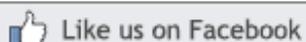


The Energy Service Coalition 2016 Year in Review

... a look back at the NEWS from our members and ESC State Chapters

Last year was an exciting year for our ESC Chapters and GESPC Programs and Projects around the nations. In this special edition of the ESC Monthly Newsletter we take one final look at some of the stories that made news across the country in 2016.



17 members elected to ESC Board of Directors

The Energy Services Coalition biennial election concluded in October with members casting ballots for 17 members to serve two-year terms on the national Board of Directors. [Click here](#) to see the new Board members.



The 2016 5th Annual ESC Market Transformation Conference

2016 Louisville, Kentucky:

The ESC 5th Annual Conference, co-hosted by the National ESC and the Kentucky Energy Services Coalition Chapter took place on August 23 and 24, 2016. Nearly 140 energy industry experts and public sector thought-leaders gathered for the day and a half conference at the Galt House in downtown Louisville. The conference showcased innovations, case studies, best practices and more in Guaranteed Energy Savings Performance Contracting and public building energy retrofits. Presentations are posted on the [conference website](#).

SAVE THE DATE: Aug 10-11, 2017 The 6th Annual ESC Market Transformation Conference

2017 Henderson, Nevada:

The Nevada ESC Chapter will co-host with the National ESC the 6th Annual Energy Services Coalition Market Transformation Conference. The conference is scheduled for August 10th and 11, 2017 at the [Green](#)

[Valley Ranch and Spa](#) in Henderson, Nevada. Watch the ESC website for updates and more details. See ya' in Henderson.



In the Spotlight: Energy Stewardship Champions

The first-ever Energy Services Coalition Energy Stewardship Champion awards were given to ten states in 2016. Champion states were recognized for a combination of their political leadership, programmatic design, and the amount of private sector investment in guaranteed energy savings performance contracting (GESPC) in their state. The Champion states include:

Massachusetts, Colorado, Delaware, Kentucky, New Mexico, North Carolina, Washington, Hawaii, Virginia and Ohio. While each of the Champion states have a great many programmatic key attributes in common, there are areas in programmatic design or political leadership in which their efforts are recognized as best practices (see each state listed below for more information).

2016 Champion: Delaware

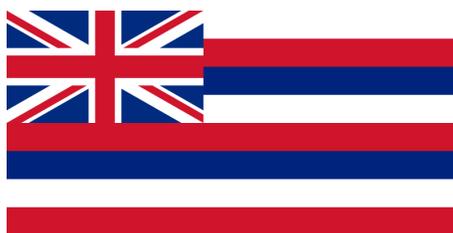
Energy Stewardship Champion: The State of Delaware and the ESC State Chapter have partnered to promote GESPC solutions for failing and inefficient equipment in aging public buildings to reduce utility costs and energy and water consumption. To date, more than \$125 million in energy savings projects have been implemented in Delaware as a result of a GESPC. The Delaware ESC Chapter is known for its outreach and education efforts and events. Since 2014, the Chapter has staged the nation's largest state conference focused on performance contracting.



What Success Looks Like: On Wednesday, October 19th, the Delaware ESC Chapter and Delaware Sustainable Energy Utility held its 3rd Annual Energy Conference at the Chase Center in Wilmington. More than 100 people attended.

Keynote speakers included Judi Greenwald, Deputy Director, Climate, Environment and Energy Efficiency and Senior Advisor to the Secretary for Climate Change, US Department of Energy, and David Terry, Public Sector Vice-President, Energy Services Coalition and Executive Director of the National Association of State Energy Officials.

To learn more about the Delaware Energy Conference and the DE ESC visit the [Chapter's webpage](#) or [Facebook page](#).



2016 Champion: Hawaii

Energy Stewardship Champion: Hawaii, with the full-support over the years from its executive branch, has completed more than \$442 million of guaranteed energy savings performance contracts since 1996. Hawaii is the nation's ESC Race to The Top leader for per capita investment (\$325.25

per capita) in GESPC, a recognition that has been championed by Governor David Ige in press releases and public announcements.

