When properly conducted, it is the best way to create a complete list of the viable opportunities within a facility, or a specific process. Since 2019, over 72 facilities have participated in the U.S. EPA's "Find the Treasure" campaign. As a result, they have found over $52 million worth of cost savings through feasible projects. This presentation will describe the benefits and best-practices of treasure hunts. It will provide an overview of the US EPA's "Energy Treasure Hunt Guide" and other custom tools for facilitation. The presentation will cover preparation for the event, efficient use of internal and external resources, reporting of results to management, and development of projects to shovel-ready status.

About Alex

Alex Dodd is a Project Manager for Grumman/Butkus Associates: Energy Efficiency Consultants and Sustainable Design Engineers. Alex graduated from UW-Madison as a Mechanical Engineer in 2004. He has been a consultant in the field of energy-efficiency and renewable energy generation for 15 years. Alex has facilitated treasure hunts at a variety of large industrial and commercial facilities. In addition to project hunting and investment-grade analysis, he specializes in retro-commissioning and commissioning of industrial and commercial automation systems.

Distributed energy technology platform

Neal R. Verfuerth | Energybank Inc.

TRAINING SESSION 4—INSPIRE ROOM

Learn about the benefits of adopting a holistic strategy that combines on-site Photovoltaic Solar, Smart LED Lighting, Demand Response IoT, Predictive Failure Analytics as well as programs available to enhance Return on Investment by reducing initial investment and/or off balance sheet financing.

About Neal

Neal R. Verfuerth—Founder/CEO of Energybank Inc—A proven track record as a thought leader and inventor of Disruptive Technology. Now having more than 100 patents issued since 2001, his technology has been deployed in more than 10,000 facilities including 30% of the Fortune 500. These companies have realized more than $1.6 Billion in cumulative savings and 13.7 Billion Tons of indirect CO_2 emissions reduced. Additional benefits include 724 megawatts of permanent load reduction to the electric grid.

Compressed air efficiency—savings on the demand side

Frank Melch | Zorn Compressor & Equipment

TRAINING SESSION 4—CLARITY ROOM

After touching upon the efficiency improvements made in compressed air equipment and controls over the last 20 years, we will highlight the energy reduction opportunities available outside of the compressor room—on the Demand Side. In this presentation we'll reinforce the impact of reducing compressed air demands through leak detection and repair. Additionally, we will feature load shedding projects we've done showing the application, estimated pre and post implementation metrics and the alternative solution.

About Frank

Frank Melch is a compressed air industry veteran having started in the industry in 1981. He worked for a variety of distributors and manufacturers over the years before joining Zorn Compressor & Equipment in 1999. In his current role of Vice President of Sales & Marketing, he directs the company's sales efforts, Marketing and Business Development, and the Technical Solutions Group. Frank is a 1981 graduate of Lake Forest College (Illinois) with a BA in Economics. In addition, Frank is a Department of Energy (DOE) Compressed Air Systems AIRMaster+ Qualified Specialist.

Market transformational impact of the Inflation Reduction Act

Dr. Svein Morner | HGA Architects and Engineers

TRAINING SESSION 4—PROGRESS ROOM

The Inflation Reduction Act (IRA) has the potential to transform markets from sweeping tax incentives and rebates to investments in better building codes and improvements to public buildings. While many of the changes are extensions and expansions of existing programs, the Act has also created new programs to help on the pathway to decarbonization. Learn about changes to existing programs and how your organizations could leverage programs for your energy efficiency goals.

About Svein

Dr. Svein Morner is a Principal at HGA. Dr. Morner has more than 25 years of experience in mechanical engineering, with a research focus in thermal storage systems, energy self-sufficient buildings, fuel cell design, and solar panels. He has been a leader in the development of the sustainable design and commissioning industry from early in his career and co-founded Sustainable Engineering Group (SEG) in 2004 (now part of HGA)—a leading engineering firm focused on energy optimization and sustainable design.

University water management

Tim Wissing | Badger Meter

TRAINING SESSION 4—EXHIBIT ROOM

This presentation will cover the topics of Sustainability, HVAC, Irrigation and Water Quality. Water Management is an area often overlook when it come to controlling cost. Managing (measuring, analyzing, controlling) the entire water system should be a key component in every energy management program. Badger Meter is a value-added solution partner who helps customers and channel partners control, manage and optimize their water resources, utilizing its line of meters and digital management tools.

