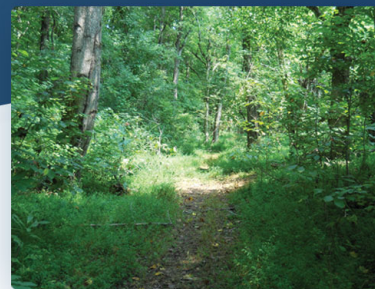




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INVESTING IN GEORGIA'S  
ENERGY, LAND & WATER RESOURCES



# Guaranteed Energy Savings Performance Contracting State Program

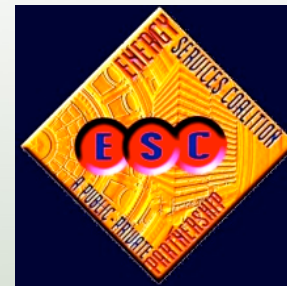
October 27, 2011



## Energy Services Coalition

**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](http://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.**

### Quick Paybacks



**Cost Savings**

#### Energy Conservation

- Lighting Upgrades
- Building Controls
- Water Conservation

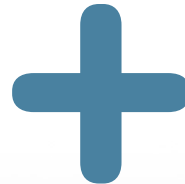
### Long Paybacks



**Cost Savings**

#### Facility Improvements

- Major HVAC Upgrades
- Building Envelope
- Renewable Energy



**FINANCIAL  
TERM**



## 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**

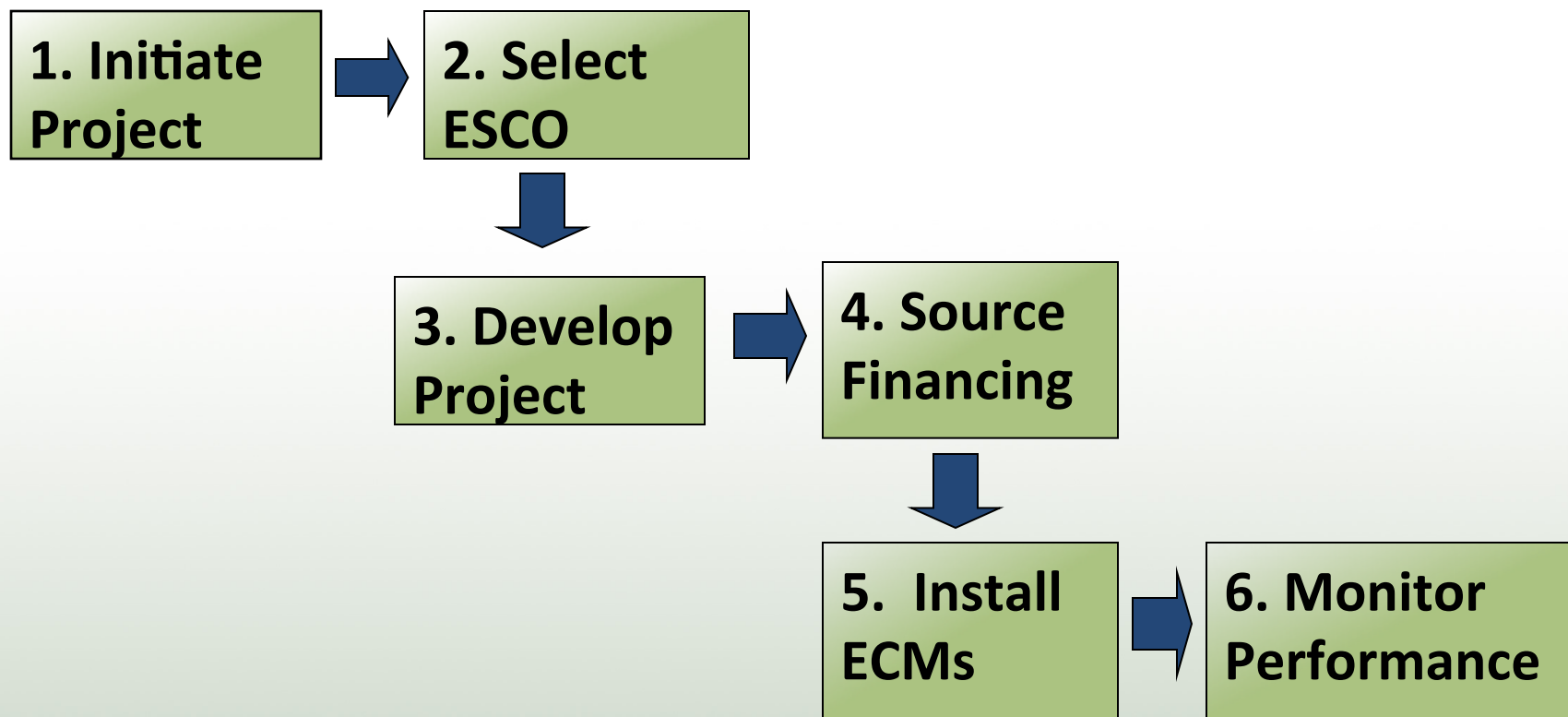
