

NAESCO News

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September 2018

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Join Us in Orlando for the 35th Annual Conference and Vendor Showcase!



The leading ESCOs will be represented, plus our Vendor Showcase will display the latest innovations, technologies, and services in the energy efficiency industry. Current content, meaningful networking, and an award-winning venue. Join us as we

celebrate our 35th Anniversary and feature a new conference and exhibit hall format!

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NAESCO has reserved a low room rate of \$209/night. Make a weekend out of it and enjoy what the resort has to offer!

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2017 Winner of the Conde Nast Traveler Readers' Choice Awards. Voted #1 Resort in Orlando!

Additional Information & Registration

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SILVER











BRONZE





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NAESCO ADVOCACY UPDATE

Overview

NAESCO continues to work on legislation, regulations and policy issues that affect the ESCO industry at the federal and state level.

Federal Issues

On the federal level, NAESCO works with coalitions of national EE organizations to promote energy efficiency, renewables, distributed generation and demand response in federal legislation and federal regulatory rulemaking. These coalitions are holding a series of meetings this fall to prepare lists of EE priorities for the new Congress that convenes in January. One key focus is on maintaining the budgets for the programs in the Department of Energy that affect the ESCO industry.

Good news on the federal budget. On September 10, the Senate Appropriations Committee announced that a final conference agreement has been reached on the first FY2019 minibus appropriations package, which includes provisions from the Energy and Water (E&W) Development Appropriations Act. The full Senate passed the bill on September 12 and the House passed it on September 13. The funding bill rejects the deep cuts to energy efficiency and renewable energy programs that were proposed in President Trump's budget. DOE is also directed to maintain a diverse portfolio of early-, mid- and late-stage research within EERE. The conference agreement contains small increases for the Federal Energy Management Program (FEMP) and the Weatherization Assistance Program (WAP), and level-funds the State Energy Program (SEP) that provides funding to the state energy offices. Please click on the link above for details.

On 5/17/18 the White House issued an executive order on "Efficient Federal Operations." The order does not set forth an annual energy efficiency reduction goal, but orders the agencies to achieve annual reductions, implement energy efficiency measures and reduce costs. Section 2(d) explicitly encourages the use of performance contracting. Agencies are scheduled to file their plans next week, after consultation

with CEQ and OMB. NAESCO is following up to see if we can get the Administration to commit to targets for ESPC, to continue the momentum of the successful Federal Performance Contracting Challenge.

The Trump Administration and the Federal Energy Regulatory Commission (FERC) continue to work on proposals to prevent the retirement of coal and nuclear plants which are being sidelined by lower-cost gas and renewables. Several states -- Illinois, New York, New Jersey and Connecticut have already passed legislation to subsidize the operation of in-state nuclear plants. The first attempt was a Notice of Proposed Regulation (NOPR) that DOE filed late last year to subsidize the plants to increase system reliability. The FERC unanimously rejected the NOPR on the grounds that there is no reliability crisis. In June, a memorandum by the Trump Administration was leaked, followed by an announcement by the White House Press Secretary, that the President wanted DOE Secretary Perry to invoke the Defense Production Act and the Federal Power Act to require that baseload coal and nuclear plants stay operational for the next two years. How DOE could actually implement this request is an open question, as cost estimates range up to \$35 billion. Does DOE try to force ratepayers to pay for the nuclear and coal plants or does it have the Federal government purchase power from these facilities for two years? Click here to continue to full report.

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TIM UNRUH NAMED NEXT EXECUTIVE DIRECTOR OF NAESCO

The National Association of Energy Service Companies, (NAESCO) is pleased to announce **Dr. Timothy D. Unruh** as its next Executive Director beginning January 1, 2019.

Unruh joins NAESCO after over 26 years in energy efficiency and clean energy development. Most recently, he served in two senior roles at the U.S. Department of Energy (DOE) – Director of the Federal Energy Management Program (FEMP) and Deputy Assistant Secretary of Renewable Power.



Prior to his work at DOE, Dr. Unruh spent many years working for ESCOs, including Con Edison and Custom Energy. Early in his career, Dr. Unruh worked for CMS Energy, finding efficiency and power quality solutions for commercial and industrial energy users, where he developed his energy engineering foundation.

