

ESPC Execution Plan

Bureau of Overseas Buildings Operations
US Department of State

What are ESPCs?

And Why Would We Do Them?

- **Definition:**

Energy Savings Performance Contracts (ESPCs) are partnerships between an owner and an Energy Services Company (ESCO), who audits, designs and constructs a project to reduce energy costs and arranges to pay for it. The ESCO is reimbursed from the energy cost savings over a payback period up to 25 years.

- **ESPCs are a funding strategy endorsed by the USG thru legislation in 1992**
- **There is no mandate to use ESPCs and the GAO consider them less cost effective than projects executed with appropriated funds**
- **ESPCs are intended to help Agencies achieve the goals of EISA 2007 and subsequent E.O.s**
- **DOS signed a non-binding MOU in 2008 with DOE/FEMP (Federal Energy Management Program) to access their ESPC expertise and resources**
- **In 2009 DOE/FEMP increased its pool of ESCOs, approved for overseas projects, from 2 to 16**

Prior Use of ESPCs

To date, OBO/CFSM/FAC has successfully executed four ESPC projects:

- **Santo Domingo – Lighting and Controls Upgrade**

 - Contract Value: \$721,000

 - Savings: 697,000 kWh/yr

 - Construction Completed: July 2005

 - Payback: \$80,000/yr for 10 years

 - Close-out: October 2008 (early payoff)

- **Mexico – Lighting and Controls Upgrade**

 - Contract Value: \$578,000

 - Savings: 787,000 kWh/yr

 - Construction Completed: May 1999

 - Payback: \$67,000/yr for 9 years

 - Close-out: March 2006 (early payoff)

Prior Use of ESPCs

- **Dhaka – Gas Micro-Turbine Generators at Residences**

Contract Value: \$725,000

Savings: 632,000 kWh/yr

Construction Completed: June 2007

Payback: \$64,000/yr for 11 years

Close-out: June 2018

- **Seoul – Ground Source Heat Pumps at Residences**

Contract Value: \$12,500,000

Savings: 1.65 million kWh/yr (plus fuel oil and boiler maintenance)

Construction Completed: March 2001

Payback: \$350,000/yr for 19 years

Close-out: March 2020

Project Specific Issues

Concerns and Pitfalls

The process of implementing an ESPC or performance contract is wrought with potential problems and legal issues.

- Proper competition of contracts
- Unsolicited Contractor offerings
- Resource management
- Hidden Costs
- Personnel Turnover
- Security Requirements
- Contractor Accessibility
- Multi-year performance evaluation

ESPC Execution Plan

Phase 1

Energy Savings Performance Contracts are resource intensive and require a clear understanding of the roles and responsibilities of all parties involved.

A three phase Execution Plan as follows:

