



2017

ENERGY EFFICIENCY CONFERENCE & EXHIBITION



DTE Energy's Energy Efficiency Awards

The Energy Efficiency Awards are presented in four categories: Education, Impact, Innovation and Leadership. These awards recognize companies that have made the most effective contribution towards energy efficiency initiatives. The Education award focuses on educating others about energy efficiency. The Impact award recognizes a company that has reduced energy by implementing a significant energy project. The Innovation award will be presented for developing or implementing a new and innovative program, idea or product. The Leadership award is presented to an organization for championing energy efficiency at their company.



General Motors Ride and Drive

A fleet of various vehicles will be on hand offering attendees the chance to take new models for a spin.



Luncheon Panel Discussion

How to Incorporate Energy Optimization into Your Daily Activities.

Join our panel of experts in discussing the entire array of energy optimization opportunities that can be found in your facility whether it is capital improvements, energy conservation by changing scheduling processes or by changing the behavior of what your employees think. Tips will be provided on how to obtain corporate buy in to make continuous energy efficiency a company goal and not just a onetime implementation.

Moderator:

KENNETH RANDAZZO, *Manager Energy Optimization and Energy Partnership & Services, DTE Energy*

Panelists:

ALFRED HILDRETH, PE, CEM, *Global Energy Manager, General Motors Company*

KEVIN DUNBAR, CEM, CMVP, *Corporate Energy Group Supervisor, FCA US LLC*

GEORGE ANDRAOS, PE, *Director, Energy and Sustainability, Ford Motor Company*

CONFERENCE SCHEDULE

7:30 am	Registration & Continental Breakfast
8:00 am – 9:00 am	Exhibits Open
9:00 am – 11:50 am	Concurrent Educational Sessions
10:00 am – 3:00 pm	GM Ride and Drive
10:10 am – 10:40 am	Break/Visit with Exhibitors
12:00 Noon	Luncheon featuring DTE Energy's Energy Efficiency Awards
1:00 pm	Luncheon Panel Discussion
1:30 pm	Dessert and Visit with Exhibitors
3:00 pm	Conference Adjourns/Exhibits Close

COST TO ATTEND

\$85	ESD Member
\$100	Non-Member
\$159	Non-Members attend and join ESD at a discounted rate (offer available to new, first-time members only)
\$25	Student Rate
\$1,000	Exhibit Booth (10' x 10') (includes four conference registrations)

9:00 am – 9:30 am

TRACK: ENERGY CONTROL SYSTEMS

Industrial IoT: Connected Buildings

Building an industrial IoT is fast becoming a reality. This presentation will help you understand the building blocks of Building IoT and how to start developing them into buildings today. We will also cover how big data, data plumbing, cyber security and functional integrations are changing the way we operate buildings. With this new knowledge, you'll be able to start leveraging technology better and more efficiently.

SCOTT COCHRANE, President & CEO, Cochran Supply & Engineering

TRACK: LIGHTING

Lighting Industrial Spaces

The challenges of lighting plants and warehouses and a look at why their current lighting is lacking and how modern lighting can improve quality, safety, productivity while increasing energy efficiency and virtually eliminating lighting system maintenance. A presentation showing real world lighting challenges and how they were overcome.

JORDY BRADLEY, L.C., Director of Sales, Alumalight LLC

TRACK: ENERGY OPTIMIZATION

Energy Savings Through Retro-Commissioning

Upgrading existing building infrastructure with energy efficient equipment is not always an option due to lack of available funding for major renovations. As an alternative, optimizing existing system operation can provide significant energy savings benefits at lower costs and reasonable payback periods. Retro-commissioning is a thorough analysis of building systems, focusing on functionality, maintenance and energy consumption, and provides building owners affordable energy savings opportunities in their buildings. The presentation will discuss low-cost strategies for reducing energy, give examples of retro-commissioning findings on successful projects, and introduce incentive opportunities available through utility providers.

ANDREW LUZENSKI, PE, LEED AP, Senior Associate, Peter Basso Associates Inc.