"We are excited to have Tim Unruh join NAESCO and look forward to the opportunities that lie ahead, as he leads our efforts in the ESCO industry" stated NAESCO Board Chair, Natasha Shah. "With extensive expertise in both federal and MUSH ESCO markets, we know Tim will quickly be a valuable resource for our growing organization," she added.

Vice Chair Charles McGinnis said "We conducted a rigorous search for a new Executive Director and we are most pleased that Tim Unruh will be taking the helm."

Unruh will succeed current Executive Director, Terry E. Singer, who is retiring after 32 years with NAESCO. Ms. Singer said that "It has been a privilege to serve as Executive Director for the last three decades and I am confident that Tim Unruh will most ably lead the Association going forward."

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INDUSTRY REPORTS

Through the Local Government Lens: Developing the Energy Efficiency Workforce

Source: ACEEE

This study's focus is on the energy efficiency workforce for new and existing public and private buildings. It concentrates on local government actions and initiatives that leverage the activities of state governments, nonprofits, utilities, unions, and other stakeholders. Full ACEEE Report.

According to the report, local governments across the United States are increasingly enacting policies and offering programs to drive energy savings, but the success of these activities is inextricably linked to a strong, capable energy efficiency workforce. To ensure that trained workers are available to capitalize on efficiency investments, local governments can set workforce development goals, coordinate training programs, and provide equal access to opportunities to workers and businesses. They can also institute equity–focused energy efficiency workforce development programs and targets to extend these benefits to under–served community members. This report describes these strategies, highlights cities that are supporting their local energy efficiency industries, and makes recommendations for local governments interested in launching new initiatives.

Report Finds the Energy Efficiency Sector Employs 2.25 Million Americans Source: E4TheFuture and E2

Energy efficiency added more new jobs than any other industry in the entire U.S. energy sector in 2017,and now employs nearly 2.25 million Americans, according to a new jobs analysis from E4 The Future and the national, nonpartisan business group E2 (Environmental Entrepreneurs). The new report, Energy Efficiency Jobs in America 2018, finds energy efficiency workers now out number elementary and middle school teachers, and are nearly double the number of Americans who work in law enforcement.

The report highlights energy efficiency's growing economic importance. Efficiency added 67,000 net jobs in 2017, making it the fastest-growing job category in the energy sector. Energy efficiency employs twice as many workers as all fossil fuel industries combined. Efficiency workers now account for 35 percent of all U.S. energy jobs.

Among the states, California leads energy-efficiency employment with 310,000 jobs, followed by Texas (154,000), New York (117,000), Florida (112,000), and Illinois (87,000). Seventeen states now employ more than 50,000 workers and the 25 states with the most energy efficiency sector jobs all now employ over 30,000 workers (1.9 million total). Only four states saw a decline in energy efficiency employment in 2017.

According to the report, with workers in 99.7% of U.S. counties, energy efficiency has become a nationwide job engine integral to state and local economic growth. More than 300,000 energy efficiency jobs are located in America's rural areas, and 900,000 jobs are found in the nation's top 25 metro areas. One out of every six U.S. construction workers are involved in energy efficiency, as are more than 315,000 manufacturing jobs.

New Report Shows Global Annual Spending for Energy Efficient Building Technologies for Healthcare Facilities Is Expected to Reach \$6.4 Billion by 2027

Source: Navigant Research

A new report from Navigant Research examines the global market for energy efficient building technologies in healthcare facilities, providing global market forecasts, segmented by product and service type, construction type, and region, through 2027.

As the healthcare industry joins the energy efficient building technologies market, healthcare-related facilities face many challenges due to strict requirements and an increased pressure to contain costs while maintaining high satisfaction ratings from patients.

While cost efficiencies represent a significant benefit, technology can also improve the indoor environment of healthcare facilities, including air, power, and lighting quality. According to the report, energy efficient building technologies integrated with intelligent building solutions such as the Internet of Things and software as a service can add even more value to healthcare facilities by realizing significant energy savings, reasonable ROI, and increased non-energy-related operational efficiencies.

The report, Energy Efficient Buildings – Healthcare, analyzes the global market for energy efficient building technologies in healthcare facilities. The study examines the opportunities and challenges afforded by the installation of energy efficient HVAC, lighting, controls, water efficiency, water heating, and building envelope products, as well as commissioning and installation services. Global market forecasts, segmented by product and service type, construction type, and region, extend through 2027. The report also analyzes the market issues, including market drivers and hurdles and vendor opportunities, related to energy efficient building technologies in healthcare facilities. An Executive Summary of the report is available for free download on the Navigant Research website.

