



Introduction to ESPC ENABLE

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- ESPC Review
- ESPC ENABLE Overview
- Comparison of Project Funding Options
- ESPC ENABLE Process
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The U.S. Department of Energy's Federal Energy Management Program (FEMP) works with key individuals to accomplish energy change within organizations, by bringing expertise from all levels of project and policy implementation, to enable Federal agencies to meet energy-related goals and to provide energy leadership to the country.

Contracts that allow agencies to do energy projects with minimal up-front capital cost and no special appropriations from Congress.

Energy Services Company (ESCO)

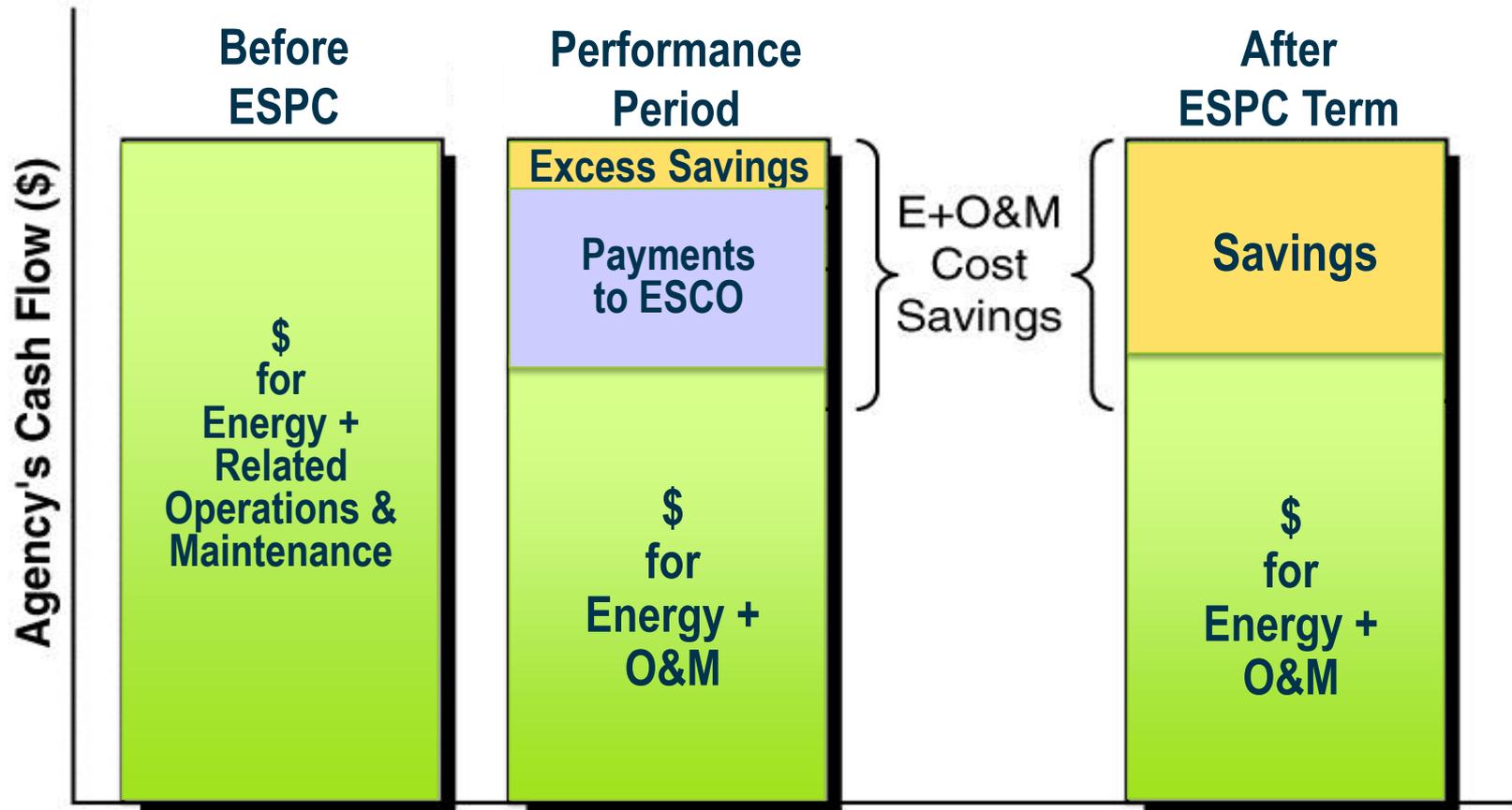
- Arranges project financing
- Guarantees cost savings sufficient to cover project costs

