



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 does GSA select buildings for Improvements?



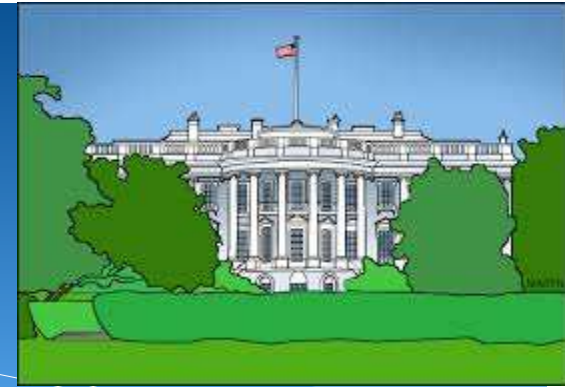
- * How are needs identified?
 - * Regions work on 5-year Portfolio Plans
 - * Driven by Infrastructure and Tenant needs and Agency Goals
 - * Regions submit projects for funding and they are evaluated by Decision Lens Tool.
 - * Decision Lens Tool has multiple criteria for project selection including 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)

ARRA



- * 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 Performance Contracting Challenge (PPCC)



- ❑ **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's ESPC National Deep Energy Retrofit (NDER) Program



- * 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.

Centralized Program Management Office



- ❑ 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

Region	Building	Category	GSF	BTUs/GSF all energy	Comments
5	OH2168ZZ	C	53,266	870,970.62	Leased
5	IL2460ZZ	C	23,280	221,135.53	Leased
5	MI0000CI	I	77,156	178,755.86	LPOE About 10 years after renovation of large portions.
5	MN0300ZZ	I	20,419	157,631.94	Small and isolated location
5	MI2004ZZ	C	66,652	126,063.03	leased
5	MI0724SB	I	88,256	122,308.88	Built 2005 with ARRA reroof already. Some potential projects
5	MI0402ZZ	A	13,587	116,823.12	Largely glass building. Good potential. Saganaw Mich.
5	MN0000WB	I	45,561	115,942.58	24/7 Constructed 2010 - No investment needs
5	MN0600ZZ	I	9,725	113,365.90	
5	WI0096ZZ	A	8,082	113,145.12	
5	WI0098ZZ	A	4,566	107,052.18	
5	MN0076ZZ	A	50,499	104,928.92	Tier 3 short term hold
5	IL0054ZZ	I	681,862	101,391.67	Previous ESPC
5	MN0084ZZ	A	21,350	92,558.43	Older facility some needs, In Minneapolis
5	MN0088ZZ	A	6,061	87,830.76	
5	OH0100ZZ	A	8,825	86,961.57	
5	MN0000GP	I	14,030	81,910.86	Remote and small

Financing Option – Future View



- * 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

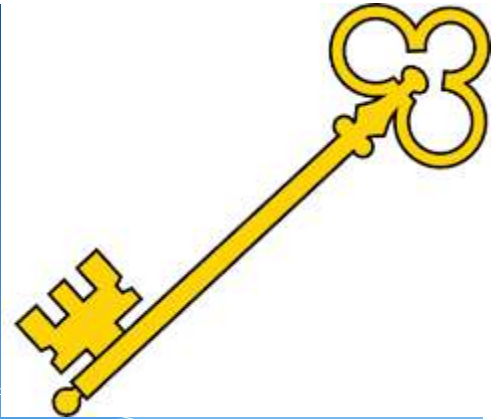
Results of NDER1



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

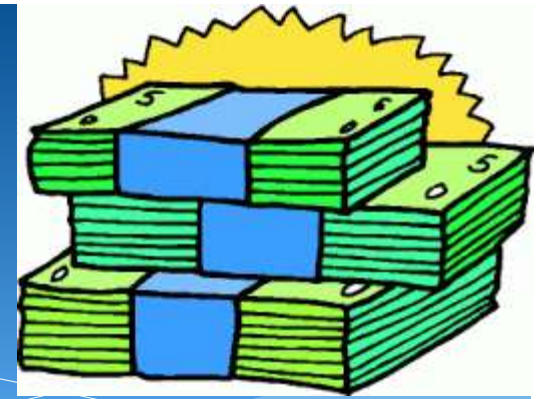
- * Within GSA, 96 percent of the PMO-managed contracts (measured by contract value) actually got awarded, compared to only 19 percent of the non-PMO-managed contracts.
- * NDER 2 is still in process.

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

Combined Funding



- * 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

