

NAESCO News

September 2016

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NAESCO Advocacy Initiatives

Federal Issues

NAESCO continues to work on several major programs and legislation that are important to the growth of the ESCO industry.

Performance Contracting Challenge

NAESCO continues to focus on completing the implementation of President Obama's \$4 billion performance contracting challenge this year. FEMP says that the goal will be achieved, and we are now turning our attention to getting the extension of the goal into the transition plans of the Trump and Clinton campaigns.

Clean Power Plan (CPP)

NAESCO continues to work with a group of ten ESCOs that developed a substantial White Paper and a formal comment document on the proposed rule for submittal to the EPA in 2014. The EPA, in response to the efforts of these ESCOs and our consultant (AJW) formally recognized the role of performance contracting as a distinct vehicle for delivering energy efficiency and said it would work with the industry to establish the infrastructure required for ESCOs to claim credit for the emissions reductions their projects produce and to trade the credits in national or state exchanges. Given the schedule for the DC Circuit Court to hear the suit by a number of states to overturn the CPP (oral hearing in late September and briefs due in early February), the ESCO Working

Group is concentrating its efforts on three states. California appears to offer the opportunity for early action, because the state has just doubled down on its already ambitious emissions reductions goals. Pennsylvania and Virginia offer opportunities for Democratic governors to develop CPP compliance plans that emphasize EE and ESPC.

179D Deduction

NAESCO has worked successfully for four years with a group of interested NAESCO members and the lobbying firms Van Ness Feldman and Prime Policy Group to secure the extension of the Section 179D deductions for energy efficiency work in commercial buildings. We got extensions that covered the 2014 through 2016 tax years, and are now working on a multi-year extension to start in early 2017. Unfortunately, the political situation in DC does not seem conducive to the passage of a tax extenders package this fall, because the national election is severely limiting the time the Congress will be in session, and there is significant disagreement among the Republican Congressional leaders about whether to pass another extenders bill or try to harness the momentum for extenders to push a comprehensive tax reform bill.

HUD Programs and Procedures

NAESCO and a number of ESCOs met with HUD officials in mid-July to discuss several chronic problem areas in the HUD PHA ESPC program, including the difficulties of implementing ESPC projects with the Rental Assistance Demonstration (RAD) program that is changing the federal funding of PHAs, the lack of knowledge of local HUD staff and PHA managers about the HUD Rate Reduction Incentive program, and the new HUD initiative to stimulate EE projects in federally assisted multifamily housing. We were encouraged by the response of the HUD officials. They recognize the problems and are committed to working with ESCOs to solve them.

National Issues

In addition to the federal government programs and legislation, NAESCO is working on several issues that are national in scope.

ESCO Market Survey Report

We have worked with Lawrence Berkeley National Laboratory to complete a draft of the ESCO Market Survey. The report highlights several issues on which NAESCO and LBNL intend to conduct further research, including the increasing competition for performance contracting projects from non-ESCO companies, the role of M&V in distinguishing ESCOs from non-ESCO companies, and the political opposition to the increasing use of Non Energy Benefits in ESPC project savings calculations.

Change in Accounting Rules -- No More Operating Leases

The Federal Accounting Standards Board issued its long-awaited (review process began in 2006) Accounting Standards Update (ASU) on the accounting treatment of leases at the end of February. The new standard will require organizations that lease assets, referred to as "lessees," to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. More information on the ASU is available on the NAESCO website and heres/leases/.

PACENation

NAESCO now has a seat on the board of PACENation, a national organization formerly

called PACENow, which is promoting the adoption of high-quality PACE programs across the country. There was a session at the Louisville workshop on Commercial PACE and NAESCO will be holding an optional pre-conference workshop on PACE at its Annual Conference in November: NAESCO Workshop on PACE

State Issues

NAESCO state advocacy during 2016 has focused on five states where we have defended the industry against potentially damaging legislation, and two precedent-setting states where we are working to assure that multi-year proceedings to re-vamp energy efficiency programs and utility regulation offer new opportunities for ESCOs.

Kansas

NAESCO successfully organized a group of ESCOs, who funded a Topeka-based consultant for a seven-month effort, to defeat legislation to essentially eliminate ESPC in the K-12 market. The legislation was based on the claim that K-12 ESPC projects were expanding beyond the scope of the enabling legislation by incorporating retrofits whose cost was repaid with Non-Energy Benefits rather than energy savings. We do not expect the legislation to re-appear next year, because the sponsor has retired from the House.

Illinois

NAESCO organized a group of ESCOs and their lobbyists to defeat legislation that was sprung on us at the end of the state legislature's 2016 session. But it is clear to ESCOs and their retained lobbyists that the issue is not dead, and that there will probably be an attempt at legislation in the 2017 session.

Michigan

In Michigan we are confronting another legislative surprise, not an "amendment" to a placeholder bill, but rather a legitimate, last-minute amendment to a major bill on the structure of the state's electric market that has been under consideration for a year. We were able to mobilize ESCOs and their lobbyists to oppose the amendment and get it removed from the bill.