About Tim

Tim Wissing, Manager of Regional and Inside Sales for Badger Meter's North American flow instrumentation group. Tim has over 15 years of working within the field of Flow Metering, focusing on helping people select and implement flow meters within the HVAC, water management, and wastewater markets. He enjoys utilizing his skills to contribute to the exciting technological advances that happen every day at Badger Meter. Tim is a US Navy Veteran and a Magna Cum Laude graduate of Cardinal Stritch's College of Business and Management.

WELCOME TO THE 9TH ANNUAL EXPO

WEEE 2022

Wisconsin Energy Efficiency Expo

EXPO AREA

SOUTH

Exhibit Room

Event Center

Legacy Ballroom

Progress Room

Prosperity Room

Inspire Room

Clarity Room

NORTH

Exhibit Room

Podium

Coat Room

Event Center

Podium

350 360

340 330 320 310 300 290 280 270 260 250 240 230

220 210 200 190 180 170 160

10 20 30 40 50 60 70 80 90 100

150 140 130 120 110

All Day Bev

Buffet

Buffet

All Day Bev

Exhibitor Visitation Card

Get at least 10 exhibitor's initials. Drop the completed exhibitor visitation card in the exhibitor "Fish Bowl" located at the registration desk. Drawing for various door prizes will be held at 4:15 pm in the Event Center.

NAME:

EXHIBITOR	BOOTH	INITIAL	EXHIBITOR	BOOTH	INITIAL
Accurate-Airtight Exteriors	10		JMB Associates / Badger Meters	170	
Alliant Energy	20		LiquidCool Solutions	190	
Allied Industrial Marketing, Inc.	30		McCotter Energy Systems	200	
Arch Electric	40		Northeast Wisconsin Technical College (NWTC)	210	
Citizens Utility Board (CUB)	50		Onsite Utility Services Capital	220	
Clayton Industries	60		PACE Wisconsin	230	
Energybank Inc.	70		Quality Power Solutions (QPS)	240	
Energy House	180		Rivion	250	
Faith Technologies, Inc.	90		Rohde Brothers, Inc.	260	
Focus on Energy	80		Schaeffer's Specialized Lubricants	270	
Grumman/Butkus Associates	100		Tech4 LLC	280	
Harley-Davidson	360		Three Element Traininig	300	
Hastings Air Energy Control, Inc.	110		USGBC	310	
HGA	120		We Energies	320	
Honeywell	130		Werner Electric / Fluke	330	
Hunzinger Construction	150		Wisconsin Clean Cities	350	
Interstate Energy Systems	140		Wisconsin Sustainable Business Council	340	
J&H Controls	160		Zorn Compressor & Equipment	290	

EXPO Exhibitors

Accurate-Airtight Exteriors
Accurate-Airtight Exteriors is a full service energy savings company in business since 1998. From concept to implementation, let us be your guide. Air barrier consulting, enclosure repair, energy audits, and pressure testing services for existing and new construction buildings. Let us show you how to prevent and stop energy loss.

Alliant Energy
At Alliant Energy, our purpose is to serve customers and build strong communities. We are focused on powering beyond the market challenges of today, while powering what's next in energy. We deliver the energy solutions and exceptional service that our customers and communities count on—safely, efficiently and responsibly.

Allied Industrial Marketing, Inc.
At Allied Industrial Marketing our goal is to help you solve or prevent power quality problems. Whether you have only one challenging load or a complete facility affected, we can help to diagnose the problem, quantify the magnitude of the problem through analysis and simulation, and recommend methods to solve it. We use computer simulation to evaluate alternative solutions for power quality problems including technical services, along with seminars and trainings.

Arch Electric
Arch Electric is Wisconsin's leader in Solar Photovoltaic (PV) Energy and Storage. We offer solutions that range from simple grid-tied configurations with solar energy storage to off-grid systems, all with expert analysis and design. With office locations in Plymouth, Milwaukee, and Madison, our experts are able to meet the needs of all commercial, residential, and utility clients with timely and professional care.

Citizens Utility Board
The long term focus of Wisconsin's Citizen Utility Board (CUB) has been independent representation of consumers interests. CUB is a member-supported, nonprofit organization whose purpose is to provide public interest legal services to ensure effective and democratic representation of residential and small business utility customers before regulatory agencies, the legislature, and the courts; advocate for reliable, affordable and sound utility service; and educate consumers on matters relating to utility regulation and energy policy.

Clayton Industries
Clayton Industries is a worldwide leader of boiler manufacturing companies. We make industrial on-demand water tube boilers, dry steam generators, fired boilers and unfired steam generators, and PLC systems. Clayton's unique controlled circulation boilers' counter-flow design offers many advantages over other industrial boiler and rental boiler companies. We use the latest PLC controls technology in our quick-start boiler manufacturing process. Clayton is a favorite choice for process steam boilers in high-efficiency energy markets.

