

Turn Insights into Action



A Blueprint for Leveraging ESPCs to Upgrade Federal Facilities

SEPTEMBER 17, 2025



Agenda

Current Challenges & Why They Matter

Funding the Solutions with Savings:
ESPCs and ESCOs

The ESPC Process:
From Understanding to Action

What's Possible

Taking Action




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Current Challenges & Why They Matter



A photograph of the J. Edgar Hoover FBI Building, a large, modern, multi-story structure with a distinctive grid-like facade of windows. The building is set against a clear blue sky. In the foreground, there are several large, rectangular planters with greenery. To the right, there are trees and a flagpole with the American flag. The image has a dark blue overlay.

“ The median age of the 130,000 federally owned and operated buildings across the nation is 60 years. ”

Gordian, 2024



Challenges Facing Agencies

Aging Infrastructure



Higher energy use

Rising operating costs

Deferred maintenance issues

Morale and quality of life

Increased disruption

Elevated safety risks

Inability to advance mission

Unable to meet evolving occupant needs

Compliance Mandates & Regulations



Examples:

Energy Acts

Executive Order 14154

10 U.S.C. § 2920

Adhere or face penalties

Must act now for certain funding

Energy
Resilience

Why Agencies Delay



**Budget constraints
and uncertainty**



**Capital project
approval delays**



**Funds dispersal
timelines**



**Complex
procurement rules**



**Risk
perception**



**Competing
priorities**



**Knowledge
gaps**



**Staffing
issues**



But, Inaction Has a Price

Hidden Costs



Repetitive maintenance = temporary fix & costly

Rising Utility Costs

Loss of funds from inefficiency and delays

Not capturing savings opportunities today

Operational disruptions and inadequate support for mission needs

Growing maintenance backlog

Reduced facility resilience

“

DMR estimates have increased sharply in recent years, jumping 57% from FY2017 through FY2022.

”

Deferred Maintenance and Repair at Civilian Agencies: Causes, Risks, and Policy Options (2024)



Funding the Solutions with Savings: ESPCs & ESCOs





ESPCs Deliver Guaranteed Savings

Energy Savings Performance Contract (ESPC)



A financial agreement where an energy service company (ESCO) implements energy efficiency improvements and guarantees savings to cover the costs over time.



Allows agencies to fund upgrades using future savings, **with little to no upfront capital.**



They are guaranteed, so there is **little risk of losing money.**



ESCOs **reimburse you for missed savings** if the guarantees are not met

Historically, ESCOs, including Trane, have overdelivered on savings for federal agencies.



The Importance of a Trusted ESCO

An energy service company (ESCO) specializes in energy efficiency and infrastructure upgrades and is responsible for project delivery and guaranteed savings.

Early collaboration helps ensure the **project aligns with agency goals and your mission**

ESCOs bring **expertise in technical solutions and federal contracting**

Involve them during project planning,
not just execution

TRAITS TO LOOK FOR IN AN ESCO

- ✓ Industry accreditation
- ✓ Positive track record of success
- ✓ Trusted advisors in the government sector
- ✓ Transparent pricing structures and clear terms
- ✓ Comprehensive approach