TRACK: FINANCING ENERGY PROJECTS

Financing Options for Public Schools

Michigan K-12 schools operate approximately 400M square feet of buildings and spend an estimated \$500M every year on electricity and fuel costs. Readily affordable energy efficiency improvements could reduce these costs by 20% or more, annually saving our schools \$100M statewide, or \$60 per pupil. There are a number of financial tools and resources available to schools in order to fund projects that save money, reduce operating expenses and even improve classroom environments. This session will explore the current and emerging financing options available to K-12 schools, as well as share some examples of districts that have demonstrated success. Furthermore, learn how new research is helping to reshape the business case for making energy efficiency investments; not only reducing utility and maintenance expenditures, but actually improving student performance by qualitatively improving classroom environments.

JASON BING, Healthy Buildings Director, Ecology Center

TRACK: MECHANICAL

Learn How to Self-Fund Your Capital Projects

Substantial and measurable energy savings without spending a dime. Attendees will learn how to discover hidden energy savings opportunities in buildings and use these opportunities to finance infrastructure upgrades. Projects and case studies will be shown that guarantee positive cash flow to building owners, while upgrading infrastructure and asset value through energy programs.

KURT RILLEMA, Comprehensive Solutions Manager, Trane

9:40 am – 10:10 am

TRACK: ENERGY CONTROL SYSTEMS

Don't Let Compressed Air Compress Your Profitability

Compressed air is an expensive utility accounting for 5 – 30% of a facility's total energy bill. Many projects to improved compressed air systems have results of short duration when permanent monitoring is not installed. With the cost of energy and the huge savings potential of compressed air, permanent monitoring is a must if compressed air savings are a focus of the facility manager. The audience will get inside several projects and see examples of how permanent monitoring has helped for audits as well as improving the long term overall efficiency of a facility. You cannot manage what you do not measure.

JAN HOETZEL, Principal, Airleader Compressor Management USA

TRACK: LIGHTING

LED Technology Presentation

This session will discuss changing technologies in LED lighting as a solution to customer power savings. Total cost of ownership and return on investments will also be shared.

BEN MYER, Director of Sales, Dialight

TRACK: ENERGY OPTIMIZATION

The Basics of an Energy Efficiency Project - Short Term Results with Long Term Rewards

Starting up an energy efficiency project can be a daunting task for anyone, but especially for individuals inexperienced in the field. It is easy to be overwhelmed by the vast amount of information and countless alternatives available. Many sources dive into the details of a particular opportunity and provide great information on a single subject, but for many what is actually needed is basic information and guidance on how an energy efficiency project can be built and how to manage it. This presentation will provide a simple, step-by-step guide for a typical energy efficiency project, tailored to first time energy management teams. The presentation will highlight tips and tricks from experienced Certified Energy Managers (CEMs) on the things they wished someone had told them when they were undertaking their first energy project. Mr. Steen will also discuss the downfalls of overlooking some of the basic elements of a project such as lack of stakeholder buy-in, improper solution evaluation, absence of savings sustainment, and missed schedule milestones.

WILLIAM STEEN, PMP, CEM, CMVP, DCGP, Senior Program Manager, Leidos

TRACK: FINANCING ENERGY PROJECTS

Small Commercial Customer Spotlight - The Tabernacle Missionary Baptist Church

Houses of worship are committed to taking care in utilizing their precious resources. Energy-efficiency improvements are one way to reduce operating expenses so that more money can be directed to help support the mission. DTE Energy is partnering with Michigan Saves to help small businesses, including houses of worship, take advantage of the benefits of energy efficiency by offering interest rates as low as 0% APR. The Tabernacle Missionary Baptist Church will talk about how they used Michigan Saves financing and DTE Energy incentives to implement lighting improvements that improved the appearance, function, and safety of the house of worship. An interactive panel discussion will provide insights from the perspectives of the pastor, the contractor, and the lender.

MODERATOR: TODD O'GRADY, Commercial Contractor Coordinator, Michigan Saves

PANELISTS: DWIGHT HAWKS, President, Hawks and Associates

NATHAN JOHNSON, Pastor, The Tabernacle Missionary Baptist Church

JOSH PATTON, Vice President - Sales, Ascentium Capital

TRACK: MECHANICAL

Sustainable Productivity - How Your Rental Company Can Help

Benefits of new Tier 4 engine technology on improved fuel economy and rated CO, PM & NOx emissions. Focus on paybacks in reduced fuel expense. Two case studies will be reviewed.