Agency

- Pays ESCO over term of contract from guaranteed cost savings

Reallocate the Government's Utility Bill

- ◆ Stop paying for waste and pollution ◆ Start paying for efficiency ◆



ESPC Authorizing Law & Enabling Legislation

- National Energy Conservation Policy Act, Title VIII Shared Energy Savings (1986)
- Energy Policy Act (EPAAct 1992)
- 42 USC 8287 – ESPC Statutory Authority
- DOD Authorization Act 2004
- Energy Policy Act 2005
- Energy Independence & Security Act (EISA 2007)
- 10 CFR 436 – Implementing Regulations
- National Defense Authorization Act FY11
- Federal Acquisition Regulations Part 23
- Executive Order 13423
- Executive Order 13514
- Presidential Performance Contracting Memo (December 2011)



(See FEMP ESPC Web pages for details)

<http://energy.gov/eere/femp/energy-savings-performance-contracts>

- Tool to meet required energy and water goals
 - \$4B Presidential Performance Contracting Challenge
 - Agency goals under Executive Orders to reduce energy, water, GHG
- Serves as means to address deferred maintenance
- Allows facility to operate more efficiently and effectively with greater comfort and improved operating conditions
- Enhances agency mission and tactical operations



FEMP ESPC IDIQ Results (1998-2014)

- 325 FEMP ESPC projects have been awarded by 25 agencies
- Average project size: \$10.5 Million
- Total project investment: \$3.41 Billion
- Total savings: \$8.53 Billion
- Energy savings: 398 million MMBtu
- Projects have produced average savings of 108% of the ESCO guarantees



ESPC ENABLE is a new funding program:

- Intended for smaller projects at federal facilities (traditionally underserved market)
 - Or where ESPC ENABLE presents the best or only option for the agency to fund an energy and water efficiency project
- Standardized and streamlined process to quickly award projects and realize savings using GSA Schedule 84, SIN 246-53
- Targets straight-forward ECMs including lighting, water fixtures, basic HVAC controls, HVAC equipment replacement and solar PV
- Prescribes basic levels of measurement and verification (M&V) for each ECM