What Success Looks Like: Hawaii was recognized at the 2016 ESC Market Transformation Conference for the fifth consecutive year as the nation's leader for per capita investment in guaranteed energy savings performance contracting (GESPC). Hawaii's investment of \$325.25 per capita in 2016 earned the state a No. 1 ranking.

Performance contracts signed by state and local government agencies in Hawaii since 1996 total \$442.4 million and include 225 buildings and facilities covering 96 million square feet. The savings are the equivalent of powering 368,426 homes for one year.

2016 Champion: Colorado

Energy Stewardship Champion: Colorado has one of the largest ESC State Chapters in the country with 37 members that meet on a regular basis to promote the benefits of, and provide education on the widespread use of energy performance contracting in public and private facilities. In May, 2016, Colorado hit a significant milestone when the state joined four other states in the ESC's Race to the Top "Half-Billion Dollar Club." To date, 140 public jurisdictions have executed 188 energy performance contracts, in administration buildings, schools, courthouses, jails and correctional facilities, libraries, health clinics, veterans housing, ballparks and other community facilities.



What Success Looks Like: Recently, the Hillcrest Care Center faced closure, which would have forced 70 elderly residents to move over 100 miles to the closest nursing care facility. Wray Community District Hospital acquired the care center and contracted with an energy services company pre-qualified by CEO, to help identify building improvements, and potential energy and water savings.

"The Colorado Energy Office's Energy Performance Contracting program partners not only helped with critical building and energy savings improvements, they helped save an important community resource. And they preserved more than a building. Over 100 local jobs were saved, and elderly patients did not have to relocate far away from families and loved ones," said Jennie Sullivan, Wray Community District Hospital.



2016 Champion: North Carolina

Energy Stewardship Champion: North Carolina provides oversight of performance contracting projects in the state, and benchmarks energy usage in K-12 facilities, community colleges and technical colleges. The state also tracks GESPC projects in all state buildings, colleges and universities. To date, more than 74 public jurisdictions throughout North Carolina have executed GESPCs, leveraging nearly \$500 million

in private sector investments into an estimated \$50 million in guaranteed annual energy cost savings.

What Success Looks Like: North Carolina State University has reduced campus energy use by 33 percent and water use by 50 percent per gross square foot since the early 2000s despite a more than 50 percent increase in campus square footage. The utility savings mark the achievement of two state-mandated goals created by lawmakers that calls for a 30 percent reduction in energy use per gross square foot from the 2003 baseline and a 50 percent reduction in water use per gross square foot from the 2002 baseline. Among the largest single contributors to campus energy reduction is the addition of energy saving cogeneration technology at NC State's Cates Utility Plant. The renovation is funded by a guaranteed energy savings performance contract.

2016 Champion: Kentucky

Energy Stewardship Champion: The Commonwealth of Kentucky's statute requires energy service companies not only provide an energy savings guarantee, but also an annual reconciliation statement that documents through a prescribed Measurement and Verification protocol the annual energy savings achieved versus the guarantee. Total GESPC investment in Kentucky exceeds \$750,000,000.



What Success Looks Like: The Auburn Elementary was recognized for achieving ENERGY STAR certification earlier in 2016. Auburn Elementary received this recognition after implementing a variety of energy and maintenance savings techniques through a Performance Contract in 2001, and additional improvements in 2016, saving the district \$1,343,676 in energy usage avoidance. The environmental impact using U.S. EPA data, is equivalent to 3,870 passenger cars not driven for one year, 41,575 barrels of oil not burned, 2,295 households' worth of electricity use for one year or 147 acres of trees preserved from deforestation.

2016 Champion: Massachusetts



Energy Stewardship Champion: The Commonwealth of Massachusetts benchmarks energy usage in its buildings, and requires reporting and measurement and verification on all GESPC projects. Massachusetts' Department of Energy Resources works closely with local units of government in implementing GESPC projects in communities throughout the state, and to date has

implemented more than \$865,000,000 in performance contracting projects.