Wyoming and Utah

In both of these states, relatively new Assistant Attorneys General have issued opinions that performance contracts may be unconstitutional, because they violate the basic principle that the state cannot enter into contracts that bind successive legislatures to appropriate funds. We are puzzled by these rulings, because both states have long histories of successful ESPC projects, in which the issue of obligating future legislatures has been handled with standard non-appropriations clauses in financing agreements, and both states routinely lease cars, office copiers and other equipment on multi-year contracts that are functionally similar to ESPC. NAESCO is working with the ESCOs in these states to see if we can identify interest groups that may be behind these rulings, and we are talking with the state energy offices to determine how to move forward.

California

In California, a multi-year proceeding of the CPUC that is re-working the structure of the ratepayer-funded EE programs has reached a critical phase. Because of the complexity

of the issues, and the importance of California as the largest state market for ESCOs, NAESCO has hired a consultant to assist us with responding to the changes under consideration. The CPUC has also established a collaborative, called the California Energy Efficiency Coordinating Committee to bring all of the stakeholders together to try to reach consensus on major issues.

- Business Plans: In mid-August, the CPUC issued its most recent decision in the proceeding; the decision specified the content of the utility Business Plans, which have replaced the historical 3-year EE program cycle. The plans will set the framework for a ten-year Rolling Cycle of programs, and will be followed by more detailed implementation plans on a flexible basis. Old programs will be discontinued, and new programs started as needed, rather than on a rigid three-year cycle. We will get a preview of the Business Plans at the end of September, followed by several months of discussions on the content of the plans, in advance of their filing on January 15, 2017. We will be concentrating our review of the Business Plans on the issue of how the Program Administrators, particularly the utilities, plan to meet the state's ambitious to double energy efficiency and emissions reduction. We believe that meeting these goals will require a significant expansion of program funding (California's EE spending is about one-fifth of Massachusetts' EE spending on a per capita basis) and a new framework for implementing the mandates of AB 802.
- Bright Line Between Administration and Implementation: One of the major changes in the August decision is that the utilities and other program Administrators (PAs) are ordered to raise the percentage of third-party programs from the current minimum of 20% of the portfolio to a minimum of 60% of the portfolio by 2020. The PAs would reduce their roles to program and contract administration. We think that this "bright line" between administration and implementation will make it easier for implementers like NAESCO members to field innovative programs that have been stifled for the past two program cycles. NAESCO is proposing that the utilities re-instate the statewide Standard Performance Contract programs that were discontinued a decade ago, re-vamp the industrial programs to implement AB 802 and reduce the complexity of the current project reviews and savings calculations, and fully fund innovative new programs in the residential and small C/I sectors. We think that all of these types of programs are required to produce the volume of comprehensive projects that the state needs to meet its goals.
- AB 802 Implementation: NAESCO and other parties have argued for the last decade that the existing CPUC policy frustrated the state's energy resource policy (the "loading order") that utilities should procure all cost effective energy efficiency before procuring other resources. Last year, the legislature passed two bills -- SB 350 and AB 802 -- that doubled the state's EE goals and ordered the CPUC to calculate EE savings from a baseline of existing conditions rather that Title 24 or Industrial Standard Practice. In the opinion of NAESCO and many other stakeholders, CPUC staff and its consultants are resisting the implementation of AB 802, and so pushing that implementation will be a major focus of NAESCO's efforts in the coming months.

New York -- Reforming the Energy Vision

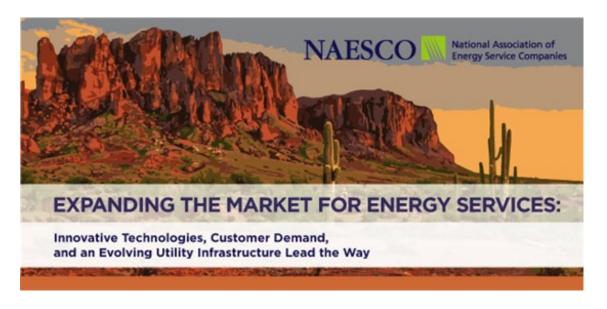
• The New York State Public Service Commission is in the middle of a proceeding to

restructure the state's utility industry to enable customers to implement the full range of Distributed Energy Resources -- EE, RE, DR, CHP, DG -- with utility support rather than resistance.

- The first stage of the proceeding established the fact that widespread DERs are technically feasible and valuable to all ratepayers, and the NY Public Service Commission ordered each of the utilities to begin pilot DER programs.
- The second stage moves the utility revenue model away from the old centralized system, in which utility financial health and profitability are dependent on kWh throughput, to a system in which the utility acts as the operator for a complex network of DERs.
- We expect that both the pilot DER projects and the new revenue model are the
 first steps in what will be a long development process, and it is important to note
 that while the PSC is moving ahead with this development, it is maintaining its
 commitment to NYSERDA and utility-administered EE and R&D programs, as well
 as to the DER financing initiative of the Green Bank and Energize New York.