The ESPC Process: From Understanding to Action





Step 1



Assess Facilities

Step 2



Identify Energy / Water Efficiency
& Resilience Opportunities

Step 3



Rank Priorities & Objectives

Step 4



Validate Savings & Secure Funding

Step 5



Construction & Commissioning

Step 6



Monitor / Measure / Validate Savings
& Provide Performance Period OMR&R



Step 1

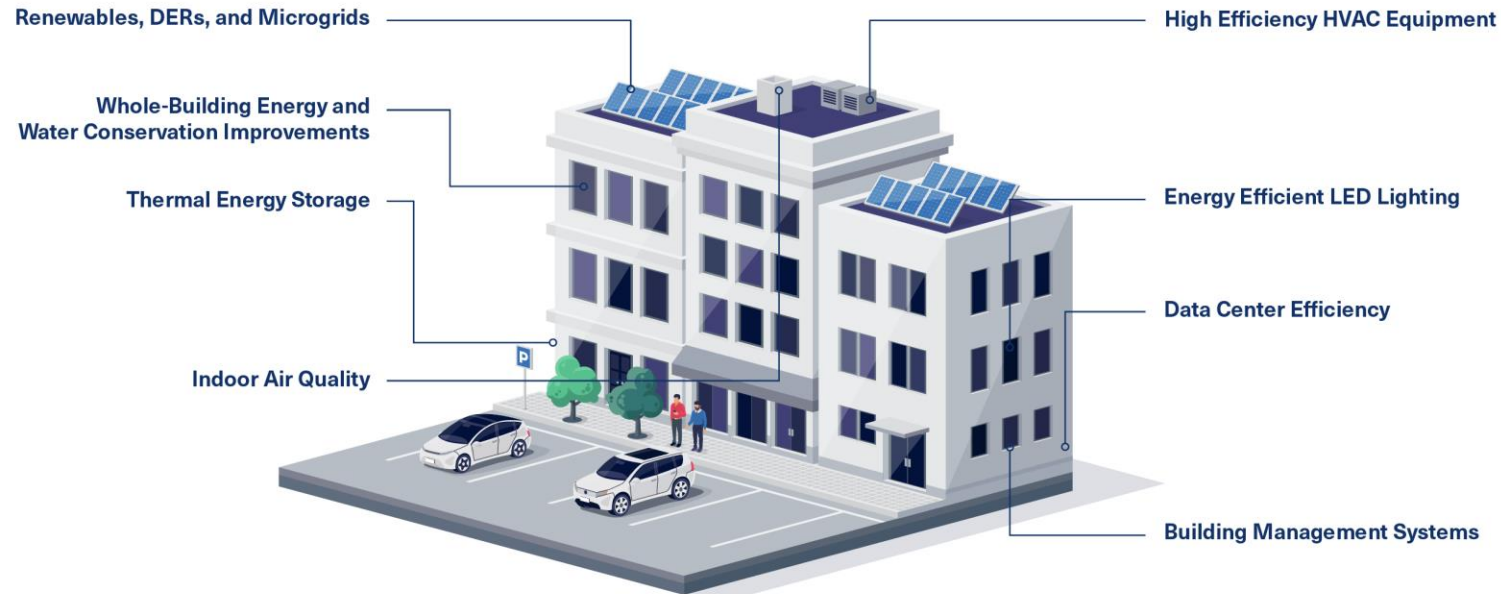


Assess Facilities

- ✓ Conduct comprehensive energy and water audits across all building systems
- ✓ Evaluate existing infrastructure for vulnerabilities and inefficiencies, or planned improvements
- ✓ Document baseline utility consumption and operational costs
- ✓ Identify critical systems vital for building resilience

Services & Solutions ESPCs Can Fund

Technical Solutions



Subject Matter Expertise



Energy
Auditing



Project Design
& Engineering



Construction
Management



Measurement &
Verification (M&V)



Risk & Compliance
Management



Step 1



Step 2



Identify Energy / Water Efficiency & Resilience Opportunities

- ✓ Analyze audit results to find improvement areas
 - Collaborate with ESCOs to develop solutions and project lists aligned with goals, regulations and paybacks
- ✓ Consider sunk costs and non-cashflowing ECMs supporting strategic goals
- ✓ Pursue companion funding sources, available incentives and other energy related savings sources



Step 1



Step 2



Step 3



Rank Priorities & Objectives

- ✓ Prioritize projects based on mission impact and resiliency
- ✓ Factor in cost-benefit analysis and payback periods
- ✓ Engage stakeholders to align goals and secure project buy-in
- ✓ Weigh regulatory compliance and potential incentives
- ✓ Balance development costs with project viability



Step 1



Step 2



Step 3



Step 4



Validate Savings & Secure Funding

- ✓ Use ESPCs to finance projects outright, or with minimal agency companion funding
- ✓ Finalize contracts with clear terms & conditions, performance guarantees and share risks and responsibilities
- ✓ Coordinate implementation schedules to minimize operational disruption
- ✓ Implement projects to meet relevant codes, regulatory, safety and environmental requirements



Step 1



Step 2



Step 3



Step 4



Step 5



Construction & Commissioning

- ✓ Manage project to minimize any operational and mission interruptions
- ✓ Follow all building codes and design requirements
- ✓ Regular communications with all project stakeholders
- ✓ 3rd party commissioning to ensure operations as designed/intended