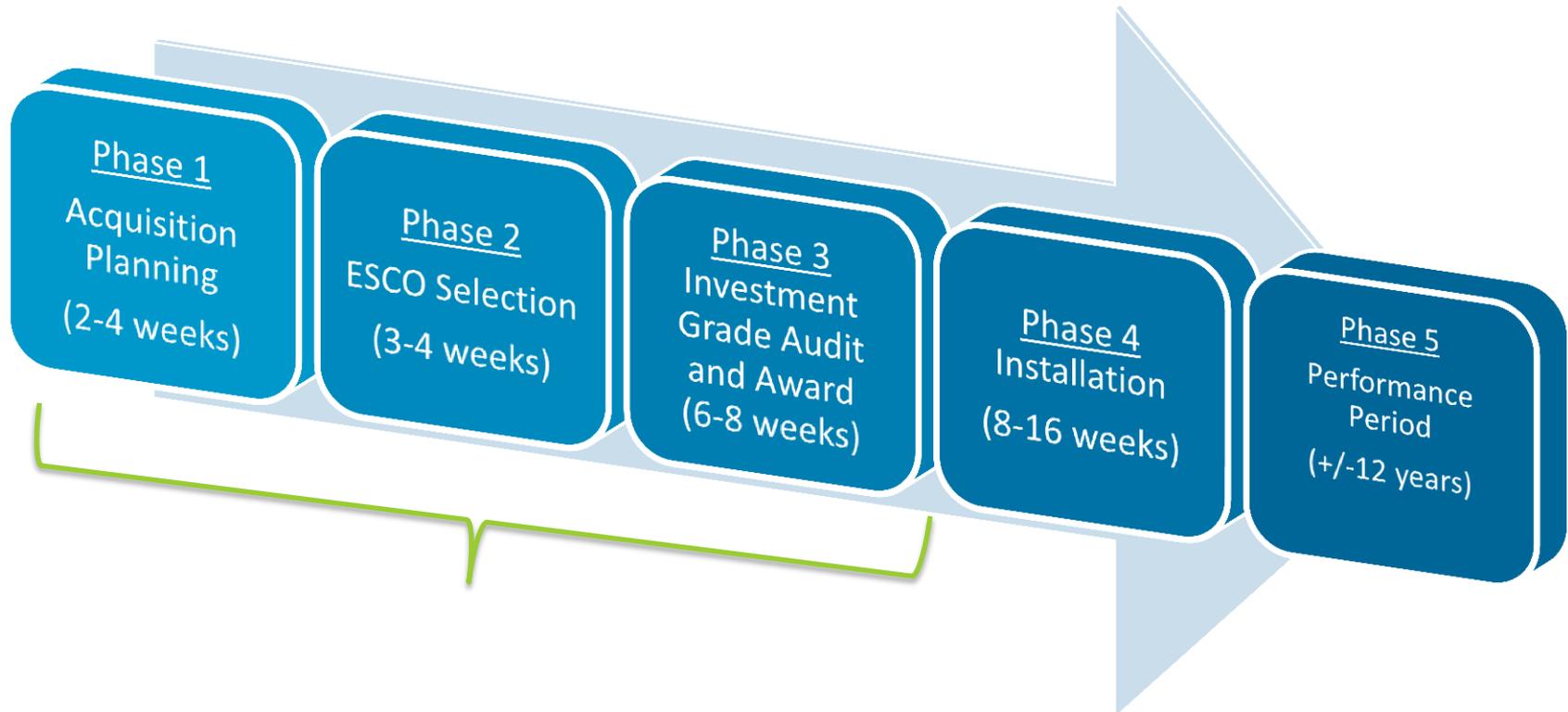
ECM	Included	Not Included
Lighting	<ul style="list-style-type: none"> Lamps, Ballasts, Fixtures Controls: Occupancy, Day lighting (on/off, dimming) 	<ul style="list-style-type: none"> Solar Lighting (off-grid installations allowed)
Water	<ul style="list-style-type: none"> Sanitary plumbing fixtures: sinks, toilets, urinals, showers Irrigation Leak repair Domestic/commercial hot water heaters Water based appliances: dishwasher, ice machine, clothes washer, etc. 	<ul style="list-style-type: none"> Heating/Cooling system improvements (cooling towers, once through cooling, condensate reclaim)
HVAC Controls	Whole building control strategies including: <ul style="list-style-type: none"> Time/Temperature Set-back Demand/Night Ventilation 	<ul style="list-style-type: none"> Advanced Controls ¹: Energy Management Control Systems (EMCS) / Building Automation Systems (BAS)
HVAC Equipment	Basic whole building/system one-for-one replacement ² of: <ul style="list-style-type: none"> Window AC units / Electric Baseboard heat Split AC/Furnace Heat Pumps Packaged Terminal Air Conditioner (PTAC) Packaged Single Zone Air Conditioner (PSZ) Roof Top Units (RTU) 	<ul style="list-style-type: none"> Single building Boiler/Chiller Central Boiler/Chiller Plants Retro-commissioning based activities Non-building related heating/cooling/ventilation
Solar PV	<ul style="list-style-type: none"> Ground, Roof, Parking Canopy mount Fixed and Tracking Arrays Grid Tied and Off-grid 	<ul style="list-style-type: none"> Solar Thermal (Hot Water) Hybrid PV/Hot water systems

1. Advanced Controls may be considered, however savings calculations within the ENABLE IGA tool are limited to time/temp set-back, demand/night ventilation

2. Current ENABLE IGA tool is presently configured to model one-for one replacement of whole system(s) across an entire building with “like” systems (ex: replace (3) RTU’s with (3) higher efficiency RTU’s.) IGA Tool not presently configured to model partial replacement of building HVAC systems or replacement/modification of sub-systems (ex: VFD’s on select fan units).