Energybank Inc.
Energybank is an industry leader who recently developed a Distributed Energy Resource platform called "Fusion". It bundles high performance LED lighting, Industry 4.0 technology, and Photovoltaic Solar into a holistic system that delivers a value proposition that has no equals.

Energy House
The Energy House is a leader in LED lighting in Wisconsin, completing over 3,000 LED lighting installations. The Energy House is a full service, Blue Ribbon trade ally with the Focus on Energy programs. We provide a full lighting audit and retrofit for new fixture options for all of your lighting needs.

Faith Technologies, Inc.
Faith Technologies Incorporated (FTI) is a dynamic organization comprised of construction, engineering, manufacturing and renewable energy experts. We create success for our partners and team members through innovation and expertise, rethinking how energy is designed, applied and consumed and providing solutions that go beyond the ideas of today. With expertise across all our divisions—Faith Technologies®, EnTech Solutions™ and Excellerate®—we are one connected company, bringing our partners' visions to life to ensure a sustainable future.

Focus on Energy
Focus on Energy works with energy managers and property owners to help businesses of all types install cost-effective energy efficiency and renewable energy projects. Visit the Focus on Energy booth to learn more about opportunities to support your business needs.

EXPO Exhibitors continued

Grumman/Butkus Associates
GBA specializes in energy and resource consulting for large, energy-intensive facilities as well as mechanical, electrical, and plumbing design services.

Harley-Davidson
Our vision is to create the next generation of motorcycles with products and experiences that merge the power and technology of EV with the unique soulful connection that comes from an analog machine. Together the two create a new emotion that defines the LiveWire riding experience. Ride the Future. Get instant power and acceleration with a twist of the throttle. No clutch, no gas. Pure performance.

Hastings Air Energy Control, Inc.
IVEC saves energy and utility costs through the system's constant monitoring and control of your facility's process ventilation and filtration components. For most companies, the savings are so significant that IVEC pays for itself in just a few short years. Conventional systems run at full power during daily operation. IVEC provides "intelligent ventilation" that automatically adjusts fan output speed up or down on-demand depending on the process requirements of your process ventilation system.

HGA
HGA is a national interdisciplinary design firm rooted in architecture and engineering. We believe that the best design results from deep insight into the people and passions that animate each unique environment. More than 800 people in 11 offices from coast to coast work to make a positive, lasting impact for clients in healthcare, arts and culture, community, corporate, education, government, science and technology, and energy markets.

Honeywell
Over 100 years ago, Honeywell defined energy efficiency by making indoor comfort automatic. Today, Honeywell offers a diverse portfolio of technologies and solutions that's helps organizations reach their energy management goals. Honeywell's E-Mon class of meters provides the basic building blocks of an affordable, effective and scalable energy management system. These easy to install meters can monitor anything from a specific load panel to an entire building.

Hunzinger Construction
Hunzinger Construction Company is unconditionally dedicated to achieving excellence in the marketplace by understanding and exceeding customer expectations through integrity, honesty and ethical conduct. Tradition, quality, safety and attention to detail will result in long lasting client relationships built on trust, and the highest level of professionalism.

Interstate Energy Systems
Since 1957, Interstate Companies have been providing product support services for the manufacturers' power equipment we distribute. Interstate Energy Systems is the authorized distributor for MTU Rolls-Royce electric power generation and microgrid systems in the states of Montana, Wyoming, North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Wisconsin, Indiana, Illinois, and the Upper Peninsula of Michigan.

J&H Controls
Smart Building Solutions for Facility Management and Energy Control—J&H Controls offers compelling value to building operators and facility managers. Through our solutions, conventional facilities can be transformed into dynamic, flexible and intelligent buildings with higher efficiencies, lower costs and greater returns. From HVAC to lighting to security to elevators, our systems enable comprehensive monitoring and management of nearly every aspect of your facility including; Authorized Cylon Auto-Matrix Solutions Integrator, Certified Niagara Solutions Integrator, and WFOE Trade Ally.

JMB Associates / Badger Meters
JMB is a full service manufacturers representative, stocking distributor and service company. We sell and service ABB variable frequency drives for HVAC and Water / Waste Water applications; CRC (Critical Room Controls) for hospital room pressurization controls and fume hood controls; Badger Meters water, steam and Sage gas meters; Ebtron air flow stations, and gas detection systems by Honeywell (Vulcain), QEL and Brasch. We also are a distributor for Phase Technologies (single to three phase converters), TCI VFD accessories and Mamac transducers.

