ESPC or Design-Bid-Build for Your Retrofit?

Choosing to save energy, whether to cut costs, improve operational efficiency, develop energy infrastructure, conserve domestic energy resources, or protect public health makes excellent sense, but determining how best to approach an energy savings project can be a challenge.

One approach is to use an Energy Savings Performance Contract (ESPC). With an ESPC, an institution enters into a contract with an Energy Services Company (ESCO) which is responsible for developing and implementing an energy savings plan and installing energy efficiency upgrades. The resulting energy savings are then used to pay for the upgrades over time. The ESCO guarantees the projected energy savings and provides ongoing reports verifying the actual savings.

Another approach is to use the traditional design-bid-build process or "do-it-yourself" route where the organization itself performs or procures different aspects of an energy-saving project, like project evaluation, engineering, construction, and post-installation verification.

How can you determine which process is better suited for upgrading your facilities and achieving long-term cost savings?

Project Planning & Development

Energy Savings Performance Contracting

Development

- ESCO selected through procurement process¹
- Contract for Investment Grade Audit (IGA) is negotiated and executed
- ESCO performs Investment Grade Audit (IGA) (no upfront cost unless ESPC not pursued)

Selection Process & Negotiation

- ESCO presents a cash flow analysis with a bundled set of measures that can be paid for through savings
- Scope of project and contract are negotiated and executed with ESCO

Financing

ESCOs that are registered municipal advisors in your state may facilitate financing. Otherwise, projects must find their own financing and ESCOs may provide information (education) about how financing is generally managed

Project Implementation

- ESCO completes project
- ESCO performs commissioning

Post-Acceptance Performance

- ESCO performs ongoing measurement and verification to validate performance²
- ESCO provides reimbursement if guaranteed savings are not met and/ or fixes the problem at no additional cost











Design-Bid-Build

- RFP for design/engineering consultant prepared and released
- RFP evaluated and engineering consultant selected
- Engineering consultant performs Investment Grade Audit (requires funding)
- Engineer prepares plans and specs (requires funding)
- Project budget prepared
- Contractor RFP prepared and released
- RFP evaluated and contractor selected

- Projects must find their own financing
- Contractor completes project
- Commissioning performed by commissioning agent if included in contract
- None, unless arrangements are made for a third-party firm or internal team to perform ongoing commissioning and/or measurement and verification

Some states offer lists of pre-qualified ESCOs to streamline ESCO procurement | Some states require measurement and verification be done by an independent third party in place of an ESCO

Advantages of ESPC

- ESCO accountable for project evaluation, design, construction, and post-installation monitoring
- Single point of contact

- No upfront cost
- Guaranteed cost and energy savings
- ESCO may be able to facilitate financing or provide education

Advantages of Design-Bid-Build

- Familiar or traditional procurement approach
- Can be cost effective for organizations with in-house technical expertise like those that have design capability and can perform their own Investment Grade Audits, commissioning, or measurement and verification