White Paper: Understanding the IEEE Standard 1547 Revision

IEEE creates industry standards to establish best practices in a broad range of

technologies.

The IEEE Standard 1547 (1547) is a voluntary industry standard for interconnecting distributed energy resources (DERs) with electrical power systems (EPSs). While businesses were not required to adhere to the standard, governing bodies often use IEEE standards as the foundation for laws.

With increasing technological and economic advances, the grid has begun to experience high levels of penetration in some areas, resulting in a need to revise 1547. This new revision will be known as IEEE 1547–2018, which will be explained in more detail in the white paper. <u>Click here</u> to download it.

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NEW MEMBERS

Meet NAESCO's Newest Members in Their Own Words

Energy Service Companies



E3 Entegral Solutions, Inc. (E3) is a Texas based Performance Contracting and Design-Build construction and engineering firm providing holistic facility solutions that reduce energy usage, create comfortable environments, and improve operational efficiency. E3 has completed over 140 Energy Efficiency projects in the State of Texas for over \$150 million dollars of project work. The firm's specialty is public work, with over 90% of its current workload for public clients. Public clients include many Central Texas municipalities, school districts, and other agencies and governmental entities at state and local levels. Project size where E3 functions as the prime contractor ranges from small, quick LED projects of less than \$100,000 in value, up to projects of \$15 million construction value.

Core work includes designing and upgrading HVAC systems, creating efficient building control systems, retrofitting lighting systems, and improving facilities. However, our ultimate goal is to free resources so our clients can focus on the most important mission: serving their communities.



McKinstry is a national full-service firm specializing in consulting, construction, energy and facility services. The firm's innovative, integrated delivery methodology provides clients with a single point of accountability that drives waste and redundancy out of the design/build process. McKinstry advocates collaborative, sustainable solutions designed to ensure occupant comfort, improve systems efficiency, reduce facility operational costs, and optimize profitability "For the Life of Your Building." For more information, visit www.mckinstry.com.

Energy Service Affiliates



For more than 30 years, green building, sustainable design, and high-performing buildings have been **2RW** Consultants' focus. We deliver innovative and efficient MEP/FP systems and comprehensive energy consulting services to help building owners reduce total cost of ownership, improve occupant comfort and safety, and tread lightly on the planet. With more than 70 LEED projects in our portfolio and one-third of our technical staff carrying LEED credentials, we're highly qualified to deliver unparalleled energy savings on any building project.

As energy plays an increasingly significant role in many organizations' strategic planning initiatives, it's critical to partner with a firm you trust for MEP/FP design and energy consulting; one that has the focus and expertise to deliver long-term energy and cost savings and quality-of-life benefits. We strive to be that trusted partner-one who will guide you and serve as your advocate throughout every project.



As a fully licensed and bonded design/build electrical contractor, **Aireko Energy Group** (AEG) safely delivers superior engineering, procurement and electrical contracting services to its commercial and industrial, transit, utility, renewable energy, and government customers. AEG is a minority business enterprise and has deployed solar, wind, battery and microgrid systems at over one hundred commercial, industrial, government and utility sites in the United States and the Caribbean.



Griffith Engineering, Inc. (GEI), established in September, 2004, is a growing company providing mechanical, electrical, and plumbing design services, as well as energy analysis and auditing services for our clients.

GEI is a proven leader in both the building energy analysis and engineering design industries, and has a growing list of satisfied clients in commercial, federal, and municipal markets. GEI strives to develop innovative and cost effective design solutions, focusing on its clients' primary goals.

SYLVANIA LIGHTING SOLUTIONS

Sylvania Lighting Solutions, (SLS) delivers custom turnkey solutions for energy-efficient lighting upgrades, associated controls and additional energy conservation measures. With our unmatched expertise and full-service solutions, we are uniquely qualified to manage large projects across North America. We offer a single point of contact to survey existing systems, perform energy audits, design lighting and control system upgrades, integrate with building management systems, complete

installations and optimize rebates, reducing energy and maintenance costs, along with environmental impact.