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Join us in Scottsdale, AZ for NAESCO's 33rd Annual Conference & Vendor Showcase and a Pre-Conference Workshop on PACE November 16-18, 2016



For more information such as agendas, hotel, exhibiting or sponsorship, click <u>here</u>.

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Interview with David Gabrielson, Executive Director, PACENation

In anticipation of NAESCO's upcoming <u>Workshop on PACE Market Opportunities</u> being held November 16 in Scottsdale, Arizona, we sat down with David Gabrielson who will

be participating as a speaker and moderator for the Workshop.

NAESCO: What are the barriers that you see to the large-scale expansion of the commercial PACE market: enabling legislation at the state level, enabling legislation and regulations at the local level, acceptance of the concept by the banking community, all of the above?



DG: We don't see any barriers to large scale expansion of PACE. Enabling PACE legislation is already in place in 33 states and the District of Columbia; this covers over 80% of the US population. Currently, 16 states and the District of Columbia have active programs. PACENation and its members are working hard at increasing these numbers. Making sure that owners and contractors - including ESCOs -understand the many benefits of PACE is another challenge and we are hard at work communicating those benefits. There are over 730 commercial PACE projects funded to date, and we expect this

number to grow quickly as we articulate the many benefits of PACE to more stakeholders. This includes bankers and lenders who have to provide consent. 150 lenders have supported PACE nationwide to date and we expect many more to provide consent in the future.

NAESCO: Given the answers to the first question, where do you see the most likely opportunities for the expansion of commercial PACE in the next 12-24 months, and is the expansion likely to occur in contiguous regions (e.g., New England) or in scattered pockets?

DG: There are almost unlimited opportunities for the expansion of PACE! As our overall marketplace grows we will see PACE available in more and more localities, and with greater availability, more awareness among building owners and ESCOs of the benefits PACE financing provides. As more real estate companies realize that PACE brings unique solutions to the barriers they face when implementing energy efficiency or renewable energy projects - the so-called split incentive between landlords and tenants comes to mind - we expect an acceleration in the use of PACE in that marketplace. We have only scratched the surface in the use of PACE for non-profits, and we expect that the use of PACE, which is a land-based financing mechanism, to become more prevalent in this sector that cannot easily access credit-based financing. We also believe that the secure nature of PACE financing will accelerate the uptake of solar projects. We see this happening throughout the U.S., and not restricted to specific regions.

NAESCO: What do you think the ESCO industry can and should be doing to promote the expansion of commercial PACE?

DG: The first step that the ESCO industry needs to take is to realize that PACE brings down many of the barriers they have faced in implementing projects in the commercial market place. PACE is strictly property-based financing, which means that it breaks down key barriers to the implementation of projects by ESCOs: first, special purpose entities that don't have the credit strength to access low cost financing without personal or parental guarantees can be financed by PACE; second, the automatic transfer of the PACE assessment payment to a new owner eliminates owners' short

term holding bias against the implementation of energy projects; finally, the non-accelerating nature of PACE financing - like other tax assessments, only payments in arrears are due - makes it much easier to obtain lender consent to a senior position for the PACE financing. ESCOs also need to realize that the secure nature of PACE makes it possible for customers to get 20-yr financing at low cost, which makes it possible to create positive cash flow for their customers with the comprehensive, deep retrofits that ESCOs are so adept at developing. No other form of third-party financing offers this possibility. The fact that PACE eliminates the split incentive issue - when the investment in an energy improvement project is paid by the landlord, but the benefits usually accrue to tenants - is another potent selling point that ESCOs need to understand.

We believe that PACE opens the door for ESCOs to successfully pursue projects with commercial customers. Naturally, those ESCOs who take the time to understand how PACE can assist them in their sales efforts will also have to develop a program management approach to project implementation, given the wide geographic footprint of commercial enterprises.

NAESCO members are encouraged to contact PACENation directly if seeking help to make PACE a resource for your customers.

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The Water-Energy Nexus by David Ribeiro, Senior Analyst, ACEEE

The following blog post has been revised by NAESCO with permission by the author:

What might increased efficiency efforts for water conservation look like?

There are lots of opportunities to reduce the amount of wasted energy that is related to water. Take drinking water plants for example. Generally speaking, 80% of energy use at drinking water plants is for running motors that pump water. Capital upgrades at water treatment plans, such as installing more energy-efficient pumps or those with variable speed drives, can be part of the solution to increase energy efficiency at these energy-intensive public facilities.

At wastewater treatment plants, even more energy savings are possible by using byproducts of the treatment process to efficiently generate energy for use onsite. Rather than flaring biogas from sludge digesters, some facilities use the gas to operate combined heat and power units to generate heat and electricity.

At the water customer site, energy can be saved through greater use of "greywater" in appropriate applications-we need full water treatment for drinking water, but less pure water can often be used for non-drinking applications.

How significant is the importance of reducing energy in water processes?

