"In a Constrained Budget, How Performance Contracts Can Be the Answer to Achieving Energy Efficiency and Security Goals".

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Agenda

- Energy Savings Performance Contracting (ESPC) Overview
- How ESPCs work
- Case Studies
Energy Savings Performance Contracting (ESPC) Overview

- ESPC is a contracting vehicle where federal agencies can tap into private financing in order to help achieve energy efficiency and mission goals without up front capital cost when appropriated funds are not available.

- ESPC is authorized under 10 USC 2913. Term can not exceed 25 years. Savings must exceed project cost over the project term.

- Measurement & Verification (M&V) required to prove savings throughout the term of the contract.
Energy Savings Performance Contracting (ESPC) Overview con’t

- ESPCs are revenue neutral to the government
- Various Energy Conservation Measure (ECM) can be employed as part of a project. These include but are not limited to:
  a) Renewable – Solar, Wind, Geothermal
  b) HVAC & Controls Improvements
  c) Lighting
  d) Waste to Energy
  e) Water Improvements
How ESPCs Work

1. Before ESPC: *Funds are wasted on energy and O&M costs*

   ![Diagram showing energy bill, O&M costs, government savings, and contractor payment]

2. During ESPC:
   - Private Sector finances, installs and maintains new energy efficient equipment, at no upfront cost to government
   - Energy savings are guaranteed by contractor
   - Government pays off investment with savings on utility bill

3. After ESPC: *Government keeps the savings after investment is paid off*
Energy Performance Contracting: Another look

Baseline energy costs

Cost for upgrade covered by guaranteed savings

Saved energy costs

Reduced energy costs thanks to performance based solutions

Timeline

Cost

Detailed Analysis

Contract begins

Contract duration

Contract ends

Guaranteed Benefit

Investment
Case Study - U.S.M.C Base 29 Palms

- Energy Management System for Buildings
- Lighting retrofits
- New central plants
- Cogeneration plant – 7 MW/dual fuel

$138 Million in total savings over the term
Case Study – Fort Bliss

U.S. Army – Fort Bliss
Building renewable generation systems to improve energy security

- Designed and installed highly efficient photovoltaic arrays
- Added 50 tons of solar cooling
- Improved living conditions through solar thermal heating for barracks and community pool
- Integrated utility metering to UMCS in over 125 buildings

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