Associate Energy Service Affiliate



Buildings are increasingly efficient, yet they lack the tools to manage, and measure, the fastest growing source of energy usage – Miscellaneous Electric Loads (MELS). These loads consume energy even when the building is empty, about 70 percent of the time.

By thinking small, **Bert** transforms data from plug and hardwired loads into big efficiency improvements that save money and increase comfort. Bert eliminates the overnight load; automatically turning devices off when buildings are empty. At the same time, Bert collects building and device data 24/7, providing valuable insight into energy usage and occupant comfort.

Bert's proven solution can be installed as a standalone system or integrated into a Building Automation System.

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ACCREDITED MEMBER SPOTLIGHT:



CMTA Energy Solutions is a full service engineering firm, providing infrastructure solutions to K-12 schools, Higher Education and State and Local Government facilities through energy savings performance contracting. Our solutions allow facilities with limited funding to receive complete high quality HVAC, lighting and plumbing renovations that are funded through reductions in energy and operational costs. They are a leader in Net Zero Energy Engineering with many operating Net Zero Energy facilities, and most of its performance contracting projects incorporate new geothermal HVAC systems as a key component. CMTA has over 200 employees with company headquarters in Louisville, KY with additional offices in Lexington, KY, Houston TX, Cincinnati, OH, and Washington, D.C.

"NAESCO's accreditation process provides real third-party validation that each accredited company has a history of successful projects, and it is the most highly regarded accreditation in the energy services industry. CMTA was excited to go through this process to demonstrate our commitment to the industry and to the success of our client's energy projects." – Jeremy Kelly, PE, Principal, CMTA Energy Solutions

Recently, CMTA developed a guaranteed energy savings project for the Kentucky



Exposition Center in Louisville, KY with the targeted focus of replacing a 55+ year old steam boiler plant. The solution implemented by CMTA guaranteed \$268,911 in energy and operational savings. In order to fund the project 100% by savings, the approach included not only

installing a high-efficiency condensing natural gas boiler plant but also implement significant demand reduction strategies utilizing HVAC controls upgrades and enhancements. The project was awarded honorable-mention for the 2018 ASHRAE Technology Awards for the creative approach to managing peak demand and reducing utility imposed demand charge ratchet penalties.

Construction period and first year energy savings of \$410,517 along with a utility rebate of \$219,439 have resulted in a net benefit of \$256,835 in the first 18 months since project completion. Results from the project have led to the Owner in selecting CMTA to develop a more comprehensive energy efficiency project for all remaining opportunities throughout the facility. This phase II project, which is currently in the contract phase will implement comprehensive LED lighting, replace chillers and additional boilers among other HVAC and water savings conservation measures.

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MEMBER NEWS

Ameresco Aquires Chelsea Group Limited

Ameresco recently announced that it has acquired Chelsea Group Limited (Chelsea Group) a Hawaii-based building science and design engineering consulting firm specializing in preserving and enhancing the mechanical infrastructure of commercial, institutional, retail, and industrial facilities. With this acquisition, Ameresco further expands its addressable customer base and energy solutions offerings in Hawaii.

Chelsea Group specializes in engineering services, building science, and asset value. The company's services include design engineering, commissioning, project management, construction management, and ongoing services. Chelsea Group engineers conduct detailed building assessments to develop cost-effective infrastructure improvements addressing deferred maintenance, building energy systems, and mechanical systems.

The Ameresco and Chelsea Group offices in Hawaii will be combined at the current Chelsea Group location in Honolulu and will operate together as Ameresco, led by Wyeth Crawford, who is joining Ameresco as Director of Operations, Hawaii. George Benda will continue to be active in the business as a mentor, consultant and advisor.

CTS Group Aquires Johnson-Melloh Solutions

CTS Group has announced that it has acquired Johnson-Melloh Solutions (JMS) of Indianapolis, Indiana in a move to expand services and better facilitate sustainable solutions for customers.

JMS brings to CTS Group extensive experience, knowledge, and a long history of developing with over 100 solar projects for schools, universities, government, and commercial markets. States and utilities are updating legislation and rebates making solar photovoltaic systems an even more attractive way to reduce electric consumption. CTS Group can now offer customers in-house expertise to help determine the viability of solar photovoltaics as part of a comprehensive energy efficiency solution to upgrade buildings and infrastructure.