Energy use for extraction and treatment of drinking water is expected to increase. For example, saltwater intrusion into some water supplies may mean turning to more energy-intensive water treatment processes. The opportunities to reduce energy in water processes should be seen as part of the solution. Improving energy efficiency can

not only soften the blow of increasing energy requirements, but it can also soften the blow on municipal budgets (electricity use for water and wastewater utilities is already a significant operating expense for municipalities). Those treatment plants in flood plains will need significant capital investments to protect them from sea level rise and flooding, so it is a good time to incorporate efficiency as part of these capital investments.

On the electric power generation side of the equation, as cooling water becomes warmer during hot spells or becomes more scarce, the capacity of thermoelectric power generating plants may also decrease. While there are steps that can be taken, such as dry cooling, these come at a significant cost and efficiency penalty. Energy efficiency is not a silver bullet for the changing availability of cooling water; however, increased efficiency can offset some of the decreased capacity and make the energy supply go further, easing resource constraints when it is important to do so.

David Ribeiro is on the staff of ACEEE where he conducts research on energy efficiency implementation at the local level, including lead-by-example strategies and the interconnection between efficiency and community resilience. He is also the lead author of the City Energy Efficiency Scorecard and contributes to the Local Policy Database.

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New Members

Global Energy Services is a national woman-owned lighting retrofit, water conservation, and building envelope services company committed to helping building owners realize immediate energy cost savings by providing cost-effective solutions through



energy-efficient products, systems and measures. Our goal is to reduce lighting energy use, decrease water consumption and maintenance and overhead costs to directly impact and increase your net profit and improve the asset value of your building.

SCI Dallas Prison - Before



SCI Dallas Prison - After



Global Energy Services recently completed a successful GESA (Guaranteed Energy Savings Agreement) program with one of their value-added partners, Energy Systems Group, at the SCI Dallas Prison in Pennsylvania. The project was valued at \$1.1 million dollars.

James Lighting of Duluth, GA recently joined NAESCO and will be exhibiting at the upcoming Annual Conference and Vendor Showcase. James



Lighting is a leader in the industry in advanced solid state lighting systems by providing

LED lighting at competitive prices. They are committed to designing outstanding products that achieve best-in-class lumen per watt per dollar performance.



James Lighting LED MAGIC TUBE serves as a special energy efficient replacement for all traditional fluorescent T8 lamps. Designed to operate on all existing rapid-start, instant-start, programmed-start, and emergency fixture ballasts...or simply no ballast at all.

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Industry Reports

ACEEE Report on Bank of America's Energy Efficiency Program

This paper analyzes **Bank of America's** \$55 million initiative to provide low-cost funding and grant support to advance energy efficiency investment in low- to moderate-income communities. The funding supported community development financial institutions in developing and enhancing efficiency programs for residential, commercial, and multifamily buildings. The report focuses on loan performance, energy savings, and the degree to which the savings offset the cost of the energy efficiency investment. See <u>full report</u>.

Air Conditioning Demand Set to Grow Rapidly Over the Coming Decades

It's been a hot summer in the Northern hemisphere, with peak temperatures setting new monthly records. While some are debating whether air conditioning is an unnecessary luxury in the age of global warming, the reality is that the global demand for space cooling is set to grow in coming decades. See <u>full article</u>.

Global Revenue for Energy Efficiency Commercial Building Retrofits is Expected to Exceed \$100 Billion in 2025, According to Navigant Research

A new report from Navigant Research examines the state of the global market for energy efficiency retrofits in commercial and public buildings, with analysis of market and technology issues, plus global market forecasts segmented by region, product and service type, and building type, through 2025.

The report, *Energy Efficiency Retrofits for Commercial and Public Buildings*, provides a comprehensive examination of the state of the global market for energy efficiency retrofits in commercial and public buildings. The report analyzes the significant market and technology issues related to energy efficiency retrofits, with a focus on the following product and service types: HVAC, lighting, building controls, water efficiency, water heating, building envelope, energy production, commissioning, and installation. Global market forecasts for revenue, broken out by region, product and service type, and building type, extend through 2025. The report also assesses the key demand drivers and market dynamics that will contribute to market growth, as well as the competitive landscape. An Executive Summary of the report is available for free

download on the Navigant Research website.

ACEEE Analysis Finds Energy Efficiency is the 3rd Largest Resource in the US Electric Power Sector

A recent research report published by ACEEE's Maggie Molina, Patrick Kiker and Seth Nowak said for decades, energy efficiency has been a critical strategy for meeting US electricity needs while saving consumers billions of dollars in avoided infrastructure costs. Just how big is energy efficiency today across the US electric power sector? This paper quantifies the energy savings and other benefits from a set of energy efficiency programs and policies. They examine the combined savings from appliance and equipment efficiency standards, utility-sector energy efficiency programs, and building energy codes. The authors found that since 1990, energy efficiency has become the third-largest electricity resource in the United States; without it, the United States would need the equivalent of 313 additional large power plants to meet the country's energy needs. If savings from appliance standards, utility programs, and building codes reached their full potential, efficiency would become the nation's largest electricity resource by 2030, providing a wealth of benefits. See full report.