**Financial Term – 10 years**

**Total Square Footage – 335,100 / 14 buildings**

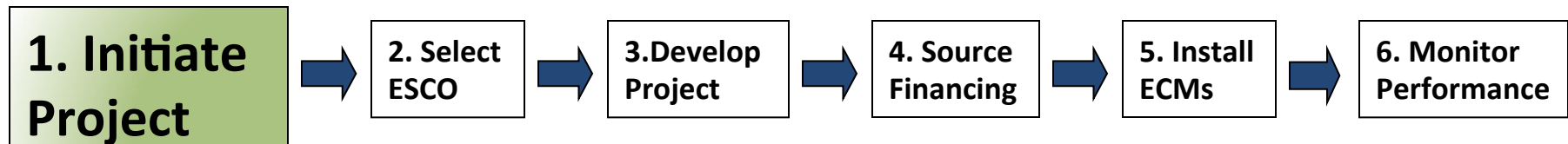
### **Project Scope**

- Lighting Upgrades
- DDC Energy Management System
- Mechanical System Upgrades
- New Chillers
- New Boilers
- New Air Handler Units

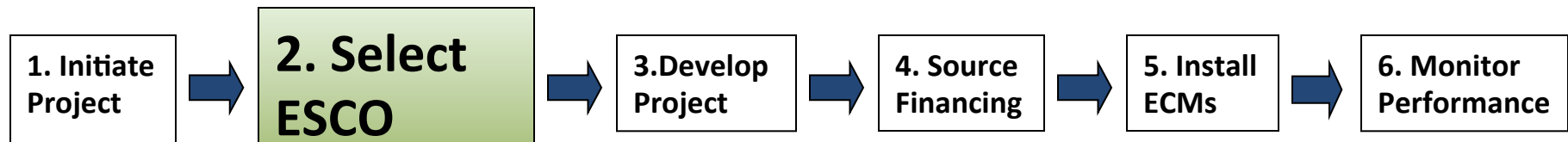
## GESPC Procurement Process







- 1.1 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 EOIs to Selection Panel.**



**2.1 Selection Panel Develops Short List of ESCOs (3-5)\***

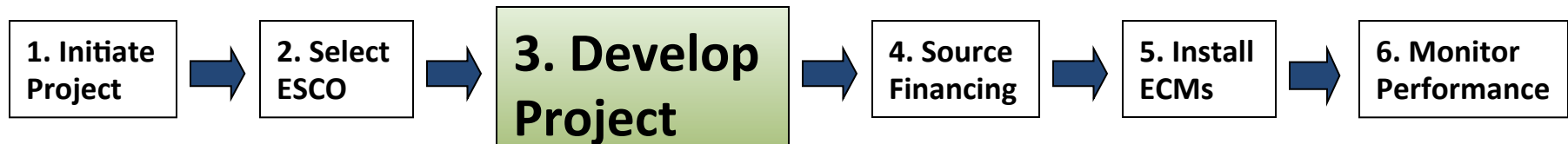
**2.2 Institution develops and issues RFP to short-listed ESCOs\***

**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.**

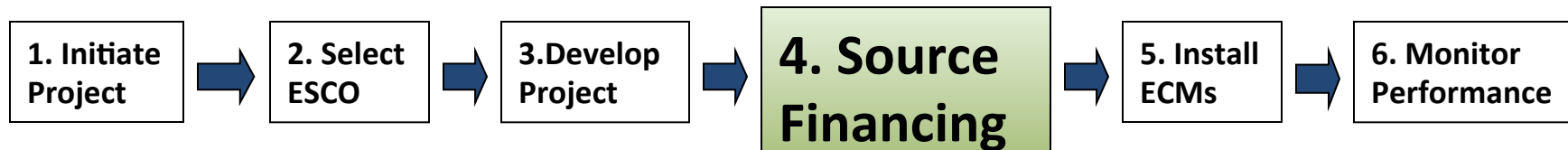
**3.2 ESCO conducts Investment Grade Audit (IGA)**

