Focus On FEMP

NAESCO 2019 Federal Market Workshop
March 14, 2019
FHI 360 Conference Center
Washington, D.C.
## DOE Budget: Appropriations Summary for Selected DOE Offices and Programs (dollars in millions)

### FY 2019 Conference*

<table>
<thead>
<tr>
<th>Program</th>
<th>Appropriations (dollars in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Nuclear Security Administration</td>
<td>$15,229</td>
</tr>
<tr>
<td>DOE</td>
<td>$35,685</td>
</tr>
<tr>
<td>Environmental Management</td>
<td>$7,175</td>
</tr>
<tr>
<td>Science</td>
<td>$6,585</td>
</tr>
<tr>
<td>Energy Programs</td>
<td>$4,986</td>
</tr>
<tr>
<td>ARPA-E</td>
<td>$366</td>
</tr>
<tr>
<td>Credit Programs**</td>
<td>$24</td>
</tr>
<tr>
<td>Office of Electricity</td>
<td>$156</td>
</tr>
<tr>
<td>Cybersecurity, Energy Security, and Emergency Response</td>
<td>$120</td>
</tr>
<tr>
<td>Energy Efficiency and Renewable Energy</td>
<td>$2,379</td>
</tr>
<tr>
<td>Nuclear Energy</td>
<td>$1,326</td>
</tr>
<tr>
<td>Fossil Energy</td>
<td>$1,005</td>
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<tr>
<td>ARPA-E</td>
<td>$366</td>
</tr>
<tr>
<td>Credit Programs**</td>
<td>$24</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>$320</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>$246.5</td>
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<tr>
<td>Sustainable Transportation</td>
<td>$344</td>
</tr>
<tr>
<td>Fossil Energy R&amp;D</td>
<td>$740</td>
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</tbody>
</table>

* From the Joint Explanatory Statement of the Committee of Conference

** "Credit Programs" refers collectively to the Title XVII Loan Program, Advanced Technology Vehicle Manufacturing (ATVM) Loan Program, and the Tribal Energy Loan Guarantee Program.
EERE Priorities

EERE promotes affordable and reliable energy to enhance America’s economic growth and energy security. Priority focus areas include:

- **Energy Affordability** – continuing to drive down costs of the energy technologies in our portfolio
- **Energy Integration** – facilitate the integration of new sources of generation and consider opportunities from greater flexibility in energy consumption
- **Energy Storage** – technological advances to provide more flexible generation and more flexible load through a comprehensive approach to energy storage with smart buildings, pumped hydro, hydrogen storage, and batteries
Federal Energy Management Program

Wheelhouse

Providing strategic energy management for agencies to become resilient, efficient and secure in support of Administration priorities for American Energy Dominance, Increased Government Accountability and Development of a Future-Focused Workforce.

Wheelhouse

- Strategic Programming & Integration Planning
- Facility & Fleet Optimization
- Energy/Water Resilience & Security
- Energy & Water Project Procurement
- Federal Leadership & Engagement
- Development Services
Federal Energy Management Program
Facility & Fleet Optimization

Optimized Design
Bring Added Value to Energy Management
- Use standardized and replicable best practices
- Bring recognition for success, like DOE’s 50001 Ready recognition
- Design for water, health, safety and demand response savings
- Discuss valuing resilience and making it part of project savings
- Build in advanced metering and data roll-up across facilities

Operations & Maintenance
Valuing & Acting on O&M related opportunities
- ESCOs ensure O&M is part of project scope
- Work with FEMP on best practices and guidance
- Sell continuous improvement savings (DOE data is ~2-5%/yr)
- Hands on actions like Treasure Hunts can be valuable

Product Efficiency & Technology Integration
Product Mix Changing…so Bring New and Supported Information
- FEMP EE Procurement Program & ENERGY STAR starting point
- Think in lifecycle but also non-energy benefits (health, safety, resilience)
- Share your technology solutions with FEMP so we can stay ahead…
- Data brings M&V 2.0 opportunities but also new energy savings!

Key Program Engagements
- Creating standardized and replicable solutions
- Providing implementation guidance to agencies
- Promoting energy ownership and management - not just projects

Administration Priorities:
- Energy Affordability
- Integrated Energy & Water Solutions
- Workforce Development
Federal Energy Management Program
Energy/Water Resilience & Security

Key Program Engagements
• Systematic, prioritized approach to resilience planning
• Creating replicable solutions across agencies
• Promoting actionable assessments and templates

Administration Priorities:
Energy Affordability
Integrated Energy & Water Solutions

Portfolio Resilience Planning
Technical Resilience Navigator
Systematic, prioritized approach for organizations to assess current infrastructure against mission priorities and risk (threats, vulnerabilities, consequences), identify solutions, and prioritize solutions and projects for implementation.
• Outlining risk, prioritization, and valuation approaches
• Developing agency universal resource
• Implementing at portfolio and site level
• Examining technical and operational solutions