What Success Looks Like: Earlier this year, the Town of Easton entered into a contract for a roof-top solar system at two of its schools. The systems include 2,299 panels, generating approximately \$79,000 in net metering credits this year, and upwards of \$1.24 million over the 20-year term of the agreement. The total installed capacity of the solar systems' is over 700 kW. Annual energy savings for the schools is expected to be nearly 900,000 kWh. The Easton Middle School and Oliver Ames High School solar arrays follow many successful energy efficiency projects in Easton, including the Town's ongoing GESPC and associated improvements to municipal and school facilities which is saving \$250,000 in energy costs annually, while improving indoor air quality and comfort conditions in the buildings.

2016 Champion: Virginia

Energy Stewardship Champion: Virginia has implemented more than 70 GESPC projects in public facilities. The projects support Gov. Terry McAuliffe's 2014 Virginia Energy Plan on reducing energy consumption in state buildings and his Executive Order 31 which directed state agencies to reduce their electricity consumption in state buildings by 15 percent by 2017. Total GESPC investment in Virginia exceeds \$761,000,000.



What Success Looks Like: The Virginia Department of Motor Vehicles saved more than \$300,000 in 2016 on its energy bills. The savings at the Department's Broad Street headquarters were the result of a GESPC contract that leaders there initially thought was too good to be true. The guarantee was for \$284,000 annually.

2016 Champion: New Mexico

Energy Stewardship Champion: New Mexico has implemented more than \$70 million in GESPC



projects since 2010. The state's GESPC program is self-funded through a charge on projects that ranges between 1 and 3 percent of the total project cost. The fee is charged to the facility owner and is paid out of their project's energy savings. The fee covers the state's GESPC program's oversight of the project and technical assistance.

What Success Looks Like: New Mexico State University is expected to save more than \$1.3 million annually thanks to a GESPC that was

completed at the beginning of 2016. The project has allowed NMSU to generate 51 percent of its own power from a new solar array, meaning the university has produced more power than it has bought from El Paso Electric. NMSU has also reduced electricity and natural gas consumption, and reduced the production of 24.9 million pounds of carbon dioxide.

2016 Champion: Ohio

Energy Stewardship Champion: Ohio adopted its landmark energy savings performance contracting legislation in 1985, and since that time the state has completed nearly \$1.5 billion in energy projects. The state uses a complete set of standardized contract instruments that must be used for state facilities' projects. These documents have been reviewed and approved by the appropriate legal, finance and procurement authorities in the state.



What Success Looks Like: A second phase \$4 million ESPC at the Youngstown Metropolitan Housing Authority was completed near the end of 2016. Phase 1, implemented in 2008, has saved the YMHA several million dollars. Phase 2 will provide energy efficiency upgrades to more than 500 units in five developments, and builds on the success of Phase I by providing the Authority an additional \$100,000 per year in savings. The Authority expects to save more than \$500,000 annually in combined savings for the two-phase project.



2016 Champion: Washington

Energy Stewardship Champion: Washington has more than \$1.2 billion in GESPC projects completed since 1986, with \$334 million worth of projects having been implemented in the past four years. Each year these projects are saving the Washington taxpayers more than \$40 million in annual utility costs reductions to public facilities. Washington pioneered GESPC technical assistance through an Interagency Agreement that

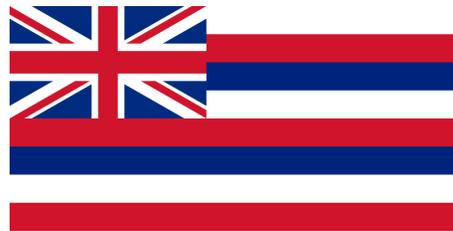
allows its Department of Enterprise Service's Energy Programs to provide overall contracting and project management services to local governments, school districts and state agencies. Compensation for this technical assistance is based on a pre-determined fee based on the total GESPC project value.