**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.**

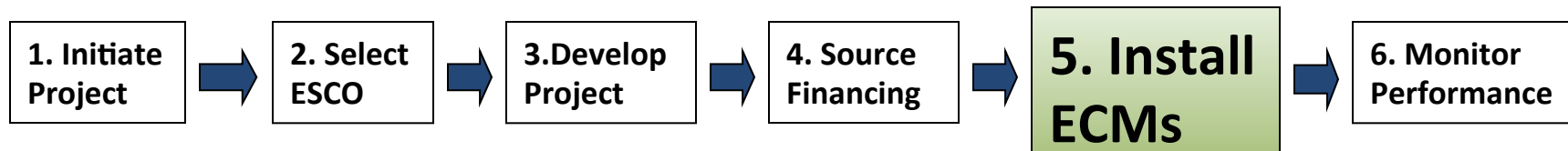


**4.1 The Board of Regents requests that GSFIC obtain financing.**

**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.**

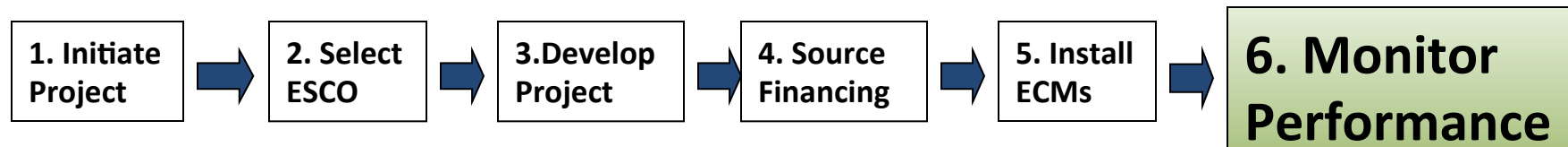


**5.1 ESCO begins construction process.**

**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.**



**6.1 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**

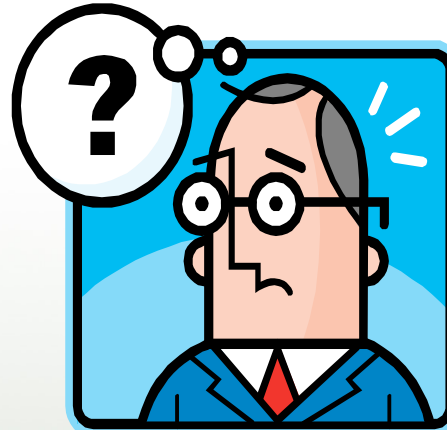




## Next Steps.....

- Selection of State Pre-Qualified ESCOs
- GSFIC Selection of Financial Lenders
- Workshops and Training

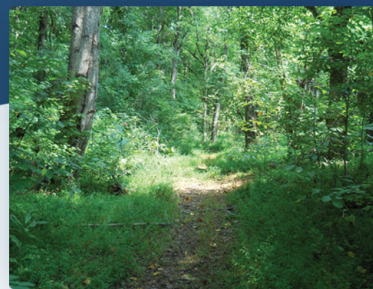
# Questions ?





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Category	Bid & Spec	GESPC
<b>Funding</b>	<ul style="list-style-type: none"> <li>▪ Energy projects must compete for limited budget resources</li> <li>▪ Insufficient funding for comprehensive energy project</li> <li>▪ Cost overruns may reduce scope</li> </ul>	<ul style="list-style-type: none"> <li>▪ Comprehensive energy project is 100% funded from the existing operating budget; no upfront capital required.</li> <li>▪ Guaranteed maximum price; no change-orders</li> </ul>
<b>Staffing</b>	<ul style="list-style-type: none"> <li>▪ Limited staff or lack of expertise</li> <li>▪ High staff costs due to a piece-meal approach to bidding and managing each separate project</li> </ul>	<ul style="list-style-type: none"> <li>▪ ESP provides single-source accountability and technical expertise to audit, engineer, implement, and ensure project performance</li> </ul>



Category	Bid & Spec	GESPC
<b>Project Performance</b>	<ul style="list-style-type: none"> <li>▪ Multiple contracts with multiple vendors can result in conflicting project requirements</li> <li>▪ Lowest first cost equipment selections</li> </ul>	<ul style="list-style-type: none"> <li>▪ One contract; single source of accountability for project design, implementation, and performance</li> <li>▪ Comprehensive project implementation maximizes savings design opportunities</li> </ul>
<b>Savings</b>	<ul style="list-style-type: none"> <li>▪ No energy savings guarantee</li> <li>▪ No Measurement &amp; Verification to document energy reduction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long-term energy savings are contractually guaranteed</li> <li>▪ M&amp;V services reduce risk of savings erosion over time</li> </ul>