Creating a Market for Energy-Efficient Commercial Buildings - How Governments Can Reduce Carbon Emissions by Implementing ENERGY STAR Buildings Program Elements

Bob Sauchelli, formerly the National Program Manager of the EPA's Energy Star Program, has written a guide intended for use by governments, countries, and regional economic organizations that have taken on the challenge of responding to climate change and are seeking practical solutions for addressing its causes and effects. This 60-page handbook describes how governments can reduce carbon emissions resulting from energy consumption in commercial buildings by creating market demand for energy efficient commercial buildings. In order to influence market behavior and create demand for energy-efficient buildings, Sauchelli focuses on how the ENERGY STAR Buildings program created a set of market-influencing program elements that drive the demand for energy-efficient buildings as well as the practices, technologies, and energy efficiency services that help improve and achieve a high level of energy performance for commercial buildings. Mr. Sauchelli recently answered some questions about the guide for NAESCO.

NAESCO: What compelled you to put together this type of guide?

Sauchelli: I was originally looking for a way to historically document the ENERGY STAR Buildings program so that its methodology could be better understood and appreciated. Then, I decided to take a more forward looking approach and developed a Guide that could be useful by governments around the world faced with the challenge of meeting emissions reduction commitments. Basically, the Guide is a policy level template of the ENERGY STAR Buildings program that describes the essential program elements required to create market demand for energy efficient commercial buildings.

Creating market demand for energy-efficient commercial buildings requires transparency in building energy performance and an understanding of the value attributes of energy efficient buildings. But, while creating demand for energy efficient buildings is essential, a market for them cannot exist without a supply of energy efficient buildings. This supply can only be provided by a credible, visible and mature energy efficiency services industry. Stimulating a market for energy-

efficient buildings and the energy efficiency services that create them is a significant worldwide business development opportunity. At the same time, it's a strategy that represents an opportunity to create jobs, strengthen local economies, support electric grid reliability, and reduce emissions from power plants. -Bob Sauchelli

NAESCO: Why is this guide important?

Sauchelli: Any country wishing to reduce emissions is likely to focus on power generation, renewables and other clean energy solutions. However, the role of energy efficiency in commercial buildings needs to be highlighted as a critical first step that saves energy, reduces emissions, and lowers operating costs which improves business profitability. Additionally, the process of creating energy-efficient buildings is a financially justifiable decentralized activity that takes place at the point of energy consumption and results in the employment of many thousands of technical and trade workers to implement the latest energy-saving technologies and management best practices. Most importantly, energy efficiency in buildings can be driven by market dynamics as building owners seek their own best interest.

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Member News

Energy Systems Group President Greg Collins Presents Opening Keynote Address at Energy Services Coalition's 5th Annual Market Transformation Conference

Highlights from his address whose theme was "Industry Impact and Future Outlook"

 The energy sector landscape is undeniably dynamic, relevant, and evolving. The current market landscape indicates continual growth across core sectors, and the outlook continues to be promising. In fact, according to Navigant Research, the U.S. ESCO market is estimated to almost double over the next ten years, growing from about a little over \$6 billion in 2015 to almost \$12 billion by 2024.



- One of the most measurable areas of our industry's impact is facilitating a contractual and financial vehicle that enables customers to modernize infrastructure, increase efficiency, conserve resources, and reduce costs.
 - Example: Host City Louisville (Johnson Controls) City of Louisville implemented an energy savings performance contract with Johnson Controls that includes nearly \$27 million in energy efficiency upgrades and retrofits in municipal buildings. Louisville citizens reap the benefits of improved buildings from city hall to the zoo, the City achieves energy savings that help fund these improvements, and a culture of sustainability and smart city planning is further promoted.
- From President Obama's Better Buildings Initiative and Performance Contracting Challenge to EPA mandates and programs under the Department of Energy and DoD, robust initiatives are underway to promote clean energy, efficiency, smart grid solutions, and advanced energy technologies - all of which are strongly

driving economic, environmental, and modernization projects.

- Example: NASA Johnson Space Center (Energy Systems Group) In March, NASA began construction of its first combined heat and power plant. Located at the Johnson Space Center in Houston, this mission-critical energy islanding project was made possible as part of a \$47 million energy savings performance contract. The CHP facility will operate in parallel with the utility, meeting nearly 70 percent of JSC's electric requirements, all of its steam requirements, and roughly half of its chilled water requirements. Capable of operating as an islanded microgrid, the CHP plant will provide energy for critical mission operations such as the International Space Station's Mission Control and the Orion program in the event of a utility power disruption. This represents a new way of thinking about utilities, where the new CHP system will allow JSC to adapt to new programs, new requirements, and new ways of being flexible. As part of an interagency collaboration, the DOE awarded the Johnson Space Center a \$1 million grant to provide direct funding for the project and assisted the center in the preparation and evaluation of the contract and specifications for the CHP plant.
- Just as growth represents new opportunities, it also brings new challenges. A few examples: 1) as solutions, technologies and approaches evolve, and impact costs beyond just utility expenses, it is necessary to consider new methodologies to measure and verify non-energy benefits; 2) despite the best efforts of many to streamline development, approval and contracting processes, it's still a very labor intensive and expensive prospect to get a project across the finish line. New developments such as automated energy audits using big data and FEMP's E-Project Builder hold the promise to positively impact this issue. Yet, there is still much work to be done; and 3) in a changing world of utility regulation, there is the challenge of finding the right place for what one group is calling Third Party Developed Energy Efficiency, or TPDEE. And, maybe the most daunting challenge will be adapting to utility rate design changes which will place more cost on customer's demand and recovering the utility's fixed cost and less on energy or kWh usage.