ENGIE North America Acquires NYC's Donnelly Mechanical Houston-based ENGIE North America has acquired Donnelly Mechanical, the heating, ventilation, air conditioning and energy services contractor located in Queens Village, Queens for an undisclosed sum.

"Engie North America has taken a strategic approach to integrating outstanding mechanical and electrical companies into our comprehensive energy service model. Donnelly has worked with more than 2,000 customers as a highly reputable, reliable mechanical/HVAC services provider serving numerous sectors across New York City," John Mahoney, the president and CEO of Engie's services businesses in North America, said in prepared remarks. "We're excited to welcome Donnelly and its employees into the Engie North America family of companies to continue to strengthen our range of services for customers across the U.S. and Canada."

"It's a great success story for Donnelly Mechanical and me," Donnelly said, noting that he and his five partners and all of their 200 employees-many of whom have been at the company for 30 years-are staying on board.

Energy Systems Group (ESG) Unveils New Logo, Website, and Brand Platform

Energy Systems Group recently unveiled a new look and refreshed brand platform which includes a new company logo, colors, and website, located at www.energysystemsgroup.com.

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MEMBER PROJECTS

AECOM and Lockheed Martin to Enhance Energy Resilience at Fort Carson with DoD's Largest Peak-Shaving Battery

AECOM recently announced that it has begun construction of a Battery Energy Storage System (BESS) at Fort Carson, Colorado, using **Lockheed Martin's** GridStar® Lithium energy storage system. The 4.25 MW/8.5 MWh
BESS is part of an energy savings performance contract (ESPC) project to reduce Fort Carson's energy costs and increase its energy resilience.

Though there are some existing energy storage systems at military bases, this unit will be the largest stand-alone commercially contracted battery at an army base. The large, revenue-generating BESS operates behind Fort Carson's electric utility meter. It reduces electrical demand during peak intervals, thereby increasing power grid resilience. Because it was procured via ESPC, it required no capital expenditure by the Army.

Implementation of this first-of-its-kind project will combine AECOM's development, integration and construction expertise with Lockheed Martin's modular, resilient GridStar® energy storage units and Geli, Inc.'s predictive analytics control software. The BESS is intended to substantially reduce demand charges that Fort Carson pays to its electric provider. Currently the primary use-case for the BESS is for demand charge reduction, but the BESS may assume additional missions, such as renewables optimization (Fort Carson has large photovoltaic assets), frequency and voltage support for Fort Carson's distribution grid and, potentially, microgrid support.

Ameresco, BlueWave Solar and State and Local Officials Celebrate 16.2 Megawatt Projects in Massachusetts

Ameresco, BlueWave Solar, and state and local officials celebrated two recently completed community solar projects in Southeastern Massachusetts with a ribbon cutting ceremony at a 10.2 megawatt (MW) solar farm in Wareham. Massachusetts Lieutenant Governor Karyn Polito, Massachusetts State Senator Marc Pacheco, New Bedford Housing Authority Executive Director Steve Beauregard, and representatives from the Town of Wareham participated in the event. The full project consists of a 10.2 MW solar farm across four sites in Wareham, MA, and a 6.0 MW solar farm in Mattapoisett, MA. Both projects will help provide revenue to support five public housing authorities in Massachusetts.

The two solar farms are owned by Ameresco and were codeveloped by BlueWave. Under 20-year agreements, annual payments will be made to the public housing authorities of Fairhaven, Mattapoisett, New Bedford, Kingston, and Plymouth. As a result of the solar projects, the housing authorities will receive these benefits over the next 20 years in support of providing housing to their citizens.

At Mattapoisett, an Eversource right of way runs adjacent to the project site and serves as the point of interconnection. At Wareham, the Eversource right of way bisects the four arrays. More than 47,000 solar photovoltaic modules were used in the projects.

The solar farms are expected to reduce carbon emissions by 16,276 metric tons of CO2 annually which is the equivalent of planting more than 19,000 acres of U.S. forests or taking 3,485 passenger cars off the road. Emission reductions were estimated using the U.S. Environmental Protection Agency (EPA) Greenhouse Gas Equivalencies Calculator.