Step 1



Step 2



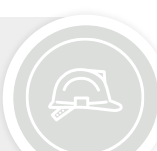
Step 3



Step 4



Step 5



Step 6

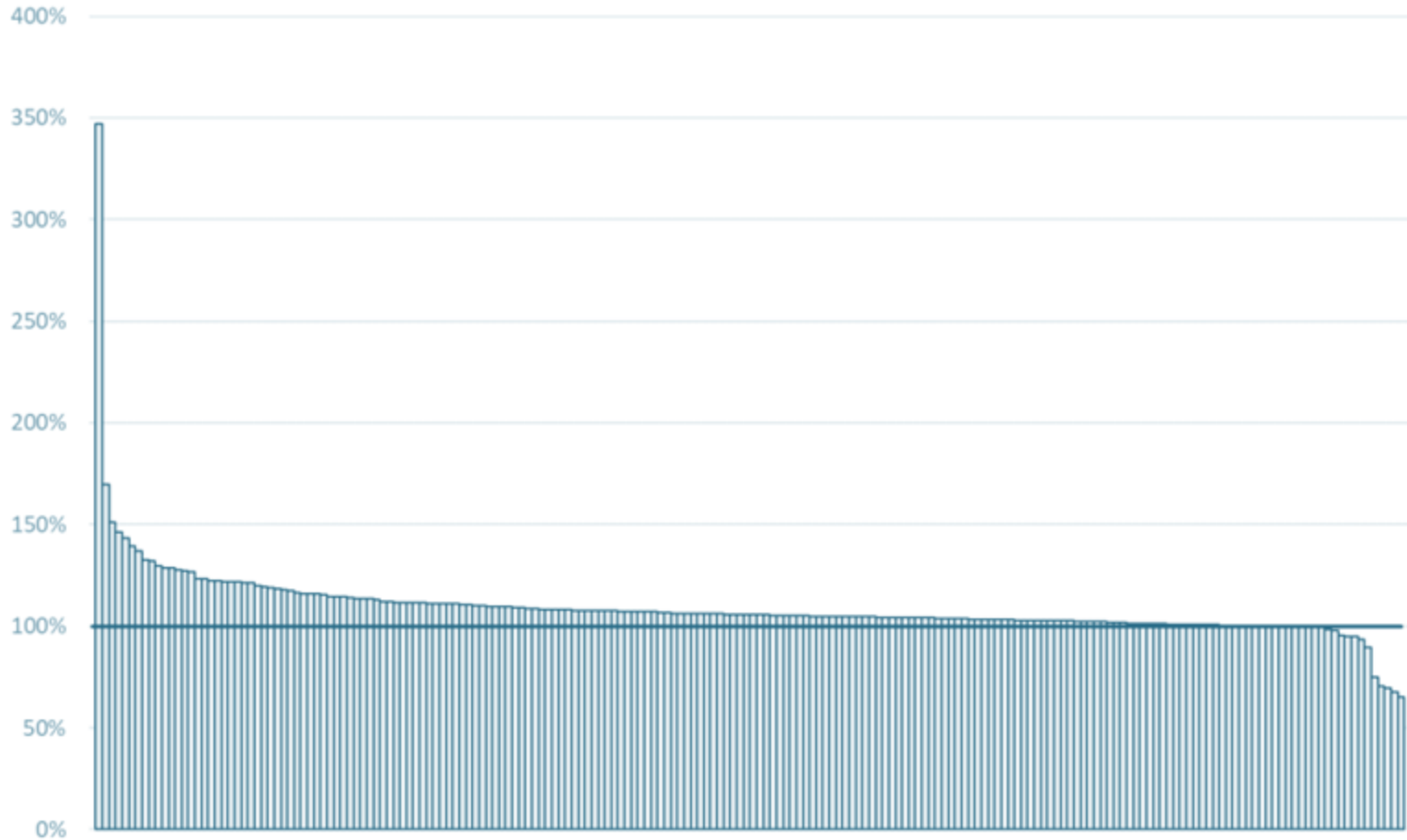


Monitor / Measure / Validate Savings & Provide Performance Period OMR&R

- ✓ Monitor and review energy savings to ensure contract compliance
- ✓ Collaborate with ESCOs to optimize long-term efficiency goals
- ✓ Refine operations and maintenance practices for continuous improvement
- ✓ Explore reinvesting excess savings into additional ECMs.