LED Waves Certified as a New York State Service-Disabled Veteran-Owned Business **LED Waves** is pleased to announce that they are now officially recognized as a Service-Disabled Veteran-Owned Business (SDVOB) with the State of New York. The accreditation comes from the state's Division of Service Disabled Veteran Owned Business Development (DSDVBD).

The DSDVBD was established by the Service-Disabled Veteran-Owned Business Act signed into law by Governor Andrew M. Cuomo in 2014. This law serves to honor the sacrifices of service-disabled veterans by promoting their businesses through public procurement opportunities. A list of SDVOBs is available through the New York State Office of General Services.

UCONS Featured on New Day Northwest to Discuss Energy Efficiency Options in Homes

UCONS, CEO Tom Eckhart and Christine Hanhart were recently interviewed in a segment on *New Day Northwest*, on KING 5, a broadcast media company and NBC affiliate based in Seattle, WA. The two were there representing UCON's affiliate, Home Energy Savings, to demonstrate how consumers can save energy in their homes. <u>Click</u> here to see the video.

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Member Projects

City of Temple Terrace, Florida Selects ABM to Provide Extensive Facility Improvements and Energy Efficiency Upgrades

ABM has signed an agreement to implement comprehensive infrastructure improvements through ABM's energy performance contracting program for the city of Temple Terrace in Florida. ABM's customized solution will provide energy efficiency upgrades and facility enhancements to eight public buildings within the city and is guaranteed to save more than \$1.46 million in energy and operating costs over a 15-year period. Project work began April 2016 and is scheduled to be completed October 2016.

AECOM Saving Energy and Money for Beaumont Unified School District

AECOM recently announced that the Beaumont Unified School District near Los Angeles, CA held a ribbon-cutting event for the completion of its solar-energy carport structures (canopies) located in the high school's staff parking lot. The solar canopies will produce over one million kilowatt-hours of electricity annually at a capacity nameplate of 632.4 KW DC. The resulting outcome will reduce the school's dependency on outside energy sources and reduce greenhouse gas emissions by 2,000 pounds annually. The solar canopies provide 43,000 square feet of covered parking in two campus parking lots outfitted with energy efficient LED lighting.

Spackenkill Union Free School District, New York Partnered with Ameresco for Energy Savings Performance Contract

Ameresco recently announced that the Spackenkill Union Free School District in Poughkeepsie, NY received \$78,488 in incentives for its energy efficiency project, and is expected to continue to benefit from energy savings of more than \$200,000 annually, on average, over the 18-year contact. The nearly \$2.8 million comprehensive Energy Savings Performance Contract, contracted in June of 2013, included 16 energy conservation measures, and was designed to help reduce utility bills, upgrade facility infrastructure, improve systems reliability, and increase overall operational efficiency. Some of the measures included replacing boilers, installing advanced energy management systems district-wide, replacing steam traps, enhancing building envelope, and replacing lighting systems district-wide.

Energy Systems Group Awarded UESC at Maxwell Air Force Base

Energy Systems Group in collaboration with its utility partner, Alabama Power Company, a subsidiary of Atlanta-based Southern Company was awarded a \$4.4 million Utility Energy Services Contract at Maxwell Air Force Base in Montgomery, Alabama. Consisting of five energy conservation measures , the UESC project will save over \$572,000 annually over a 10-year performance period. ECMs being implemented include lighting controls and/or retrofits in 18 buildings, heat recovery chillers in 20 buildings, various mechanical retrofits, controls upgrades in 22 buildings, and demand ventilation and retro-commissioning in 6 buildings. ESG will also provide performance

verification services in order to validate the savings after project completion. The project is expected to be completed within 13 months.

The UESC project is expected to reduce Maxwell's energy use by over 41,000 MMBtu or 12 GWh per year, enough to power nearly 1,100 American homes, and will help the base better meet its energy intensity reduction goals.

Harshaw Trane Completes Energy Efficiency Project for the City of Hickman, Kentucky

The municipality of Hickman, Kentucky enlisted the expertise of **Harshaw Trane** in pursuit of better use of taxpayers' dollars through energy conservation measures such as water and gas automatic meter readers, water treatment facility upgrades, and energy-efficient light-emitting diode streetlights.