CHUCK WESTHOFEN, Business Development Manager - National Accounts, Atlas Copco Rental

10:10 am – 10:40 am

Networking Break and Visit with Exhibitors

10:40 am – 11:10 am

TRACK: ENERGY CONTROL SYSTEMS

Energy Savings in Refrigeration Systems

Energy savings in refrigeration systems is realized through advanced algorithms. This results in the reduction of compressor, evaporator fan and defrost heater runtimes. Through Evaporator fan management, the system will utilize the hoar frost on the evaporator, by the process of sublimination. Adaptive defrost (also called demand frost) is employed to defrost the evaporator only when it is needed, reducing frequency and duration of defrosts. Additional benefits include tighter temperature control expending and improving product quality, integrity, taste, appearance and life.

PAUL SHOWALTER, Regional Sales Manager, KE2 Therm Solutions Inc.

TRACK: LIGHTING

Optimization: Project Green Light Detroit

The Detroit Police Department partnered with eight gas stations that have installed real-time camera connections with police headquarters as part of a ground-breaking crime-fighting partnership between local businesses, the City of Detroit, DTE Energy and Comcast to reduce crime by 40 percent. Learn how a partnership can help business customers save money and make their location customer friendly and safer.

PHILIP GUSTER, Program Manager, DTE Energy

Track: Energy Optimization

New Air Conditioning and Refrigeration Technologies Solve Big Problems

New technologies for the air conditioning and refrigeration sector are coming that address problems that users have long experienced. Smart systems for microzoning air conditioning systems help mitigate comfort problems that arise from under-zoning. New refrigerants coming for air conditioning systems reduce the impact of these systems on the climate. New controls drive down unnecessarily high demand charges. New motors with smarter controls eliminate wasted energy in refrigerated display cases. Come learn about these new technological developments.

JAY STEIN, SR. Fellow, E Source

TRACK: FINANCING ENERGY PROJECT

PACE Financing for Any Industry

Property Assessed Clean Energy (PACE) financing solves the twin problems that have long plagued comprehensive clean energy projects — large up-front costs and long pay-backs. PACE helps owners of commercial, industrial, multi-family and nonprofit buildings implement any combination of energy efficiency, water efficiency and renewable energy improvements. Up-front costs are eliminated — the PACE lender finances 100% of the project. And in place of a pay-back you get positive cash flow — from the first day until the end of the financing term. By the end of 2016, commercial building owners had completed over \$335,000,000 worth PACE improvements across the U.S., and a wide variety of buildings had been upgraded with PACE financing here in the Great Lakes State. In this session, Lean & Green Michigan PACE program president Andy Levin and a special guest will give concrete examples of how PACE has helped transform apartment buildings, industrial facilities, warehouses and hospitality venues into energy stars — and answer all your questions about PACE.

ANDY LEVIN, President, Levin Energy Partners, LLC

TRACK: MECHANICAL

End of (HVAC) Life? Or Beginning of Energy Efficiency?

Energy efficiency incentive programs have thrived for years on simple retrofit measures and lucrative incentives. From screw-in CFL and LED lightbulbs to high-bay retrofits, the investments and returns are typically very straight forward, and, given the relatively short lifespan of some equipment, opportunities are aplenty. However, a less obvious and more challenging efficiency improvement lies in a building's Heating, Ventilation and Cooling (HVAC) system. In this session, the energy experts at DNV GL will share their experiences learned from running incentive programs nationwide. Taking lessons learned from other industries in lighting and food service equipment, a new model is emerging that will lift participation for these technologies with both progressive and traditional business. This presentation will provide insight on where HVAC incentive programs are headed and what role distributors and manufacturers will play in the new landscape.

SEAN MCCOY, Assist Operations Manager, DNV GL

11:20 am – 11:50 am

TRACK: ENERGY CONTROL SYSTEMS

Energy Efficiency Improvements and Industrial Control Requirements for Additive Manufacturing Equipment

This presentation will focus on the energy efficiency gains that are possible with the newer additive manufacturing equipment. The industrial control systems requirements for this modern equipment will also be discussed in the presentation.