Guaranteed Annual Cost Savings Reported

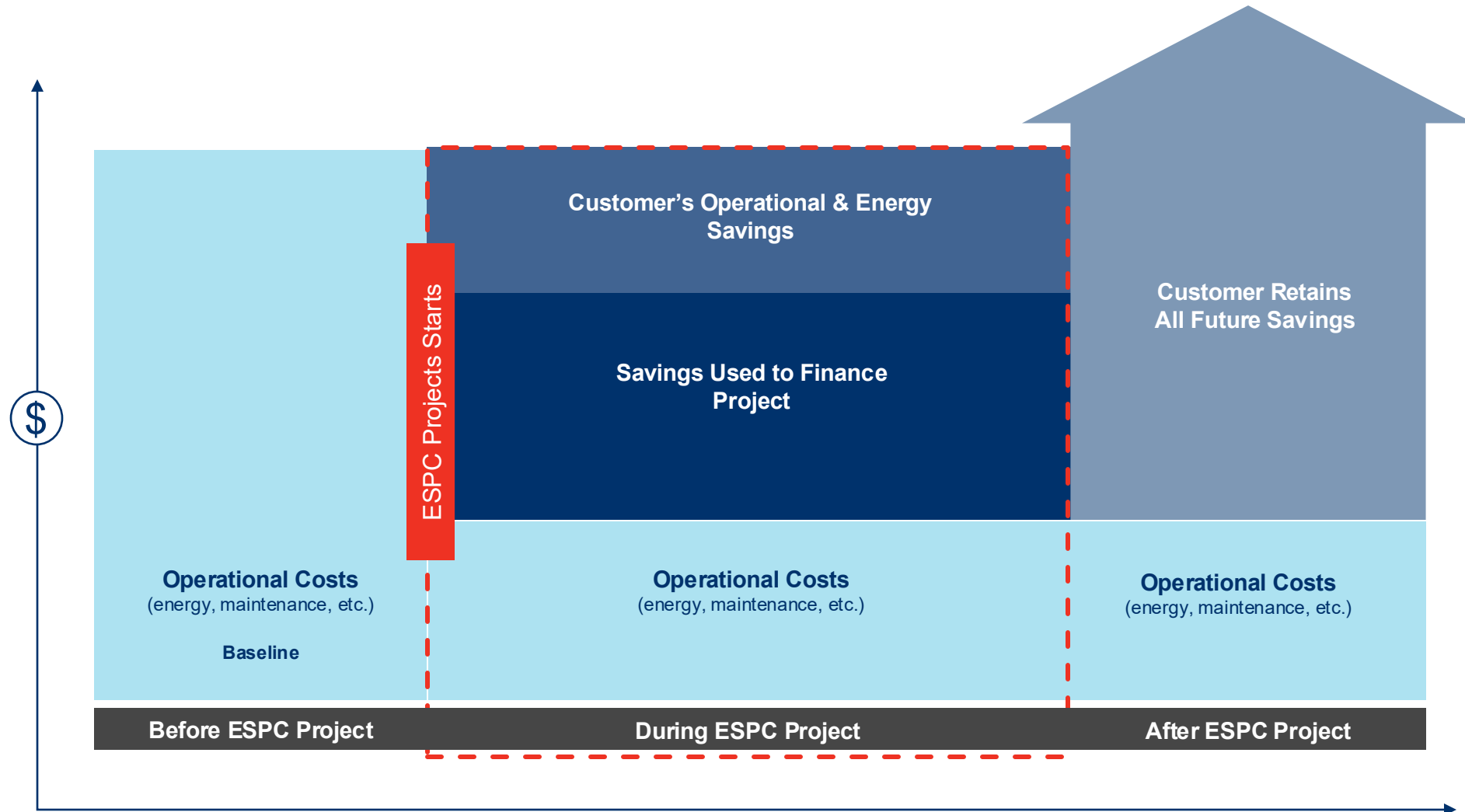


Reported Energy and Cost Savings from the DOE ESPC IDIQ Program, FY 2023

DOE ESPC-IDIQ
projects reported annual
cost savings averaged
111.7%
of guaranteed savings
for 180 out of
195 projects



The Financial Life Cycle of an ESPC





What's Possible





Outcomes You'll Achieve



Mission Support – Elevated / more comfortable environments

Infrastructure Resilience – Increased reliability and operational continuity

Project Tail – Ongoing O&M and R&R often missing in other funded projects

Cost Savings – Guaranteed reductions in utility and operating expenses

Risk & Compliance Management – Meeting energy, cyber and environmental goals

Energy Efficiency – Significant reduction in overall energy consumption



CASE STUDY

Energy Resilience in Action: US Air Force's Innovative Infrastructure Upgrade



CHALLENGE

Lacks critical mission resilience, high energy consumption and costs required new solutions to improve efficiency, cut expenses, and withstand severe weather and other disruptions.

SOLUTION

A facility assessment led to a comprehensive energy improvement plan, including a new liquefied natural gas (LNG) facility, renewable energy integration, and advanced infrastructure management to enhance efficiency and operational continuity.

RESULTS

- **Critical mission resilience** to operate primarily off-grid
- **\$560 million** project savings over the next 22 years
- **20%** reduction in energy waste across 679 buildings
- **70%** of peak electrical demand now generated by renewables
- **20%** reduction in the annual electrical load
- **14,619 mtCO2** annual reduction of greenhouse gas emissions
- **\$0 investment** from the Air Force



Taking Action & Achieving Outcomes



Upgrades Start When You Do



See It

Know where improvements will
deliver the biggest wins



Own It

Engage your ESCO, set the
scope, and lock in performance
guarantees



Do It

Leverage ESPCs to modernize,
save, and strengthen
your mission



Questions

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