Guaranteed Energy Savings Performance Contracting State Program

October 27, 2011
The Energy Services Coalition (ESC) is a national nonprofit organization composed of a network of experts from a wide range of organizations working together at the state and local level to increase energy efficiency and building upgrades through energy savings performance contracting.

www.georgiaesc.org
Overview

Guaranteed Energy Savings Performance Contracting (GESPC) serves state agencies and higher education institutions as a tool to implement needed facility improvements while significantly reducing operating costs.

With the passage of Amendment 4 in November 2010, Georgia state agencies are now enabled to use this procurement process. GESPC utilizes available multi-year financing agreements with simultaneous annual savings guarantees, provided by the Energy Services Providers (ESPs); the result is budget-neutral facility improvements.
Energy Conservation
- Lighting Upgrades
- Building Controls
- Water Conservation

Facility Improvements
- Major HVAC Upgrades
- Building Envelope
- Renewable Energy
North Carolina State University

GESPC Value - $19.7 million
Guaranteed Annual Savings - $1.7 million
Financial Term - 15 years
Total Square Footage – 1.6 million / 13 buildings

Project Scope
- New Cooling Towers
- Solar Thermal
- Lighting Upgrades
- Water Conservation Measures
- Mechanical System Modifications
- Building Envelope Improvements
- Utility Sub-Meters
- EMS Upgrades
- Lighting System Controls
Virginia Community College System

GESPC Value - $82 million (4 phases)
Total Guaranteed Annual Savings - $8 million
Financial Term – 15 years
Total Square Footage – 7 million / 315 buildings (40 campuses)

Project Scope
- Solar PV
- Lighting Upgrades
- DDC Energy Management
- Boiler & Chiller Replacements
- Steam to Hot Water Conversion
- New Hot Water Pumps
- Variable Frequency Drives
- Piping Replacements
- Thermal Storage
- Weather-stripping
- Electrical Fuse Replacements
- Fan Coil Replacements
- Water Conservation Measures
- Window and Door Replacements
- Roof Replacements
- Retro-Commissioning
East Texas Baptist University

GESPC Value - $531,000
Guaranteed Annual Savings - $70,794
Financial Term – 10 years
Total Square Footage – 335,100 / 14 buildings

Project Scope
- Lighting Upgrades
- DDC Energy Management System
- Mechanical System Upgrades
- New Chillers
- New Boilers
- New Air Handler Units
GESPC Procurement Process

1. Initiate Project
2. Select ESCO
3. Develop Project
4. Source Financing
5. Install ECMs
6. Monitor Performance
1.1 Institution determines the need for contractual ESCO services.

1.2 Institution submits a written request to GEFA to issue a Request for Expressions of Interest (EOIs) to Pre-Qualified ESCOs.

1.3 GEFA accepts Institution’s Request.

1.4 GEFA receives EOI responses from interested ESCOs.

1.5 GEFA distributes EOI responses to Selection Panel.
2. Select ESCO

2.1 Selection Panel Develops Short List of ESCOs (3-5)*
2.2 Institution develops and issues RFP to short-listed ESCOs*
2.3 ESCOs complete preliminary audits and submit proposals
2.4 Evaluation Committee scores the RFP submittals* – Institution can walk at no cost if the preliminary proposals are not acceptable.
2.5 GEFA uses scores to determine Final ESCO Selection

*GEFA’s offer of assistance
3.1 Institution executes Audit Agreement with Selected ESCO.

3.2 ESCO conducts Investment Grade Audit (IGA)

3.3 Institution approves IGA scope of work and design*

3.4 Financial Officer reviews and approves for fiscal responsibility  
(If Institution decides not to proceed, ESCO is reimbursed for IGA cost)

3.5 Institution finalizes GESPC and routes for signatures. By statute,  
GEFA must approve all GESPCs.
4.1 The Board of Regents requests that GSFIC obtain financing.

4.2 GSFIC issues RFP to pre-qualified lenders.

4.3 GSFIC selects best offer for project financing.

4.4 Institution issues Notice to Proceed to ESCO to begin construction.
5.1 ESCO begins construction process.

5.2 Institution monitors construction with assistance from the Board of Regents and GEFA, if requested.

5.3 ESCO receives progress payments, upon Institution’s approval.

5.4 Institution accepts and approves final project completion.
6. Monitor Performance

6.1 Guaranteed Savings Period Begins.

6.2 Ongoing project monitoring to verify contracted savings

6.3 Institution adheres to contractual O&M.

6.4 Institution informs ESCO of any significant changes in operation that could affect the savings calculations.

6.5 ESCO submits regular energy savings reports. Institution reviews and addresses any issues with ESCO.*
Potential Candidates for GESPC

- Annual Utility Costs in excess of $250,000
- Aging/Problematic Equipment
- Outdated Systems/Technology
- Limited Staff/Expertise/Funding
- Access to Utility Data (24-36 months)
- Energy Intensity Usage
- Noticeable Energy Waste
- Environmental Concerns
Preparing for GESPC – Suggestions

- Assign Representative /PM
- Select Project Buildings for RFP
- Compile Most Recent Utility Data
- Collect Facility Information
- Assemble List of Items to be Addressed
- Submit GEFA Application / Technical Facility Profile
Next Steps......

- Selection of State Pre-Qualified ESCOs
- GSFIC Selection of Financial Lenders
- Workshops and Training
Questions ?
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ENERGY, LAND & WATER RESOURCES

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<thead>
<tr>
<th>Category</th>
<th>Bid &amp; Spec</th>
<th>GESPC</th>
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<tbody>
<tr>
<td>Funding</td>
<td>▪ Energy projects must compete for limited budget resources</td>
<td>▪ Comprehensive energy project is 100% funded from the existing operating budget; no upfront capital required.</td>
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<td>▪ Insufficient funding for comprehensive energy project</td>
<td>▪ Guaranteed maximum price; no change-orders</td>
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<td>▪ Cost overruns may reduce scope</td>
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<td>Staffing</td>
<td>▪ Limited staff or lack of expertise</td>
<td>▪ ESP provides single-source accountability and technical expertise to audit, engineer, implement, and ensure project performance</td>
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<td>▪ High staff costs due to a piece-meal approach to bidding and managing each separate project</td>
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<tr>
<td>Project</td>
<td>Multiple contracts with multiple vendors can result in conflicting project</td>
<td>One contract; single source of accountability for project design,</td>
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<td>Performance</td>
<td>requirements</td>
<td>implementation, and performance</td>
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<td></td>
<td>Lowest first cost equipment selections</td>
<td>Comprehensive project implementation maximizes savings design</td>
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<td></td>
<td></td>
<td>opportunities</td>
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<td>Savings</td>
<td>No energy savings guarantee</td>
<td>Long-term energy savings are contractually guaranteed</td>
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<td>No Measurement &amp; Verification to document energy reduction</td>
<td>M&amp;V services reduce risk of savings erosion over time</td>
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