BASKAR VAIRAMOHAN, EPRI

ALLEN DENNIS, EPRI

TRACK: LIGHTING

LiTES: Accelerating Adoption of Advanced Lighting Control Systems in Small and Medium Commercial Buildings

While advanced lighting controls help achieve energy savings and controls capabilities in the built environment, challenges—such as costs and trained workforce—often deter use of the technology. To address the market barriers impeding adoption, NextEnergy, IBEW-NECA, DTE Energy, and Consumers Energy are partnering to launch the Lighting Technology Energy Solutions (LiTES) program. The three-year initiative, supported by the Department of Energy (DOE), will offer training and pilot incentives that will help to deploy the energy efficient technology in small and medium commercial buildings throughout Michigan. Whether you are a contractor, building owner or facility manager, or part of the lighting ecosystem, learn from project partners how LiTES can offer resources that you need to support your connected lighting project. Join us and share your ideas for opportunities that will help you advance your business and reduce the energy footprint of buildings in your portfolio.

GINA SCHRADER, Director, Business Model Innovation, NextEnergy

JOSEPH WADEL, C&I Pilot Programs Manager Energy Efficiency & Renewable Resources, Consumers Energy

KENNETH RANDAZZO, Manager Energy Optimization and Energy Partnership & Services, DTE Energy

TOM BOWES, Assistant Director, Detroit Electrical Industry Training Center

TRACK: ENERGY OPTIMIZATION

DTE Energy's Strategic Energy Plans

DTE has developed Strategic Energy Plans to help Michigan business owners “Know Their Own Power” through integrating energy management into organizational planning and operations. A Strategic Energy Plan is a management strategy, tailored to a particular business type, which is designed to help businesses use energy efficiently and focus on its conservation. It targets behaviors, operations, maintenance, equipment and infrastructure throughout an organization's fleet of buildings. The presentation will review the benefits of energy management and the contents of the new product. We will also present how DTE Energy is using the Strategic Energy Plans in our own operations and management of our fleet of facilities across Michigan.

NICHOLE BECKER, Energy Manager, Energy Partnership and Services Smart Team, DTE Energy

TRACK: FINANCING ENERGY PROJECTS

Successful Partnerships - Financing Energy Efficiency Improvements and New Business Ventures in the City of Detroit

Norma G's is both a food truck offering mobile food service and a catering company, offering high quality and authentic Caribbean cuisine throughout southeast Michigan. Norma G's has been serving the Detroit area for 2 years, and is now moving into a brick and mortar restaurant in the historic Jefferson-Chalmers Historic Business District. Supported by the residents of the community and part of the vision to transform this historic district, Norma G's is backed by several investors like Detroit Development Fund, Invest Detroit and ProsperUs, as well as having the support of Jefferson East, Inc. the group behind the revitalization of the Jefferson-Chalmers district. Motor City Match, a program managed by the Detroit Economic Growth Corporation that connects new and expanding businesses with Detroit's quality real estate opportunities and provides them with funding and tools to fuel the city's entrepreneurial revolution awarded them a competitive grant to help fund Norma G's new facility. Norma G's was required to match the Motor City Match funding, and used Michigan Saves financing with DTE Energy's incentive of 0% APR and rebates to purchase new food equipment, insulation, LED lights, and HVAC equipment. In this panel, you will hear how creative financing solutions supporting investments in energy efficiency can convince small business owners who have limited funding to invest in energy efficiency improvements that save money in the long run and support the City of Detroit's triple bottom line priorities.

ANDREW LUCCO, Motor City Match

LESTER GOUVIA, Owner/Chef, Norma G's

TRACK: MECHANICAL

Natural Gas Cooling Update

Re-purposing or updating an older facility? This session will explore some creative ways to reduce the cost of achieving comfort with a modern, high efficiency, combined heating and cooling system and will compare traditional boiler/chiller systems, Variable Refrigerant Flow systems and natural gas heat pump solutions along with the associated capital and operating costs.

ALAN DEAL, President, Performance Engineering Group, Inc.

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