ENGIE North America Pens Project with Alisal Union School District in Salinas, California

Alisal Union School District is implementing a comprehensive energy and education program with **ENGIE**, projected to save the District more than \$10.9 million over the lifetime of the program. To complement the new solar installations, HVAC units, interior/exterior LED lighting fixtures and controls across 11 sites, the District is enacting a STEM program to integrate the real-world energy upgrades into the classroom.

The plan is to install 1.2 megawatts of solar panels along with 78 new HVAC units and controls to three of its sites – Virginia Rocca Barton, Frank Paul and the former District office.

The project also calls for 7,729 new interior/exterior LED lighting fixtures to be installed and 1,735 new controls across the 11 sites.

Alisal Union is expected to generate 1,833,637 kWh of clean energy annually, the equivalent to removing the same amount of carbon from the atmosphere as 35,366 trees. The new project will also reduce C02 emissions by 2,139 metric tons annually, the equivalent to removing 458 cars from the road.

Michigan City Sanitary District and Energy Systems Group Implement Comprehensive Energy Conservation Project

The Michigan City, Indiana Sanitary District (District) partnered with **Energy Systems Group** (ESG), to design and implement a \$1.8 million energy conservation project at the wastewater treatment plant that includes infrastructure improvements and energy efficiency measures. The project will result in economic and environmental benefits for the City and its ratepayers with guaranteed savings of over \$164,000 annually over the term of the contract. ESG also applied for and secured a \$190,988.80 incentive through Northern Indiana Public Service Company's (NIPSCO) energy efficiency program administered by **Lockheed Martin Energy**, marking the largest incentive awarded by the NIPSCO program this year.

As part of a citywide initiative to evaluate ways to deliver government services more efficiently, the wastewater plant improvements include new aeration equipment (two turbo blowers) and ultra-high efficiency light-emitting diode lighting. The District continued its efficiency improvements by calibrating the wastewater aeration system to operate using just one of its two high-efficiency blowers to save power further and enhance reliability by providing redundancy into this mission-critical function for the wastewater treatment process. The equipment installation completed in July 2018 addresses the single largest energy user within the City infrastructure.

Entegrity helps an Arkansas School Become First in the State to Implement Solar Energy

Batesville School District currently is the only school in the state of Arkansas to implement solar energy on their campus, made possible through a partnership with **Entegrity**. The project involves installing over 2,000 solar modules. Entegrity provided Batesville schools with a \$7 million grant to start the solar energy project.

More than 1,400 of the panels will be installed in some acreage near the school and will have the ability to track the sun, utilizing the most of the potential energy. Over 760 of those panels are being installed in the school's canopies, showcasing the school's go green initiative.

School officials say that they hope other schools will also utilize the solar panel field as a way to teach about solar energy. The school expects to have all of the solar panels installed by the end of the year and will start the process of switching to solar energy as soon as possible.

Harshaw Trane and Bullitt County, Kentucky Public Schools Partner Harshaw Trane will be starting construction on Phase 2 of Bullitt County Public School's energy efficiency improvement project. Bullitt County is taking measures to increase their operational and energy efficiency through controls upgrades, new lighting, and more. The project cost is over \$9.7 million dollars and guaranteed savings are in excess of \$14 million for the course of the project term.

There are several components to this project, from customized solutions for individual schools to district wide measures. Harshaw Trane will be providing new LED lighting for 1.9 million square feet of building space throughout the district, as well as water conservation measures. There are several schools with smaller scale projects: three schools will be receiving controls upgrades, another will be getting new boilers, and multiple facilities will be getting kitchen hot water booster heaters.

The biggest changes are coming to Old Mill Elementary. In addition to LED lighting and water conservation, they are getting a facility overhaul. HVAC replacement, and new controls, ceilings, and sprinkler system will create a brand-new environment for students and staff.

Harshaw Trane is looking forward to making Bullitt County Public Schools more comfortable, safe, and energy efficient to help provide a better learning and working environment in Bullitt County, Kentucky.

Johnson Controls delivers \$2.7M in water meter and leak detection improvements for Yazoo, Mississippi

Johnson Controls will implement \$2.7M in water meter and leak detection improvements for The Public Service Commission (PSC) of Yazoo, Mississippi. The project will replace 4,500 water meters with advanced water meter technology, including installation of leak detection systems and automatic meter reading equipment.

For many years, Yazoo PSC has dealt with aging, inefficient water meters and water leaks in their infrastructure that went undetected. The upgrades will help the city-owned utility improve meter-reading accuracy, reduce operational costs and support sustainability initiatives.

