GSA’s Approach to Deep Energy Retrofits in ESPCs

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Types of Projects

* 1. Appropriations Only
   * Most of ARRA
   * GSA’s Capital Program

* 2. Financed
   * ESPCs
   * UESCs
   * PPAs

* 3. Combination Appropriations and Financed
How are needs identified?

* Regions work on 5-year Portfolio Plans
  * Driven by Infrastructure and Tenant needs and Agency Goals
  * Regions submit projects for funding and they are evaluated by Decision Lens Tool.
    * Decision Lens Tool has multiple criteria for project selection including energy savings
  * ESPC Program Management Office (PMO) is part of the 5 year Portfolio Plan discussion

Are appropriations Available?

* If yes, are they sufficient to achieve the needs?
* If No, look at financing and/or Combination with financing

Other drivers:

* Presidential Performance contracting challenge (PPCC)
* Funding was provided for limited scope and full building renovations.
* Projects were selected based upon multiple factors.
  * Energy savings
  * Reducing repair/replacement needs
* Projects selected by ARRA PMO
  * Provide a narrative, cost estimate and energy savings calculations.
Presidential Memorandum on Implementation of Energy Savings Projects and Performance-Based Contracting for energy savings

GSA’s commitment was $175 million in implementation value.

GSA’s Strategy to Meet our Commitment:

- The National Deep Energy Retrofit (NDER) project was a pilot to see if we can attain deeper energy retrofits than are generally seen in ESPC projects.
- Regionally run ESPC and UESC contracting.

Phase 2 of the PPCC was added

GSA’s commitment was $169,500,000 additional implementation value for a total commitment of $344,500,000.
GSA, in partnership with DOE wanted to see if Deep Energy Retrofits were possible in ESPC projects.

* At the time, DOE stated the average % of energy savings in ESPCs was 18%.

* GSA started with creating a Program Management Office to handle both policy and contracting for ESPCs.

* Industry and Government Charrette – Discuss how do we do this as partners.
In support of the GSA ESPC Effort:

- Created a PMO to:
  - Provide Guidance and capture Best Practices
  - Provide Subject Matter Experts to support regions during ESPC development
  - Provides quality assurance to regional ESPC contracting
  - Develop system to ensure essential EPSC administration during contract performance period

- PMO membership includes portfolio, budget, finance, energy team, and contracting.
- Program Legal Counsel was also assigned.
GSA’s Deep Retrofit Concept

* Held a Charrette with all ESCOs and GSA internal stakeholders to discuss if Deep Retrofits were Possible in ESPCs
* Open, collaborative and non-competitive environment to identify barriers and solutions to “raise the bar” on the level of savings an ESPC can provide to government agencies.
* Requested out of the box thinking.
Financing Option -
Current View

- Centralized Program Management Office (PMO):
  1. Pull energy information out of GSA systems for all buildings in the region.
  2. Evaluate potential projects based upon current condition, recent renovations, known needs, and energy usage.
  3. Send regions info on buildings PMO sees may have opportunities for ESPCs
  4. Request regional review and input and determination on buildings

<table>
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<tr>
<th>Region</th>
<th>Building</th>
<th>Category</th>
<th>GSF</th>
<th>BTUs/GSF all energy</th>
<th>Comments</th>
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Identifying key characteristics or triggers that could determine a strong deep retrofit opportunity.

Potential Triggers:
- Current and past projects in the building,
- Mechanical Expenses/GSF
- Energy Consumption, EUI % difference
- Occupant satisfaction rating
NDER Goals

* Move federal facilities towards net-zero energy consumption
* Reduce water consumption at federal facilities
* Implement cost-effective retrofits with payback periods of 25 years or less
* Complete associated construction work without major tenant disruption
* Use innovative technologies
* Use renewable energy technologies
* Use comprehensive and integrated whole-building approaches to determine ECMs
Results of NDER1

* Average DOE IDIQ task order energy savings:  18%
* Average Non-NDER GSA task order energy savings: 12%
* Average NDER task order energy savings: 38%

* Within GSA, 96 percent of the PMO-managed contracts (measured by contract value) actually got awarded, compared to only 19 percent of the non-PMO-managed contracts.
* NDER 2 is still in process.
Key Strategies for NDER Success

* 1. Engaged the ESCO community
* 2. Centralized PMO for program guidance
* 3. Showed NDER Success
* 4. Upper Management Support
* 5. Allowing the full 25 year term
Most ESPCs included some form of appropriated funding.

Types of Funding:
- Payment of the Investment Grade Audit
- Minor Repair and Alterations funding
- Prospectus level capital improvement funds

Issues
- Repair and Alterations funding is annual appropriations
- Prospectus funding is difficult to predict
Questions