Funding Federal Energy and Water Projects

The U.S. Department of Energy (DOE) Federal Energy Management Program (FEMP) helps Federal agencies identify and obtain funding for energy efficiency, renewable energy, water conservation, and greenhouse gas (GHG) management projects.

Federal agencies cannot rely on Congressional appropriations alone to fund the energy projects needed to meet Federal requirements. Additional funding options are available, including:

- Energy savings performance contracts (ESPCs)
- Utility energy service contracts (UESCs)
- Power purchase agreements (PPAs)
- Energy incentive programs

Carefully matching available funding options with specific situations can make the difference between a stalled, unfunded project and a successful project generating energy and cost savings. This often means combining Congressional appropriations and project funding mechanisms.

ESPC Quick Facts

More than 570 ESPC projects worth $3.9 billion were awarded to 25 Federal agencies and organizations in 49 states and Washington, D.C., as of May 2011. These projects saved:

- 32.8 trillion Btu annually; equivalent to the energy consumed by a city with a population of 893,000.
- $13.1 billion in energy costs (approximately $10.1 billion goes to finance project investments, leaving a net savings of $3 billion).

A PPA funded 1.6 MW of photovoltaics installed on the Research Support Facility at the National Renewable Energy Laboratory. *Photo by Dennis Schroeder,* NREL/PIX 18482

Energy Savings Performance Contracts

ESPCs allow Federal agencies to conduct energy projects with no upfront capital costs, minimizing the need for Congressional appropriations.

An ESPC is a partnership between a Federal agency and an energy service company (ESCO). The ESCO conducts a comprehensive energy audit for the Federal facility and identifies improvements to save energy. In consultation with the Federal agency, the ESCO designs and constructs a project that meets the agency's needs and arranges the necessary funding. The ESCO guarantees the improvements will generate energy cost savings sufficient to pay for the project over the term of the contract. After the contract ends, all additional cost savings accrue to the agency. Contract terms of up to 25 years are allowed.

DOE indefinite-delivery, indefinite-quantity (IDIQ) ESPCs were awarded to 16 ESCOs. Each contract has a $5 billion ceiling, resulting in a potential of up to $80 billion for energy efficiency, renewable energy, water conservation, and GHG projects at Federally owned buildings and facilities. DOE awarded these umbrella contracts to ESCOs based on their ability to serve Federal agencies under terms and conditions outlined in the IDIQ solicitation. These contracts allow agencies to use ESPCs in Federal facilities, both domestic and international.

Contact William Raup at 202-586-2214 or *william.raup@ee.doe.gov* for additional information, or visit *www.femp.energy.gov/financing/espcs.html*.

Utility Energy Service Contracts

UESCs allow Federal agencies to enter into contract with serving utilities to implement energy and water related improvements at their facilities. Agencies may fund the project with appropriations, or the utility may arrange funding to cover the capital cost of the project, which is repaid over the contract term from cost savings generated by the energy and water efficiency measures. A combination of private funding and direct appropriations may also be used. The end benefits of UESCs are the

UESC Quick Facts

Since 1994, more than 1,680 UESC projects have been awarded. These projects:

- Are worth approximately $2.3 billion.
- Performed infrastructure and equipment upgrades to reduce Federal energy and water consumption.
- Saved more than 14 trillion Btu.

Energy Incentive Program Quick Facts

In 2010, more than $6 billion in energy incentives and rebates were available from regional, state, and local entities (most commonly utilities). Programs include:

- Equipment rebates
- Energy audits
- Technical assistance and/or design review
- Building commissioning
- Metering
- Power quality and reliability assistance
- Demand response and peak saving incentives

ability to implement energy projects with no initial capital investments, minimal net costs, and time and resource savings. Performance guarantees are an option that can add additional value to a UESC project.

A growing number of investor-owned, rural cooperative, and municipal utilities actively offer UESCs and other utility incentives to Federal customers. As the serving utility is recognized as an established source, UESCs can be used by agencies to implement projects without the need for full and open competition. Projects of all sizes can be installed using existing U.S. General Services Administration (GSA) areawide contracts.

The Federal Utility Partnership Working Group (FUPWG) assists with UESC and other utility partnerships. The group gathers Federal agencies with utilities and ESCOs to discuss utility partnership possibilities and processes.

Contact David McAndrew at 202-586-7722 or *david.mcandrew@ee.doe.gov* for additional information, or visit *www.femp.energy.gov/financing/uescs.html*.

Power Purchase Agreements

On-site renewable PPAs allow Federal agencies to fund on-site renewable energy projects with no upfront capital costs incurred. A developer installs a renewable energy system on agency property under an agreement that the agency will purchase the power generated by the system. The agency pays for the system through these power purchase payments over the life of the contract. After installation, the developer owns, operates, and maintains the system for the life of the contract. The PPA price is typically determined through a competitive procurement process.

Contact Tracy Logan at 202-586-9973 or *tracy.logan@ee.doe.gov* for additional information, or visit *www.femp.energy.gov/financing/power_purchase_agreements.html*.

Energy Incentive Programs

No matter which contracting vehicle agencies choose, FEMP encourages energy managers to use energy incentive programs offered by many local utility companies. These services are offered at low or no cost to the agency and are generally funded by fees included in utility rates.

Demand response and load management programs are one form of incentive offering. In these programs, utility companies or regional transmission operators (like PJM or ISO-NE) provide rate incentives and/or cash payments in exchange for curtailing energy demand during peak usage periods to increase system reliability and reduce the need for constructing new generation facilities.

FEMP outlines energy incentive programs available to Federal agencies on a state-by-state basis at *www.femp.energy.gov/financing/energyincentiveprograms.html*. Contact David McAndrew at 202-586-7722 or *david.mcandrew@ee.doe.gov* for additional information.

Getting Started

FEMP provides services and training to help Federal agencies identify and obtain project funding for energy efficiency, renewable energy, water conservation, and GHG management projects. Contact a Federal Financing Specialist to get started.

A list of Federal Financing Specialists by geographic area is available at *www.femp.energy.gov/financing/espcs_financingspecialists.html*.

A list of training opportunities and events is also available at *www.femp.energy.gov/training*.

U.S. DEPARTMENT OF ENERGY
Energy Efficiency & Renewable Energy

For additional information please contact:
EERE Information Center
1-877-EERE-INFO (1-877-337-3463)
www.eere.energy.gov/informationcenter

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FEMP facilitates the Federal Government's implementation of sound, cost-effective energy management and investment practices to enhance the nation's energy security and environmental stewardship.

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