1. Pre-Contract Phase – OBO managed and funded with post input

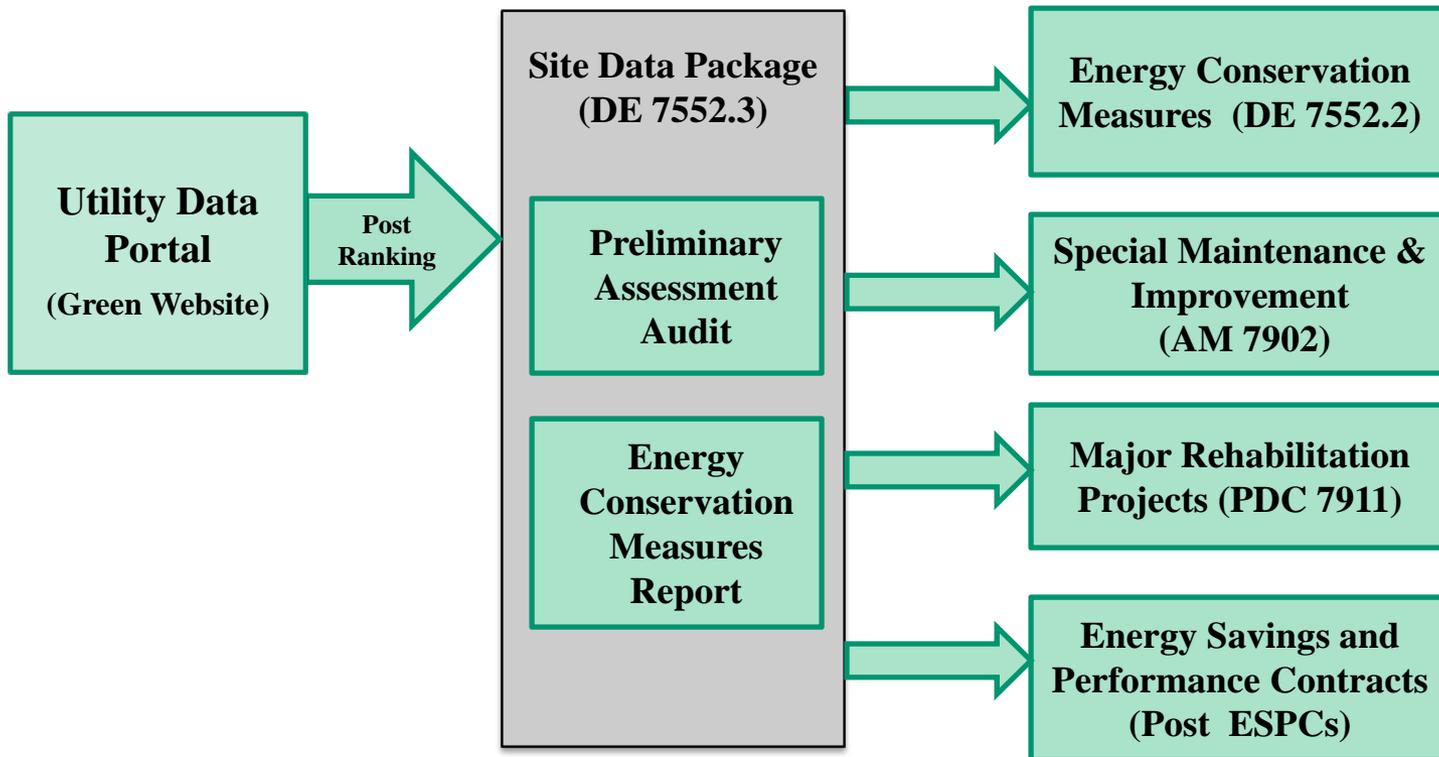
This is the preliminary data collection and project planning phase, which uses the **Utility Data Portal** to identify energy usage and cost factors. High priority posts receive preliminary energy assessment audits. The resulting deliverable called The Site Data Package is used as attachments to the ESPC Request For Proposal.

- **OBO/PDCS/DE/ESD** will manage this phase using ESD Division staff and Energy Conservation Program funds.
- Alternatively, posts may choose to work directly with an ESCO for project development **at their own expense**.

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Phase 1

Pre-Contract Phase OBO Activities



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Phase 1

Post initiated Projects

In the event a facility wishes to act without OBO involvement in the determination process of the facility ranking. There are significant efforts required to accomplish this and resources required to initiate the process.

- Contractor initiated Proposal
- Government Initiated Contract

(See Process Chart Next Slide)