LiquidCool Solutions
Founded in Rochester, MN, in 2006, LiquidCool Solutions (LCS) is a Cleantech firm and pioneer in single phase, immersion cooling for electronics. The dedicated LCS team, which averages 10 years of service, has obtained over 60 patents, including ones for vented and directed flow methods that aid in maintenance, thermal performance, heat reuse, and improved economics. Like all LCS designs, the company's most recent offerings, the ZP2U Server, and MiniNODE, can serve clients—and Mother Earth—with solutions that are Sustainable, Reliable, Versatile and Economical.

EXPO Exhibitors continued

McCotter Energy Systems
McCotter Energy Systems provides high efficiency commercial boiler room and HVAC systems that are uniquely designed to provide reliability to the clients we serve in Wisconsin and the Upper Peninsula of Michigan. We specialize in complete boiler room design with a selection of high-efficiency boilers, burners and water heating equipment suited for industrial applications.

Northeast Wisconsin Technical College (NWTC)
NWTC is a two-year technical college with a long history of fostering partnerships to provide educational and training opportunities for the development of a skilled workforce. NWTC has one of the widest varieties of utility-related programming in the Midwest including Energy Management and Solar Technology. The College is leading the National Science Foundation-funded Utilities and Energy Coordination Network (UCEN).

Onsite Utility Services Capital
Onsite provides Energy-As-A-Service, with a proven process to reduce your electricity, gas, water or waste costs. ONSITE customers report, 12–40% end-to-end energy use reductions resulting in lower monthly utility bills, less energy consumption and lowered carbon footprint—without upfront costs or capital expenditures—just energy bill savings, from day one!

PACE Wisconsin
PACE is an innovative program that enables property owners to obtain low-cost, long-term loans for energy efficiency, renewable energy, and water conservation improvements. Projects financed using PACE can generate positive cash flow upon completion with no up-front, out-of-pocket cost to property owners—eliminating the financial barriers that typically prevent investment in revitalizing aging properties. The term of a PACE Financing may extend up to the useful life of the improvement, which may be as high as 20 years or more, and can result in cost savings that exceed the amount of the PACE Financing. The result is improved business profitability, an increase in property value, and enhanced sustainability.

Quality Power Solutions
For over 20 years, QPS has provided end-to-end mission critical power solutions, including expert design, installation and maintenance of UPS systems and generators.

Rivion
Rivion is committed to improving building performance with energy and sustainability solutions that reduce operating costs, increase asset value and create healthy environments. Rivion's experienced, dedicated team has a history of successful projects across the globe. A holistic approach enables the Rivion team to leverage their fundamental knowledge of buildings and building operations with the latest in energy and sustainability technologies and methods. This approach is designed to produce early and ongoing value for clients, making sure their assets run as efficiently and intelligently as possible.

Rohde Brothers, Inc.
Rohde Brothers, Inc. is one of Wisconsin's most successful, well-known, and respected commercial and industrial contractors. Their reputation of integrity and reliability dates back over 110 years to 1911. Rohde has designed and fabricated award-winning systems and progressive solutions for new and established companies representing a variety of industries including food processing, cheese making, industrial manufacturing and die casting.

Schaeffer's Specialized Lubricants
Schaeffer Oil, interestingly enough, is a green company. Yes, green Schaeffer will help you meet sustainability objectives. We extend drain intervals consuming less oil. We have amazing anti-friction additives to reduce energy or fuel consumption.

Tech4 LLC
We automate industrial machinery, all day, every day. We know how to design it so that it will work. We have worked with hundreds of components, evolutions of software, and a variety of mutating networks. We discard the ineffective and apply the effective. We have only one objective: to make it work the way you intended.

Three Element Training
Provider of power/thermal plant customized training associated with operations, maintenance and management, in formal classroom settings to on-the-job applications. Seminars for preparing students to write the ASOPE exam, helping facilities qualify their personnel to plant specific equipment/systems and help companies develop tools for structured management of Operating Procedures, Checklists, Valve Lineups, Qualifications Books.

EXPO Exhibitors continued

USGBC
At USGBC we're committed to transforming how our buildings are designed, constructed and operated through LEED, the world's most widely used green building system with more than 100,000 buildings participating today.

Our vision is that buildings and communities will regenerate and sustain the health and vitality of all life within a generation. Our mission is to transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life.

We Energies
We Energies provides affordable, reliable, and clean energy to more than 2.2 million customers in Wisconsin. We're focused on strengthening the fabric of the communities we serve by building and maintaining safe, resilient infrastructure, while reducing greenhouse gas emissions. With our continued investments in solar, wind and battery storage, we're a national leader in the decarbonization effort. Our goal: net carbon neutral by 2050.