Comparison of Project Funding Options

	DOE ESPCs	ESPC ENABLE	UESCs
Contract type	TOs under DOE IDIQ	GSA Schedule 84 (SIN246-53)	GSA Area-wide contracts; Basic ordering agreements
Private-sector partner	ESCO	ESCOs on GSA Schedule 84 (SIN246-53)	Serving utility company
Eligible facilities	Federally owned worldwide	Federally owned facilities worldwide	Where government pays utility bill; where offered/authorized
Project size	\$2 million or larger	< \$2M, site bundling is anticipated	Any
ECMs	Unlimited	Lighting, water, basic HVAC controls, HVAC equipment, and solar PV	Unlimited
Savings guarantees and M&V	Required	Required; simplified M&V	Negotiable; performance assurance required for annual scoring
O & M	ESCO responsible; tasking negotiable	Government or ESCO; ESCO provides training	Negotiable



- *Projects awarded in 12-16 weeks*
- *Energy/cost savings in 6-8 months*



Acquisition Planning

Activities: Estimated timeline – 2-4 Weeks

- Essential members of the acquisition team are identified
- Agency hosts kickoff meeting with acquisition team members
- Agency develops an Acquisition Plan*
- Agency develops the Request for Quotation/Notice of Opportunity*

**Indicates FEMP-provided template*



ESCO
Selection

Activities: Estimated timeline – 3-4 Weeks

- Request for Quotation/Notice of Opportunity is released
- ESCOs expression of interest (EOI)*
- Agency evaluates responses based on best value criteria outlined in the RFQ/NOO*
- Agency notifies unsuccessful offerors* and issues the notice of intent to award (NOITA)*

*Indicates FEMP-provided/required template

Tools can be found at:

<http://energy.gov/eere/femp/espc-enable-procurement-process>



IGA and
Award

Activities: Estimated timeline – 6-8 Weeks

- Agency prepares Scope of Work (SOW)*, then hosts Investment Grade Audit (IGA) kickoff meeting
- ESCO performs IGA using FEMP-provided survey tools*
- ESCO submits final proposal*, final negotiations occur
- Agency awards task order

**Indicates FEMP-provided template*

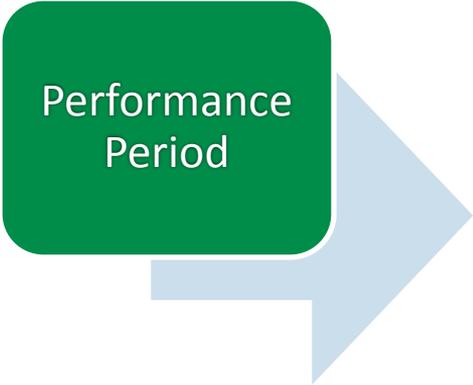
Installation

Activities: Estimated timeline – 8-16 Weeks

- Installation
- Commissioning*
- Measurement and Verification (M&V)*
- Agency Acceptance*



** Indicates FEMP provided plan templates and report outlines*



Performance
Period

Activities: Annual M&V audit performed to verify achievement of annual cost savings

- ESCO or agency must perform annual audit
- Equipment inspections are performed as prescribed in the M&V plan to verify savings achievement
 - Primarily Option A (Option B for solar PV)
- An annual M&V Report* is generated by the ESCO and submitted to the agency

** Indicates FEMP provided report outline*

Updates in the Program

- 20 qualified ESCOs under GSA Schedule 84
 - Nine Small Business vendors
- IGA tool being converted to web environment

Project Status

- Multiple projects underway (\$24M Pipeline)
- Project scopes range from one to multiple ECMs
- Efforts are leading to other performance contracting projects (IDIQ, Schedule 84, UESC)



