



PERFORMANCE CONTRACTING PROCESS

STATE CONSTRUCTION CONFERENCE

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Topics for Discussion

- What's EPC?
- Why EPC?
- Distinguishing Features of EPC

- Facts about EPC
- Steps to Successful EPC
- EPC Process & Resources
 - ESCO Selection Process
- EPC Case Studies (Video) – Federal Govt.
- Q & A

Acronyms

- EPC - Energy Performance Contract
 - ESPC - Energy Savings Performance Contract
 - GESG – Guaranteed Energy Savings Contract
 - ESCO - Energy Service Company
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- RFP - Request for Proposal
 - IGA - Investment Grade Audit
 - M&V - Monitoring and Verification
 - ESA - Energy Services Agreement
 - ECM - Energy Conservation Measure
 - SEO - State Energy Office
 - FEMP - Federal Energy Management Program
 - DOE - Department of Energy



Energy Organizations

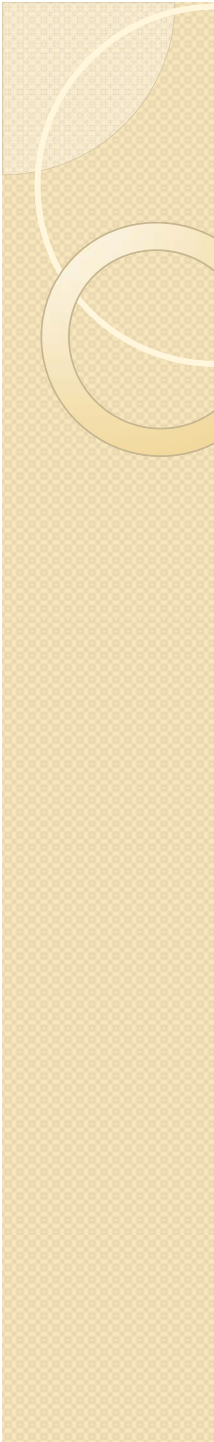
- *ACUPCC* – American Colleges & Universities Presidents' Climate Commitment
- *CCI* – Clinton's Climate Initiative
- *APPA* – Association of Higher Education Facilities Officers
- *AASHE* – Association for the Advancement of Sustainability in Higher Education

- *EVO* – Energy Valuation Organization
- *ESC* – Energy Services Coalition
- *NAESCO* – National Association of Energy Service Companies
- *EERE* – U.S. Department of Energy (DOE) Office of Energy Efficiency & Renewable Energy
- *USGBC* – U.S. Green Building Council
- U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy's Energy Star



What's EPC?

- An innovative form of contracting method.
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- A contractual and financing mechanism.
 - A performance-based procurement method and financial mechanism.



What are Distinguishing Features of EPC?

- An innovative form of contracting.
 - QBS/GMP/Design/Build, etc.
- ESCO takes on project performance risk.
- ESCO provides a turnkey service.
- ESCO is responsible for designing, implementing, and measuring the results.



Why EPC?

- Energy Security
- Economic Efficiency
- Economic Development
- Environmental Stewardship
- Indoor Environment
- EPC and Sustainability

Facts

ESPC Laws & Regulations (Federal):

- Legislation authorizing ESPCs enacted in 1992.
- DOE promulgated regulations in 1995.
- ESPC authority was made permanent in 2007.
- The authorization of ESPCs is outlined in the following laws and regulations:
 - [National Energy Conservation Policy Act](#)
 - [Energy Policy Act of 1992](#)
 - [DOE Final Rule: 10 CFR 436 Subpart B](#)
 - [Federal Acquisition Regulations](#)
 - [Skaggs Authority](#)
 - [Executive Order 13423](#)
 - [Energy Independence and Security Act of 2007](#)

Source: DOE's Federal Energy Management Program (FEMP)

Facts

EPC Laws & Administrative Codes (State):

- **GS 142-60 thru 142-70 - Financing of GESC**
 - SL 2009-375 Increased the cap from \$100 Million (aggregate principal) to \$500 Million (aggregate outstanding) & Modified the Reporting Requirements.
- **GS 143-64.17 - Requirements of GESC**
- **NCAC 01 Subchapter 41B**

Source: State Energy Office (SEO)



Facts

- Presidents and Chancellors of Colleges & Universities are committed to carbon neutrality.
- ACUPCC and CCI have partnered to dramatically increase the number of energy efficiency retrofit projects in U.S colleges and universities using Energy Performance Contracting (EPC) as one vehicle for implementation.
- Higher education institutions are motivated to undertake building retrofits for several reasons.
 1. Need to respond to climate change.
 2. Financial implications of business as usual.
 3. Consequences and costs of poor operations and maintenance.
 4. Leadership through sustainability on campus.