Werner Electric | Fluke
Since its founding in 1948, Fluke has helped define and grow a unique technology market, providing testing and troubleshooting capabilities that have grown to mission critical status in manufacturing and service industries. Every new manufacturing plant, office, hospital, or facility built today represents another potential customer for Fluke products.

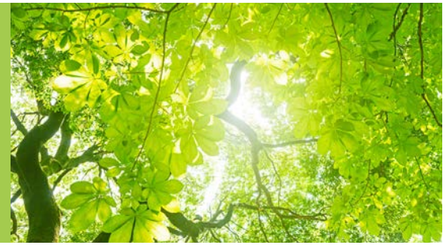
From industrial electronic installation, maintenance and service, to precision measurement and quality control, Fluke tools help keep business and industry around the globe up and running. Fluke has achieved the number one or number two position in every market in which it competes. The Fluke brand has a reputation for portability, ruggedness, safety, ease of use and rigid standards of quality.

Wisconsin Clean Cities
Wisconsin Clean Cities is a nonprofit organization managed by Legacy Environmental Services, Inc., an Indiana Certified Women's Business Enterprise. Established in 1994, Wisconsin Clean Cities is one of the U.S. Department of Energy's more than 75 Clean Cities coalitions. The organizations support the nation's energy and economic security by building partnerships to advance affordable domestic transportation fuels, energy efficient mobility systems and other fuel-saving technologies and practices.

Wisconsin Sustainable Business Council
The Wisconsin Sustainable Business Council's (WSBC) mission is to advance sustainable principles and practices forward through the power of business. We support companies and sustainability professionals through an array of programming, education, resources, and tools. We are a catalyst for businesses looking to integrate sustainability into the fabric of their organization. Come learn about free resources you can use to support sustainability integration!

Zorn Compressor & Equipment
Zorn Compressor & Equipment is the Midwest leader providing compressed air and vacuum solutions since 1965. Zorn offers compressors and vacuum pumps from high quality manufacturers, as well as custom turn-key installations, equipment service, parts, lubricants, rentals and system audits to customers from printing plant and hospitals to dairies and component manufacturers.

Scholarship Program



Thank you to our WAEE Corporate Sponsors and Members!

Since 2010, 94 students representing 13 different Wisconsin colleges and universities have received $100,000 in scholarships funds.

The WAEE scholarship program was developed to financially support students pursuing engineering, business and technical careers with emphasis on energy efficiency, energy management, energy conservation, renewable energy, energy generation, applied equipment design, energy system operation or other energy related fields. It provides students opportunities to meet other professionals working in energy careers and to see the wide variety of careers available to them, along with providing WAEE members opportunities to meet students who may be seeking an internship or employment in the future.

Scholarship Awards

Year	Amount	Number of Scholarships
2010	$2,500	5
2011	$3,000	4
2012	$4,500	7
2013	$4,750	5
2014	$7,050	7
2015	$8,000	9
2016	$10,000	10
2017	$9,500	6
2018	$11,500	9
2019	$12,500	9
2020	$12,500	12
2021	$14,200	11
2022	$15,000	TBD
TOTAL	**$ 115,000**	**94+**

CEU/PDH Certificates
are available at the registration desk after 4 pm

Thank you to WAEE Corporate Sponsors

PLATINUM

Alliant Energy — Powering Beyond

FTI — Faith Technologies Incorporated

focus on energy® — Partnering with Wisconsin utilities

Rohde Brothers, Inc.

WEC Energy Group

WPPI Energy

GOLD

C·E·S·A 10 — Cooperative Educational Service Agency

HGA

Mercury

Pearson Engineering, LLC

Werner Electric Supply

SILVER

Accurate-Airtight Exteriors

Power Quality Specialists — Allied Industrial Marketing, Inc.

Arch Electric

Bemis

CUB Citizens Utility Board

Clayton

energybank

Energy House USA

Grumman|Butkus — Energy Efficiency Consultants and Sustainable Design Engineers

Hastings air energy control, inc.

Honeywell E-Mon Submeters

Builders Hunzinger Since 1907

Interstate Energy Systems

J&H Controls

JMB

leidos

LiquidCool Solutions

McCotter Energy Systems — Smart Energy. Reliable Efficiency.

Northeast WI Technical College

Onsite Utility Services Capital

Quality Power Solutions — Empowering your success. Always.

Rivion — Improving Building Performance

Schaeffer's Specialized Lubricants — Since 1839 — Good People. Great Products.

Tech 4

Three Element Training

Trane

Zorn Compressor & Equipment