



CT's New Standardized Energy-Savings Performance Contracting Program

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DEEP, Lead by Example Program
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Lead by Example Program

- Public Act 11-80, Section 118, requires DEEP to develop a plan to reduce energy use in state buildings by:
 - 10% by January 1, 2013
 - An additional 10% by 2018
- Lead by Example (LBE) supports similar reductions in municipal buildings
- LBE program was initiated in September 2011, run by DEEP in collaboration with other agencies
- Energy Savings Performance Contracting (ESPC) is a major program of LBE and critical to achieving state targets



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What is ESPC?

- Implementation of energy savings measures with no upfront capital
- The costs of energy savings measures are paid for by future guaranteed savings from utility budget
- Approach over 30 years old, approx. \$6B - \$7B in U.S. annually
 - Most ESPC projects in municipal, state, and federal government facilities (also in universities, hospitals, and some commercial)



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Benefits of ESPC

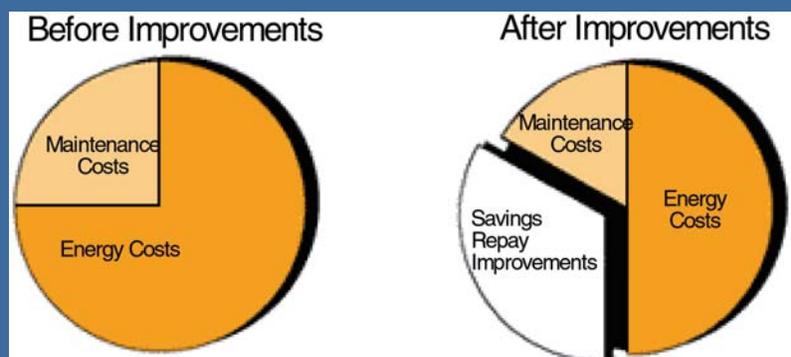
Re-purpose wasted utility dollars to:

- Stabilize energy costs, improve budget accuracy, stabilize load profiles
- Upgrade facilities to highly efficient energy systems
- Reduce budgetary burdens of deferred maintenance
- Eliminate costly emergency repairs
- Encourage action on energy efficiency – lead by example
- Help to stimulate a clean energy economy in CT



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Reallocating Wasted Energy Dollars



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Typical Energy-Savings Measures

- Lighting
- Heating ventilation & air conditioning
- Energy management systems
- Motors and variable speed drives
- Building envelope measures
- Water savings measures
- Renewable energy
- Other



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Who Benefits?

- Municipal leaders – finance projects outside of capital budgets
- Taxpayers – reduced budget burden
- Building occupants – healthier working and learning environments, increased comfort
- Facility managers – improved efficiency, fewer complaints, fewer emergency repairs



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CT Towns With ESPC Experience

Bridgeport	Naugatuck
East Hartford	New Britain
Fairfield	Stamford
Farmington	Stratford
Middletown	Windham
Milford	
Naugatuck	



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Development of CT Program

- Public Act 11-80 required DEEP to develop standardized ESPC process
- Developed by Interagency Workgroup
 - DEEP, Administrative Services, Construction Services, Policy and Management, Attorney General, Treasurer
- US Department of Energy provided technical assistance on best practices, processes, standardized documents
- Started with templates developed out of years of experience in other states nationwide



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CT Program Users

- State agencies, including higher education
- Municipalities *may* use program
- State/local government facilities including:
 - K-12 schools (including regional school districts)
 - Offices
 - Wastewater treatment facilities
 - Campuses, dormitories
 - Prisons
 - Hospitals



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Confidence, Ease for Program Users

- Clear, streamlined, repeatable, transparent process
- Program approval by key state agencies provides legal, procurement, and financial confidence
- Consistent, level playing field for vendors
- Designed to mitigate risk for agencies and municipalities:
 - payment is contingent on appropriation of funds
 - vendor's energy savings guarantee must be \geq total project costs
 - vendor pays if there is an energy savings shortfall



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State Program Resources



Energy technical support



Pre-qualified vendor list



Standardized contracts



Financing technical support



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Pre-Qualified Vendor List

- State contract with pre-qualified list of Qualified Energy Services Providers (QESPs)
- Municipalities can “piggy back” on state contract



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Standardized Contract Documents

- Base contract between DAS and QESPs
- Pre-approved contract exhibits, details to be added for each project
 - Fixed cost and pricing
 - RFP to select QESPs to do Cost-Effective Feasibility Analysis
 - Investment-Grade Energy Audit
 - Energy-Savings Performance Project Statement of Work, Schedules



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Technical Support - Energy

- Program Manager at DEEP
- Utilities – Review of Energy Savings Measures for incentives through CT Energy Efficiency Fund
- (Anticipated) Vendors to provide 3rd party review of Investment-Grade Energy Audit, Energy Savings Performance Project Statement of Work, first year Measurement and Verification report



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Technical Support - Financing

- Clean Energy Finance and Investment Authority staff to provide advice and support on financing options, introductions to capital providers and financial institutions
- Tax-exempt municipal lease/loan guidance documents