2016 ESC Newsmakers . . .

Newsmaker: Hawaii

Hawaii's GESPC investment of \$442.4 million, or \$325.25 per capita, has earned the state the No. 1 ranking in the ESC's Race to the Top."



"It is an honor to be acknowledged for this achievement, which highlights the innovative work being done to transition Hawaii to a clean energy future," said Gov. David Ige. "Reducing energy use by making our buildings more efficient will help us meet the challenges of energy security and climate change that we face in Hawaii. I'd like to thank the Energy Services Coalition for this recognition, and for its work in championing energy performance contracting."

"Investing in energy efficiency not only lowers harmful carbon emissions, it reduces home and business energy costs, stimulates economic growth, and improves energy system reliability," said Luis Salaveria, director of the State Department of Business, Economic Development and Tourism (DBEDT). "By reducing government spending on energy we are able to free up valuable taxpayer dollars for other essential programs."

The Hawaii State Energy Office (HSEO), a division of DBEDT, provides technical assistance to state and county agencies entering into energy performance contracts. The GESPC projects vary widely and include courthouses, community colleges, airports and prisons. The \$442.4 million of energy performance contracts put in place since 1996 will save the state an estimated \$1.1 billion in electricity costs over the life of the contracts.

"It's gratifying that among Hawaii's largest energy consumers, state and county agencies have helped drive Hawaii's No. 1 per capita ranking in GESPC contract value for each of the five years I have been energy administrator," HSEO Administrator Mark Glick said. "Efficiency gains from these major projects are playing a significant role in reducing greenhouse gas emissions while providing a healthy return on investment."

Glick cited the \$158 million energy performance contract recently undertaken by the State Department of Transportation (DOT) at 12 of Hawaii's 15 airports, which will cut energy use in half and save the state about \$500 million over 20 years. The project, being carried out under the leadership of DOT Director Ford Fuchigami, is one of the largest single GESPC in the nation.

Performance contracts signed by state and local government agencies in Hawaii since 1996 include 225 buildings and facilities covering 96 million square feet. The savings are the equivalent of powering 368,426 homes for one year.

Newsmaker: Michigan

In recognition of significant energy efficiency



investment and demonstrated energy cost savings at facilities throughout the state, Energy Services Coalition - Michigan Chapter presented its Sixth Annual Awards honoring the City of Grand Rapids, Manistee Public Schools, Riverview Public Schools, Washtenaw Intermediate School District and West Branch Regional Medical Facility. Also, Rep. Al Pscholka (District 79), MI House of Representatives, was recognized for leadership in passing Public Acts 119-123 of 2016, which enable municipalities to finance Energy Savings

Performance Contracts with another cost-effective option and Public Act 485 of 2014, which provided the ability to enhanced Energy Savings Performance Contracting at Michigan Community Colleges.

Collectively, this year's recipients, who oversee energy consumption, invested nearly \$8.0 million in energy efficiency improvements through performance contracting. The investments are saving more than \$689,000 annually. In the period of 2011-2016, the ESC Michigan Chapter has recognized recipients for a total of \$112.9 million in energy efficiency and renewable energy investments and \$7.6 million in annual savings.

The annual awards event attracts energy efficiency experts from around the state and this year the event was held at the offices of the Michigan Agency for Energy. The event featured a keynote address by Lieutenant Governor Brian Calley and a facilitated panel discussion with the award recipients.

Following is the project list by size and savings that were honored with a 2016 ESC-MI Chapter award:

- City of Grand Rapids: \$1.9M and \$146,000 in annual cost savings.
- Manistee Area Public Schools: \$2.35M and \$148,000 in annual cost savings.
- Riverview Public Schools: \$1.14M and \$78,000 in annual cost savings.
- Washtenaw Intermediate School District: \$.97M and \$137,000 in annual cost savings.
- West Branch Regional Medical Center: \$1.59M and \$180,000 in annual cost savings.