The project is enabled through an ESPC and a Mississippi Department of Health Revolving Loan Program that includes federal funding. The ESPC guarantees efficiency gains as a result of operational improvements to fund the project without impacting taxpayers or increasing the cost of water service. These operational efficiencies include improvements in water meter accuracy, customer billing practices, the ability to reduce water loss by locating and repairing leaks within the distribution system, and the

implementation of technology that will enable Yazoo PSC to enhance their customer service offering to constituents. Yazoo PSC is guaranteed \$202,954 in benefits for the first year, and more than \$4.37 million in benefits over the life of the 20-year project.

New York State School District Sees Energy Savings Add Up Through Siemens Project

The East Syracuse Minoa (ESM) Central School District in Upstate New York just completed the seventh year of an 18-year ESPC with Siemens. In the 2016–2017 school year, the energy efficiency and building systems improvements implemented at seven schools and several district buildings totaled almost \$598,000 in energy savings – exceeding annual guaranteed savings by more than \$4,000. To date, the ESPC has provided more than \$4 million in accumulated realized energy savings.

The performance contract allows the district to improve energy conservation efforts and take advantage of alternative energy technologies. Cumulatively over the last seven years, the ESPC has helped ESM reduce its carbon emissions by more than 9,200 metric tons – which equates to removing 1,981 cars from the road per year.

A district-wide energy management system with direct digital controls allows for implementation of energy conservation strategies and room occupancy scheduling. For instance, the chilled water plant at the high school can be controlled by demand-limiting strategies that allow the chilled water systems to gradually reach operating conditions and thus avoid unnecessary utility charges during periods of mild weather. Likewise, HVAC equipment at the middle school can be automatically shut down or reduced in operation during unoccupied periods in order to lessen electrical and thermal energy consumption.

Other district facility improvement measures include lighting retrofits, premium motors and variable frequency drive pumps and fans for HVAC systems, new doors and windows, and a 25 kW solar power system. New high efficiency, condensing gas-fired hot water boiler plants in four ESM buildings have saved as much electricity as 6.2 average American homes will consume over the course of a year.

Snapcount Used in Cincinnati Zoo Project

Recognizing the importance of energy efficiency, the Cincinnati Zoo began working with Donovan Energy in 2017 on dozens of projects, eventually selecting Donovan to convert the entire zoo to LED lighting. Covering 65 acres and over 87 buildings, Donovan developed a 6-day plan to audit every fixture using **SnapCount**, a software solution used to assess, quote and mobilize comprehensive energy retrofit projects.

The results included 87 buildings being audited through SnapCount, spanning 65 acres of land. 10,000 fixtures were digitally audited in 87 buildings throughout the zoo and 16,000 lamps were audited and retrofitted in the project.

Revenue Generated in Village of Medina, NY through EPC with Wendel

Wendel Energy Services was chosen by the Village of Medina to implement facility, water system and street lighting improvements. The goal of the village was to reduce energy consumption and environmental emissions throughout the targeted facilities, as well as taking measures to increase the village's revenue.

In the first phase of the project, the village focused on facility wide improvements such as upgrades to lighting and lighting controls, HVAC equipment and controls upgrades, and pump and generator upgrades. Wendel also assisted with the replacement or upgrade of approximately 2,000 water meters village wide. With the new meters in place, more accurate readings can be taken to allow for an increase in revenue across the village. A new drive-by system was also deployed to allow the village to obtain water meter readings by simply driving through the village rather than walking house to house. This will reduce the Village's effort to collect water readings from several weeks to several hours each billing cycle.

Phase two of the EPC will also be focused on street lighting. While the Village currently owns 108 street lighting fixtures, the local utility company is still paid to operate and maintain another 466 street lights. Wendel is assisting in negotiations between the village and the utility company to purchase these fixtures, which would then be converted to LED technology as well. This transaction is one of the first street light asset sales from the utility, National Grid, to a municipality in New York State under recent legislation. This purchase will greatly reduce the maintenance costs for the Village and the conversion to LEDs will generate even more energy savings. While the water meter upgrades alone is bringing in an additional \$77,000 in revenue annually, both phases of the project will generate over \$200,000 in annual savings and revenue enhancements for the Village. When combining these savings with an approximate 61 Tons of CO2 emission reductions, the Village of Medina is well on their way to reaching their sustainability goals.