Source: ACUPCC – EPC Toolkit for Higher Education

Facts

ESPC (In Progress or Complete)

- Total Potential Investment is approx. \$176Million
- Actual Project is approx. \$62 Million
- Museum of Arts (2nd Year Guaranteed Complete)
- Downtown Govt. Complex (1st Year Guaranteed Complete)
- UNCG (1st Year Guaranteed Complete)
- ASU (Under Construction)
- NCSU & UNCW (Approved by COS)
- DOC (ESA Negotiation in Progress)
- NCCU & WCU (IGA in Progress)
- NCSU, ECSU & UNCP (Selection of ESCOs)
- DOT & FSU (Applications approved by SEO)

Source: State Energy Office (SEO)



5 Steps to Successful EPC

1. Decide if energy performance contracting is a good solution for you
2. Select an energy service company (ESCO)
3. Contract with your ESCO to identify energy saving opportunities
4. Negotiate a long-term contract with your ESCO
5. Verify savings and enjoy the benefits

Source: Energy Services Coalition (ESC)

Step 1

- **Find out if your facility is a good candidate for a performance contract.**

- **Mini-Audit**

- Is your Utility cost more than \$1.50/SF?
- Do you spend more than \$300,000 a year on energy bills?

If so, an energy performance contract may work for you. It is likely to benefit you even more if you have ...

- Aging buildings or equipment;
- Recurring maintenance problems or high maintenance costs;
- Comfort complaints;
- Scarce budget resources;
- Too little energy management expertise;
- Too many demands on your maintenance staff;
- No recent upgrades of your lighting or controls systems; and
- Energy-using equipment that is ready for replacement.

- **Assemble a team.**

- **Assess ESCO services and benefits.**



Step 2

- **Develop a facility profile.**
- **Develop an RFP.**
- **Invite ESCOs to tour the facility.**
- **Evaluate the proposals.**
- **Interview ESCOs.**
- **Select an ESCO.**



Step 3

- **Negotiate an energy audit and project development agreement with your ESCO.**
- **Review the energy audit.**



Step 4

- **Negotiate the scope and terms of the contract.**
- **Negotiate a guarantee to meet your needs and as required by law.**
- **Arrange financing.**
- **Review maintenance requirements and services.**



Step 5

- **Approve the installation.**
- **Operate the building as agreed in the contract.**
- **Maximize benefits through trained staff.**
- **Review the quarterly reports.**



EPC Process & Resources

- <http://www.energync.net/programs/docs/usi/PerformanceContractingFlowChart.pdf>

- <http://www.energync.net/programs/usi.html>
- Source: State Energy Office (SEO)



List of Qualified ESCOs

- **Ameresco, Inc***
- **Burns & McDonnell**
- **Chevron Energy Solutions Company***
- **ConEdison Solutions***
- **Energy Systems Group, LLC**
- **Florida Power and Light**
- **Honeywell International, Inc.***
- **Johnson Controls, Inc.**
- **Link Services**
- **NORESCO***
- **Pepco Energy Services, Inc. ***
- **Siemens Buildings Technologies, Inc.***
- **Schneider Electric***
- **Trane Comfort Solutions Inc.***

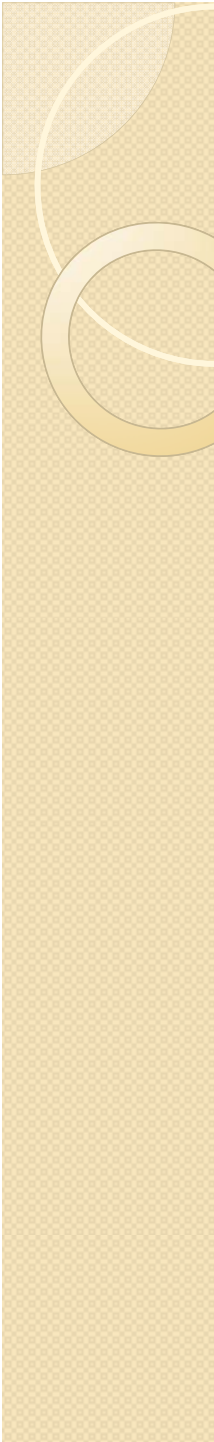
(*) Denotes ESCOs Contracted/Selected for ESPC

Source: State Energy Office (SOE)



ESCO Selection Process

- RFP
- Pre-Proposal Conference
- Opening of Proposals
- Evaluation of Proposals by Selection Committee
 - Use Matrix to Evaluate Proposals
- Interview of ESCOs by Committee
- Selection of ESCO
- Award of Phase I – Investment Grade Audit (IGA) to an ESCO



EPC Case Studies (Video) – FDA White Oak Campus, Maryland

http://www1.eere.energy.gov/femp/financing/su_perespcs_fda.html

Source: DOE/Federal Energy Management
Program (FEMP)



Q & A