Newsmaker: Kansas

The Kansas Legislative Sub Committee on the Facility Conservation Improvement Program (FCIP) held a hearing on January 28, 2016, to discuss performance contracting in the state and the status and future of the FCIP. Committee members heard educational presentations on the history of performance contracting and how it works. The committee asked the Kansas Corporation Commission for more detailed information on its FCIP projects, their scope, projected energy and dollar savings, status of projects, and M&V performance results. Six school districts, two school organizations and one municipality provided favorable comments on their performance contracting experiences.



The ESC Executive Director, Jim Arwood, penned an educational [Op-Ed](#) that appeared in the Saturday, January 23, 2016 edition of The Hutchinson News. The News is one of the larger newspapers in Kansas and is part of the Harris Enterprises Inc. that operates four other daily newspapers in the state (Garden City Telegram, Hays Daily News, Ottawa Herald, and The Salina Journal).

Newsmaker: Utah

New Chapter: Private and Public sector ESC members joined together in early 2016 to re-launch



the Utah ESC Chapter. The ESC can trace its roots to Utah where the predecessor to the ESC started in 1995. That year the Utah Office of Energy Services hosted a roundtable discussion on performance contracting and the need for collaboration between end-users and ESCOs in the state. That roundtable grew into the Utah Coalition and soon other states became interested in what they were doing in Utah. In 1999, growing interest from other states throughout the country prompted the organization to expand and become

a national public-private partnership under the name Energy Services Coalition.

The 2016 ESC Public Sector Leadership Award: During the closing ceremonies of the 2016 ESC Market Transformation Conference in Louisville, Shawna Cuan of the Utah Chapter, was awarded the 2016 ESC Public Sector Leadership Award. The ESC Chapter in Utah was reinstated at a meeting of steering committee members on February 17, 2016. At that meeting Shawna Cuan was unanimously voted in as public co-chair of the Utah ESC Chapter, and since that time she provided the leadership that led to the group's initial meeting, launch of an outreach committee and an outreach action plan, worked with the Utah Energy Office to develop an RFP for third-party reviewers, and represented the Chapter at the Governor's Energy Summit.

Newsmaker: Kentucky

ESC Private Sector Leadership Award: John Boyd was recognized for his contributions to the Kentucky ESC Chapter with the 2016 ESC Leadership Award. Boyd has been active in the ESPC market for eight years - first as a sales representative for an ESCO, then as a supplier to ESCOs. He became the Private Co-Chair of the Kentucky Chapter of the ESC in 2009. Since that time he has contributed countless hours of personal and professional time to leading the Kentucky Chapter to its position as one of the most active and productive ESC Chapters in the nation, with the one of highest per capita contracting volume in the nation, with over \$750 million in jobs since enabling legislation was put in place in 1996 (\$224 million in the last three years alone).



John regularly rallies Chapter members to give presentations at public events. At practically every Chapter meeting he reminds members to draft and submit their case studies for online publication to "tell their story." Once, to address the lack of case studies, he recruited a small team of members to spend the day in the Capitol basement going through state government files, pulling contracts from which he personally drafted many case studies.

Workshop: The Kentucky ESC Chapter hosted a training workshop for local officials on how performance contracting works for the public sector in Kentucky. The training was a breakout session offered as part of ESC annual conference in Louisville. The workshop was led by Private Sector Chair, Teresa Barton, and Lona Brewer of the Kentucky Division of Energy Efficiency and Conservation.



Newsmaker: Georgia

The Georgia Environmental Finance Authority (GEFA) announced recently the University System of Georgia (USG), the Georgia World Congress Center (GWCC), and the Georgia Department of Corrections (GDC) have entered into energy performance contracts that will provide energy and water savings of approximately \$113.9 million. The ESC was part of a coalition of organizations that

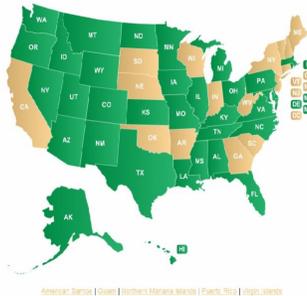
helped make GESPC possible in Georgia and these three projects, plus a project at Phillips Prison marks the first projects that have been implemented since a Constitutional Amendment was approved by voters in 2012.