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NEW PRODUCT AND SERVICES SHOWCASE

HyLite LED is excited to announce new PAR46, PAR56 and PAR64 Retrofit Solutions! The HyLite LED Lotus Lamp is designed for a quick and easy installation in existing can lights. The HyLite LED Lotus Lamps feature excellent optics for Increased Visibility & Low Power Consumption, helping you to increase illumination while you are reducing energy costs. It is available in multiple beam angles: 15, 25, 40 and 120 degrees for Ideal Light Distribution. With lamp life of up to 60,000 hours, HyLite LED Lotus Lamps significantly reduce energy consumption & re-lamping, maintenance, and disposal costs. It enhances vision for better Optical Acuity. It also reduces light pollution while providing clean, crisp light where you need it. Available in both 3000K and 5000K, the HyLite LED Lotus Lamp allows you to easily retrofit any existing PAR46, PAR56, and PAR64 application.

Universal Lighting Technologies, Inc., a global leader in lighting and a member

of the Panasonic Group, expanded its comprehensive line of lighting solutions with **EVERLINE® Emergency LED Drivers** for offices, classrooms, warehouses, and other commercial applications.

Available in four models (ELD10UNVL, ELD10UNVLPL, ELD7UNVCL, and ELD20UNVL), the new drivers were designed to meet North American buildings' strict emergency lighting requirements. Rather than installing separate emergency lighting fixtures, OEMs and contractors can specify EVERLINE Emergency LED Drivers to be installed in LED luminaires that require emergency battery back-up systems.

Compatible with Universal's EVERLINE LED drivers, the emergency drivers offer 90-minute illumination time, an integrated NiCad Battery and a wide operating voltage range. Individual product benefits include:

- Targeted for downlight applications, model ELD7UNVCL provides 7W of emergency power and an output voltage range of 15-50Vdc and provides lead within flexible conduit for connections.
- Targeted for linear fixtures, model ELD10UNVL provides 10W of emergency power and an output voltage range of 15-50Vdc.
- Targeted for architectural fixtures, model ELD10UNVLPL also provides 10W of emergency power and an output voltage range of 15-52Vdc while featuring a low profile (1.18" h x 1.18" w).
- Targeted for high bay applications, model ELD20UNVL provides 20W of emergency power, an output voltage range of 20–50Vdc and offers lead within flexible conduit for connections.

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INDUSTRY NEWS

Washington, DC Passes Historic Law Establishing Green Finance Authority Washington, D.C. Mayor Muriel Bowser recently signed the Green Finance Authority Establishment Act of 2018 creating a new instrumentality of the District government designed to increase private investment in sustainability and clean energy projects by offering loans, loan guarantees, credit enhancements, bonds, and other financing mechanisms. The Green Finance Authority is anticipated to expand renewable energy and energy efficiency, reduce greenhouse gas emissions, and support green jobs.

Entities such as the Green Finance Authority, also known as green banks or energy investment partnerships, have been established at the national, state, and county level across the world. In the United States, the states of Connecticut, New York, California, Rhode Island, and Hawaii, as well as Montgomery County, Maryland, have operational green banks. According to the District's news release, the passage of the Green Finance Authority Act officially makes Washington, DC "the first city in the United States to establish a green bank."

The Green Finance Authority will be governed by a Board composed of the Director of the Department of Energy and Environment (DOEE) as well as representatives of other key agencies, including the Deputy Mayor for Planning and Economic Development, Executive Director of the Office of Public-Private Partnership, and the Chief Financial Officer.

eProject Builder Announces October Webinar

The eProject Builder (ePB) team hosts regular webinars to introduce ESCOs, ESPC customers and other interested parties to ePB and provide a forum to ask questions. All webinars cover the benefits of using ePB, project workflow, a walk-through of the data template, and a demonstration.

Wednesday, October 17th, 1:00pm-2:30pm EDT

To participate in the session, log into www.readytalk.com by clicking the "join meeting" button, and entering Access Code 4952370 shortly before the start of the webinar. The call-in line is 866-740-1260. If you would like further information on the sessions or to receive a calendar invitation, please e-mail epb-support@lbl.gov. For more information go to https://eprojectbuilder.lbl.gov.

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