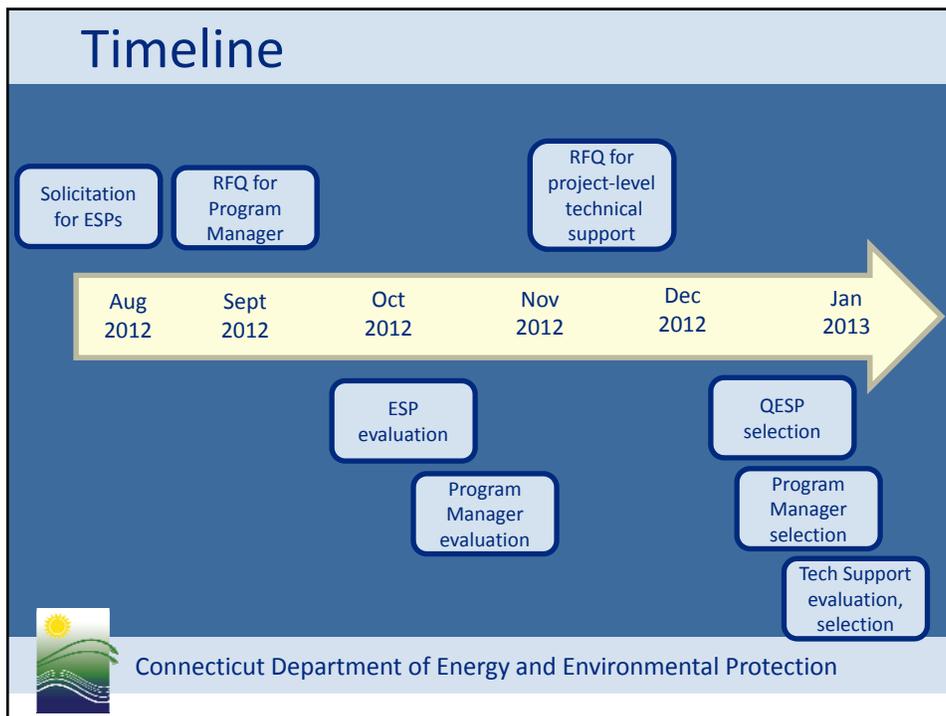
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Financing Options

- Contract documents allow for a variety of financing options
 - Tax-exempt municipal lease
 - Conventional bank financing
 - Tax-exempt municipal bonds (general obligation, revenue)
- QESPs must identify incentives from CT Energy Efficiency Fund and Clean Energy Finance & Investment Authority to decrease total project cost
- Important to think about financing options early on in the process, because financing is key factor in defining scope of project



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First Steps: What To Do Now

1. Build support in your town:
Educate and engage champions – Energy Task Force, facilities director, finance director, etc.

2. Identify potential facilities and energy opportunities:
Consider buildings with high utility bills, recurring/high maintenance, no recent lighting or controls upgrades, major equipment replacement needs (e.g., boilers), comfort complaints, poor energy performance (low Energy Star score)



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First Steps: Continued

3. Prepare your Technical Facility Profile:
 - Include 3 years of energy use data (all fuels, water), detailed description of HVAC control system and energy management system, square footage of conditioned space, area and types of lighting, any anticipated replacement of energy or control systems, previous audit reports or studies.
 - Use DEEP Technical Facility Profile template or other format
 - Use Energy Star Portfolio Manager
 - www.energystar.gov – overview, training, etc. click on “Find out more”, Portfolio Manager
 - Bill Leahy, Institute for Sustainable Energy, 860-465-0253
 - Working with utilities on electronic data feed



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First Steps: Continued

4. Research financing options:
Talk to CEFIA, other towns, capital providers, financial advisors, etc.
5. Learn from peers:
Talk to your peers in CT (or outside of CT) that have implemented successful ESPC projects

Note: Use discretion when communicating with ESCOs, Owners Representatives, or other vendors. The state program is currently evaluating ESP responses and anticipating an RFQ for technical support. Use caution not to compromise the procurement process.



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Aggregating Towns Under One ESPC

- Goal for ESPC project is several million dollars, but, difficult to reach this size for many CT towns
- Possible to combine two or more towns and/or school districts into one project.
 - Some states have done this:
 - MA: 5 aggregated projects have been implemented
 - CA: in process – 11 school districts (representing 96 towns), 6 towns, 2 universities, 1 hospital, other entities)
 - NC: just received DOE grant to develop model for aggregation
 - DEEP will assist with collaboration among towns/school districts (legal, administrative, political issues)



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Info on ESPCP Web Page

- Video featuring East Hartford and Stamford ESPC projects
- First steps, process overview and resources available
- All contract documents and attachments
- All guidance documents
- Coming soon:
 - List of Qualified Energy Services Providers
 - List of Technical Support vendors
 - Contact info for Program Manager, CEFIA, etc.



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More Info

www.ct.gov/deep/leadbyexample

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Input on Technical Support Needs

- During which stages of the ESPC process do you need technical support the most?
 1. Information gathering
 2. QESP selection
 3. Investment-Grade Energy Audit – participation, review
 4. Energy Savings Performance Project Scope of Work – participation, review
 5. Construction and installation
 6. Monitoring & verification
 7. Other
- If a limited number of hours of technical support were available, what would you ask for help with?



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Input on Technical Support Needs

- If your town has already implemented an ESPC:
 - Would you use an Owner's Representative (OR) if you did another ESPC?
 - Did you hire an OR? If so, what services did the OR provide? What was the fee and how were the services paid for? What were the most critical services the OR provided (services you valued the most)? Were there services that the OR provided that you may not have needed?



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Input on Technical Support Needs

- Where is your town or school district in the process of considering or implementing an ESPC?
- What are the key challenges/barriers/hurdles you are facing?
- What additional resources and/or information do you need to move forward?



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