The project included replacing 1,170 water meters with automatic meter reading technology, replacing 797 residential gas meters and 12 commercial meters with automatic reading technology, and replacing all 416 streetlights with new LED streetlights. Through these measures, the city has enhanced ability to detect and stop leakages, reducing waste and bills and will have a projected annual energy savings of approximately 61% or \$220,000, and a reduction in maintenance costs by 80%. Hickman also became the first city in Kentucky to go completely LED with street lighting.

Mitsubishi Electric Renovation Saves Energy, Boosts Comfort with Water-source VRF

Dodge City Unified School District in Kansas replaced old, inefficient HVAC systems at two schools with a **Mitsubishi Electric** Water-source VRF paired with geothermal technology. This has let the district claim \$215,000 in grant and rebate money, and earn ENERGY STAR® certification. The district, which provides education to 7,000 students, set out to renovate its schools one by one with sustainable HVAC technology. Central Elementary School - a 35,000-square-foot building - had natural gas, window a/c units and walls up to two feet thick. A goal of saving both money and energy pointed to water-source VRF paired with geothermal technology.

NORESCO Awarded \$49 Million Energy Savings Performance Contract with the Federal Bureau of Prisons

NORESCO will provide energy and water efficiency and capital infrastructure upgrades at two Federal Bureau of Prisons sites: Federal Correctional Institution at Fort Dix, New Jersey, and Federal Detention Center, Philadelphia. The \$49 million energy savings performance contract will help the Federal Bureau of Prisons progress toward achieving energy and water reduction mandates outlined in a March 2015 Executive Order 13693 regarding federal sustainability. NORESCO is a part of UTC Climate, Controls & Security, a unit of United Technologies Corp. The ESPC will reduce water consumption by 61 percent and electricity use by 20 percent at FCI Fort Dix and will reduce water consumption by 44 percent and electricity use by 27 percent at FDC Philadelphia. The facility improvements to be implemented under the ESPC are funded entirely through guaranteed energy savings.

OpTerra Energy Services and the City of Grass Valley, California Completes First Phase of Renewable and Energy Efficiency Program

The city of Grass Valley, California, recently announced that it has completed the first phase of a successful renewable and energy efficiency program with **OpTerra Energy**

Services. The program is aligned with the city's broader vision to achieve long-term savings through reduced energy and water use and lower maintenance costs, while also addressing aging infrastructure. Grass Valley is set to save nearly \$7 million in energy savings as a result of solar and energy efficiency upgrades across 14 city facilities.

So far electricity spending is down by 50%, city roads are safer and more inclusive for all community members, with brighter LED traffic lights and ADA compliant streetlight, and carbon emissions avoided as a result of the energy upgrades is the equivalent to removing 237 cars from the road annually.

Siemens and the city of Orem, Utah Project Projected to Save More than \$11 million Over Course of 15-year Performance Contract

Siemens has begun working on infrastructure improvements for Orem, Utah and is expected to save the city an estimated \$11.4 million in energy and operational cost savings and capital cost avoidance over 15 years. Energy efficiency measures include upgrading the city's 5,182 streetlights with LED bulbs, resulting in a projected annual savings of \$181,000. The project scope also includes building automation modifications, HVAC enhancements, and building envelope improvements at the city center, public library, public safety building, senior center, recreation center, and citywide fire stations. Future infrastructure improvements may include upgrades to elevators, boilers, and generators, as well as water-saving technologies.

Southland Energy Selected by George Washington University to Provide Comprehensive Energy and Equipment Upgrades

Southland Energy and the George Washington University in Washington, DC are planning a project for the university that includes energy and equipment upgrades in four buildings. The scope of work includes a cooling plant redesign, replacement of end-of-life central cooling plant equipment including two centrifugal chillers and cooling towers, variable drives for AHU's and high-efficiency lighting upgrades, controls upgrades and demand response. There will also be a utility meter consolidation and rate switch in one of the buildings. Projected savings are a 40% reduction in electricity, 3,717 metric tons carbon reduction per year, and cost savings over the life of project is estimated at \$8,790,000.

Trane Selected to Complete ESPC for Othello Community Hospital

Othello Community Hospital in Othello, Washington, selected **Trane** to complete an Investment Grade Audit of their facility through the State's Energy Savings Performance Contracting program administered by the Department of Enterprise Services.

To comply with Department of Health guidelines, achieve desired humidity set points, and address HVAC system deficiency, dedicated humidity control was installed in each of the hospital's two operating rooms. The chilled water supply temperatures were reset and the HVAC system is now operating within design parameters, reducing the need for simultaneous heating and cooling, and helping to extend the life of the facility's chillers. The verified energy savings has exceeded initial projections, and the project is expected to be cash-positive within 10 years. Improved comfort and humidity levels help ensure quality patient care, as well as retention of physicians and employees.

Wendel Energy Completes Energy Performance Contract with the Village of

Horseheads, NY

Wendel recently announced it completed an Energy Performance Contract with the village of Horseheads, NY that will reduce the village's utility costs and increase its revenue. Wendel assisted the village with the evaluation, design and implementation of improvements to increase energy efficiency, reduce operating costs and increase their revenue stream. The village hall, fire department, village pool and recreational center, DPW highway garage and cemetery office received upgrades. Energy conservation measures that were implemented focus on facility, water system and street lighting improvements, such as lighting upgrades, efficiency motor replacements, HVAC system and control upgrades, building envelope improvements, LED street lighting upgrades, water meter replacements and well site distribution system improvements. Wendel also assisted the village in obtaining approximately \$87,000 in energy related grants and incentives.