Energy & Cyber Security Integration
Focusing on tools to evaluate and implement cybersecurity risk management strategy:
• Facility Related Control Systems (FRCS)
  • Facility Cybersecurity Framework (FCF)
  • Facilities Cybersecurity Maturity Model (F-C2M2) Lite
  • Training components with both tools
• Distributed Energy Resources (DER)
  • Distributed Energy Resources Cybersecurity Framework (DERCF)
• Developing contract language and best practices for cybersecurity
### Key Program Engagements

- Encourage use resilience and all eligible equipment.
- Encourage new starts
- Reinforce tools to speed projects: ESCO Selector, 30 page PA

### Administration Priorities:

**Modernizing and Managing Infrastructure**

<table>
<thead>
<tr>
<th>ESCP, UESC &amp; Approps. Project Development</th>
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<tbody>
<tr>
<td><strong>Recent successes:</strong> FY 18 achieved record ESPC awards at $809 M following other record years with a large increase in project size; and many projects are enabling resilience with CHP, micro-grids, storage and controls. Incorporation of 50001 as an ESCO provided service.</td>
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<tr>
<td><strong>On the horizon:</strong> Wrap up of Gen 2; further record projects; and greater application of resilience, data centers, distributed generation, and storage.</td>
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<thead>
<tr>
<th>Distributed Energy &amp; Energy Procurement</th>
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<td><strong>Recent successes:</strong> The ReOpt lite tool has seen rapid growth in usage (1,100+ web tool users, 325,000 API hits); ESPCs with ESAs are being awarded;</td>
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<tr>
<td><strong>On the horizon:</strong> Comprehensive ESA guidance will be issued at the Energy Exchange, ReOpt Lite is becoming a platform for multiple EERE technologies: PV, Wind, and in future, CHP—ReOpt use with ESPCs and UESCs</td>
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<tr>
<th>Project Quality Assurance</th>
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<td><strong>Recent successes:</strong> Full rollout of LOC reports to key agencies; water escalation rate guidance; O&amp;M guidance.</td>
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<tr>
<td><strong>On the horizon:</strong> Customized agency trainings; actions to address shortfalls</td>
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Federal Energy Management Program
Strategic Programming & Integration Planning

Key Program Engagements
• Coordination with White House Council on Environmental Quality
• Coordination with Office of Management and Budget
• Key Stakeholder Exchange

Strategic Integration Planning
• Strategic energy management agency needs integrated with Administration priorities
• Foundation: Efficient-Secure-Resilience (goals)
• Affordability-Storage-Integration (needs)
• Strategic agency partnerships – force multiplier

Legislative & Mandate Guidance
• Implementation of Executive Orders – guidance focus
• Streamlining data collection & enhancing data analysis
  • Expanding use of eProject Builder
  • ISO agency pilot
• ESPC Rule

Administration Priorities:
Maximizing Interagency Coordination
# Federal Energy Management Program

**Federal Leadership & Engagement**

### Key Program Engagements
- **IACET**
- **FBPTA**
- **DOD NDAA**
- **Agency Recognition**
  - 30 Federal Energy and Water Awards & 2 Directors Awards
  - 16 FEDS Spotlight Awards

### Administration Priorities:
- Developing Future-Focused Workforce
- Increasing Government Accountability

<table>
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<tr>
<th>Interagency Coordination &amp; Outreach</th>
<th>Agency Accountability</th>
<th>Workforce Development &amp; Engagement</th>
</tr>
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</table>
| Chairs 5 Working groups             | Agencies report annual energy and water consumption and resource management to **FEMP**. | Training – 30,693 hours / 315 training sessions in FY18 2018 Energy Exchange and Better Buildings Summit
  - 2,900+ attendees
  - 20,971.5 total training hours provided |
| Leads development of E.O. Implementation Guidance | Annual Progress tracking for OMB Scorecard by FEMP | Veteran Interns Program – Interns at 6 agencies in FY18 |
| Agency roundtable discussions       | Annual Report to Congress | Focus
  - Multi-disciplinary dynamic needs for “Energy Manager”
  - Capture lessons learned from award winners
  - Agency-Driven – Mission Readiness-Workforce Development |
Registration and Hotels are open!

Early bird registration ends June 14.

- ATTEND OVER 100+ AGENCY REVELANT TECHNICAL TRAININGS (AND EARN CEUS)
- PARTICIPATE IN LEADERSHIP LED PEER-TO-PEER DISCUSSIONS
- ENGAGE WITH EXPERTS AT THE FEMP HUB
- NETWORK WITH THE FEDERAL ENERGY MANAGEMENT COMMUNITY
- EXTEND YOUR LEARNING AT THE FEMP PRE-EVENT WORKSHOPS ON 8/19
- EXPLORE THE INNOVATIVE MULTI-DAY TRADE SHOW

For more event details, justification resources, and to book hotels and register visit:

Energy-Exchange.com
Thank You

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For more information, visit: femp.energy.gov
Additional Slides
# Federal Energy Management Program

## Overview

**FEMPI**

### Key Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Studies</td>
<td>69</td>
</tr>
<tr>
<td>Tools</td>
<td>100</td>
</tr>
<tr>
<td>Online Trainings</td>
<td>126</td>
</tr>
<tr>
<td>Guidance Resources</td>
<td>290</td>
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*Product numbers from FY19 Q1*