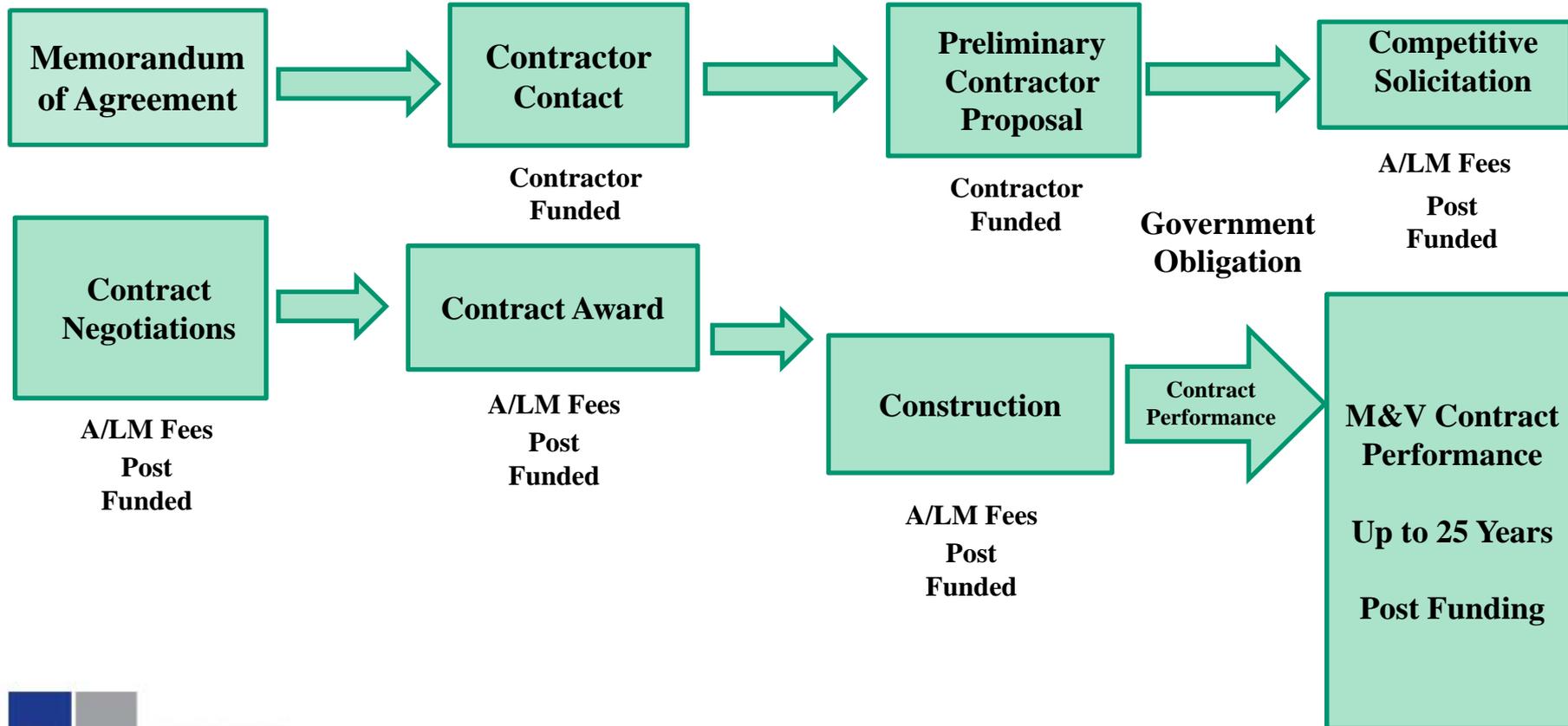
There are people and agencies available for assistance.

- OBO - Limited Roll
- DOE - Federal Finance Specialist (Tomas Hattery)

ESPC Execution Plan

Post Implemented

Pre-Contract Activities



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Phase 2

2. Contract Phase – Post managed and funded with OBO input

This is the solicitation, award and construction phase. It starts with a Memorandum of Agreement (MOA) between The Bureau, post, and ICASS Council to commit to the payment plan. Other significant activities include the following:

- Post works directly with A/LM to advertise and release the ESPC RFP
- OBO helps post evaluate initial proposals based on established criteria
- A/LM issues a Letter of Intent to Award to the selected ESCO
- The ESCO performs an Investment Grade Audit
- A/LM issues the final ESPC contract in conjunction with DOE/FEMP
- The ESCO proceeds with design and construction activities
- OBO provides technical advice and QA support as needed (ref: 15 FAM 640)
- Post may be required to hire a third party contractor to manage complex ESPC projects

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Phase 3

3. Performance Phase – Post managed and funded with OBO input

This is the long term period of performance when energy conservation measures are put into service. This phase can last up to 25 years and will require continuous post support as defined in the ESPC contract. Key events are:

- Post contracts for the systematic Measurement and Verification (M&V) of savings by an independent auditor
- The Bureau and/or ICASS release funds in accordance with the M&V reports
- A/LM issues contract modifications if the facility is altered or if there is a change in usage
- The ESPC contract can be paid off early if funds become available
- At the end of the contract term, the ESCO receives final payment and the government retains the installed equipment
- The government continues to receive energy savings free of ESCO payments