Newsmaker: Delaware

An Op-Ed produced by the ESC was published in a number of Delaware media outlets during the last week in February. The media campaign was in support of the Delaware ESC Chapter's efforts to increase awareness for Guaranteed Energy Performance Contracting in the state. To read more [click here](#).



Newsmaker: ESC Network Grows



In June, the ESC completed Year One of its cooperative agreement with the US Department of Energy to provide technical assistance to states on Guaranteed Energy Savings Performance Contracting.

Among the Year One milestones was the expansion of the ESC's network of state Chapters. New Chapters were launched or re-launched in the states of Oklahoma, Utah, Alabama, and West Virginia. These new chapters organized to conduct outreach efforts using the ESC's materials to help educate public

sector end-users and decision-makers on the process and the benefits of guaranteed energy savings performance contracting.

These new chapters, along with the nearly 30 other existing state chapters, were provided their own website pages and facebook pages as a way to communicate state specific news, laws, policies, upcoming events and successes.

Newsmaker: Alabama

The Alabama ESC Chapter hosted an Energy Efficiency and Performance Contracting Workshop on March 2, 2016 at the Central Alabama Electric Coop Auditorium in Prattville, AL. Agenda items covered topics ranging from energy efficiency options to how GESPC can be used as a procurement method.

More than 70 people, ranging from decision-makers, procurement officers, building managers, maintenance supervisors, finance and legal representatives from state agencies, K-12 school systems, higher education/post-secondary institutes, and other local government entities throughout the state attended.

"We partnered with the ESC to host a workshop to reach out to public sector representatives and give them the opportunity to better understand how they can save energy through energy efficient technologies and how performance contracting can help procure these improvements," said Mary Blackmon, ADECA's energy manager. "The 2016 Energy Efficiency and Performance Contracting Workshop was a jump-start for many educational opportunities to come.."



Newsmaker: West Virginia

The West Virginia ESC Chapter not only had a booth at the state's 2016 Construction and Design Expo March 23rd and 24th, but the Chapter headed



up a panel on Guaranteed Energy Savings Performance Contracting. Public sector co-chair, Karen Lasure presented on GESPC 101: What is performance contracting? How does it work? Is it right for your project? How this funding option can be utilized to finance capital energy efficiency and renewable energy projects in the commercial and industrial sectors. The GESPC session provided 1.5

professional Continuing Education Units to those in attendance. The 37th Annual Expo attracted more than 5,000 attendees and more than 400 exhibitors to the Charleston Civic Center in Charleston, West Virginia.

Newsmaker: Tennessee

The Tennessee Office of Energy Programs held a workshop in Franklin to discuss energy efficient technologies and facilities management strategies. More than 50 people were in attendance with attendees split evenly between private and public sector. The first portion of the workshop was dedicated to energy performance contracting and financing energy conservation measures for local governments, school district facilities, and wastewater treatment plants. The second portion of the workshop focused on LED streetlights.



Newsmaker: South Carolina

The South Carolina Office of Regulatory Staff, Energy Office, held its third in a series of workshops on Guaranteed Energy Savings Performance Contracting in Columbia, South Carolina on May 4, 2016. The workshop was expanded to include local government performance contracts, with a case study of Horry County's project, and a discussions of measurement and verification led by Dale Hahs of the ESC and Rich

Penner of Ingersol Rand.

Newsmaker: North Carolina

The North Carolina Department of Environmental Quality, in cooperation with the North Carolina ESC Chapter, held a two-day training session on formatting and preparing an IGA, savings calculations and ongoing M&V. The training for local units of government was held June 15 and 16, 2016.



Newsmaker: Minnesota

The Minnesota ESC Chapter held a GESPC workshops July 29, 2016 for the Minnesota Department of Corrections staff. Workshop topics included energy efficiency opportunities, training, budgets, baseline determination, measurement and verification, guarantees, and best practice/lessons learned from other correctional facilities that have

implemented a GESPC project.