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New Product and Services Showcase

New Low Profile Panel Lights from LED Waves

Lighting manufacturer **LED Waves** is pleased to introduce the DLC Qualified Skylight 2.0 Ultra Thin LED Panel Light to their selection of fluorescent troffer replacement products. Available in 1x4, 2x2, and 2x4 foot sizes, the Skylight is designed to fit directly into standard drop ceiling grids. Additional hardware is available for recessed drywall, ceiling flush, hurricane suspension, or gap mounted installations - allowing this collection to fit seamlessly into any construction, old or new. The panels' extremely low profile lends itself to installations with limited clearance space above the ceiling. The 1X4 and 2x2 foot LED panels are 37 Watt replacements for 64W fluorescent fixtures (approx. 4,000 lumens each) while the 2x4 foot version is a 62 Watt replacement for a 96 Watt fluorescent fixture (7,289 lumens). Each unit is rated to last upwards of 50,000 hours, assured by LED Waves' five year warranty.



Incorporate Music into Any Lutron Residential Lighting Control System with New Sonos Endorsed Integration

Starting this month, music lovers can control their home's sights and sounds in a simple and personalized way, as **Lutron Electronics** ushers in the future of light and music with Sonos®- endorsed integration and a new Pico Remote Control for Audio. The collaboration with Sonos, the sound platform for the connected home, gives consumers direct, one-touch control of any Sonos speaker alongside lights, shades and temperature, when used with Lutron's Caséta Wireless, RadioRA 2, and HomeWorks QS smart home systems. Play, pause, skip tracks, and adjust volume, in exactly the same

way that you control lights and shades from your nightstand or from the wall.







Beyond the Bulb, A Path to Deeper Energy Savings with Philips Lighting

Philips' vast portfolio of retrofit kits, LED lamps and tubular LED's (TLEDs) meet the stringent criteria for federal procurement such as Trade Agreement Act (TAA) and Made In America.

A recent development at Philips is that they now offer several models of TLEDs that are now TAA Compliant, extending the quality, reliability and affordability of Philips solutions to the US Federal Government.

The TAA compliant TLEDs have industry leading features such as:

- 50% energy savings v/s F32T8 electronic instant-start systems
- Compatibility with a wide range of electronic instant-start, programmedstart, & emergency ballasts; select models are compatible with dimming ballasts



- Plastic shatter-proof construction
- Plastic models are made with a UL94V-0 flame Retardant material
- Fits into the existing fluorescent sockets (eg. G13 & 2G11)
- Contains no mercury
- Low temperature operation (down to -4 F or -20C)
- Negligible UV radiation (less than 1 uW/lm for
- Wavelengths shorter than 425 nm
- 160 degree beam angle

www.usa.lighting.philips.com/products/product-highlights/instantfit.html

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Industry News

In less than five years, the Army has engaged in 127 energy-saving projects with the private sector that now exceed \$1 billion in investments, announced Secretary of the Army Eric Fanning.

The Army's projects alone represent 33 percent of all the federal government's current contributions to meeting the president's goal, Fanning said.

The \$1 billion milestone was surpassed with a contract signed, Aug. 11, by Anniston Army Depot and its utility company.

DOE Invests \$19 Million to Improve Efficiency of Nation's Buildings

The Energy Department's Building Technologies Office announced it is investing \$19 million in 18 projects to improve the efficiency of our nation's homes, offices, schools, hospitals, restaurants, and stores. These projects will develop advanced building technologies that will help American consumers and businesses save money on their utility bills, reduce greenhouse gas emissions, and create jobs.

These innovative projects will develop sensors and energy modeling tools to make buildings smarter, reduce refrigerant leaks and improve the efficiency of heating, ventilation, air conditioning, and refrigeration systems, and produce a low-impact, gaspowered heat pump that can operate efficiently in colder climates. The projects will also support renewable energy market penetration through energy storage, pinpoint air leaks and reduce energy losses through the building envelope, and cut electricity use by transmitting sunlight to building interiors.

BCA Survey of Building Professionals Finds 75% Believe Leaky Ducts Contribute Substantially To Energy Loss; Most U.S. Buildings Have Significant Duct Leakage

A new survey found that an overwhelming majority of engineers, commissioning agents and other building industry professionals believe that duct leakage is prevalent in most commercial buildings today, and that these leaks are a significant cause of energy loss. The independent survey, was conducted by the Building Commissioning Association's Best Practice Technical Committee.Results of the survey indicate that the overwhelming majority of today's building professionals believe that, for commercial buildings, leaky ductwork is a significant cause of energy waste. 75% of respondents said they believe that leaky ducts contribute substantially to energy loss in commercial buildings. Click for more information.

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