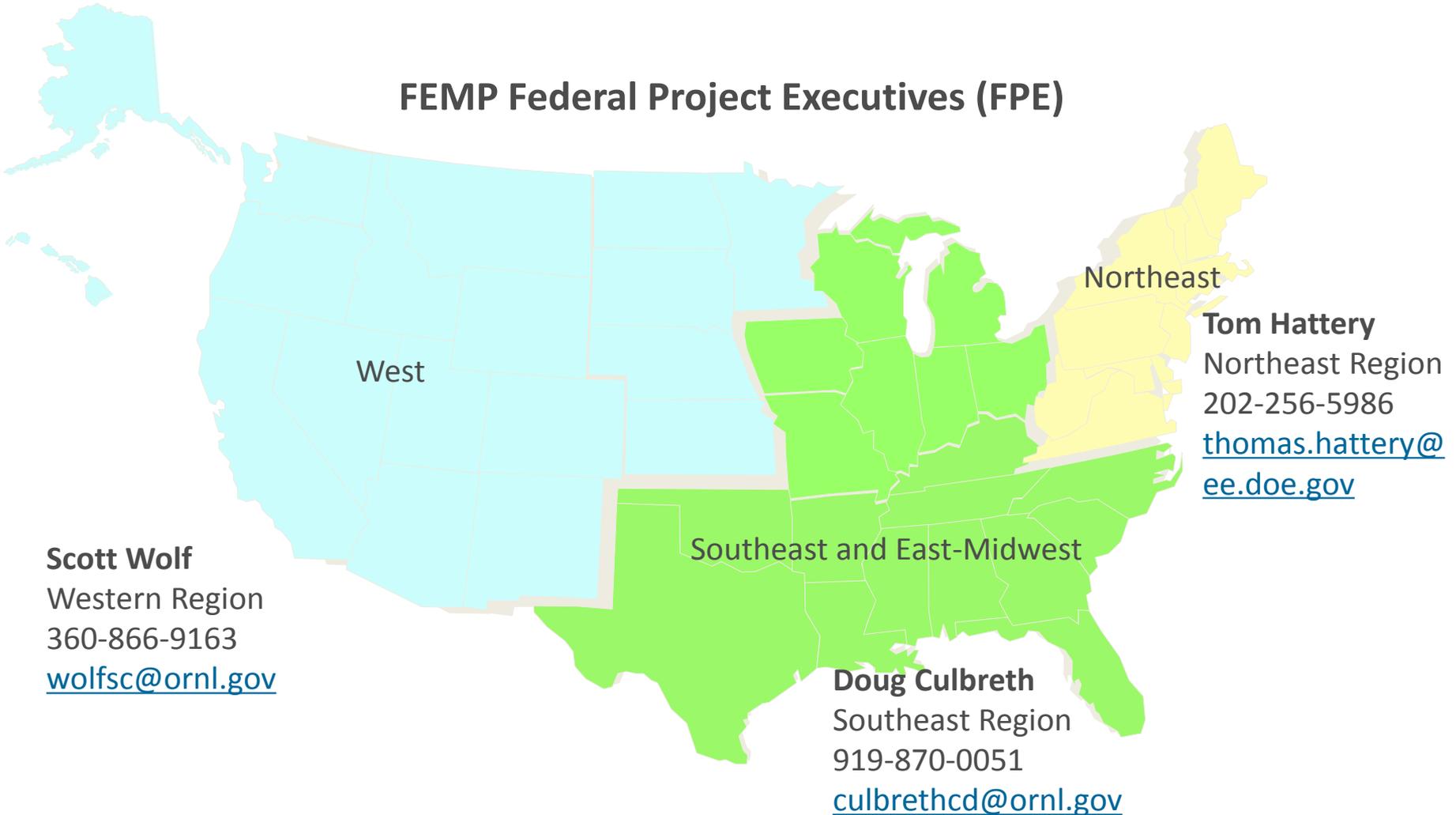
- Look at agency portfolio to identify project opportunities
- Evaluate agency personnel in assembling a project team
- Review internal requirements and management sign-offs
- Contact FEMP for additional guidance



FEMP Resources Available to Federal Customers

- Assistance to build an ENABLE program
- Tools and guidance to train, educate, and motivate
- Project management support to guide you through the ESPC ENABLE process
- Procurement subject matter experts to support project execution
- ESPC ENABLE webpage resources, including training <http://energy.gov/eere/femp/espc-enable>

FEMP Federal Project Executives (FPE)



<http://energy.gov/eere/femp/energy-savings-performance-contract-federal-project-executives-0>

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<http://energy.gov/eere/femp/espc-enable>

