# **Environmental Security Technology Certification Program (ESTCP) Overview**

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#### **About ESTCP**

- Established in 1995 to:
  - ♦ Improve DoD's environmental performance
  - ♦ Reduce costs
  - ♦ Enhance and sustain mission capabilities
- Demonstration & validation focus
- Promote Implementation
- Energy & Water is one of five ESTCP Program Areas
- Issue annual solicitations.

Environmental Restoration

Resource Conservation & Climate Change Weapons
Systems &
Platforms



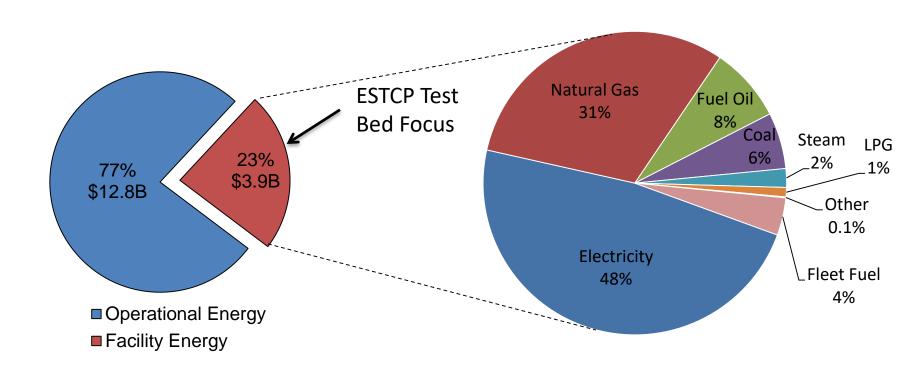
Munitions Response



#### **DoD Energy Use – ESTCP Focus**

DoD Facility & Operational Energy Cost: \$16.7B (FY15)

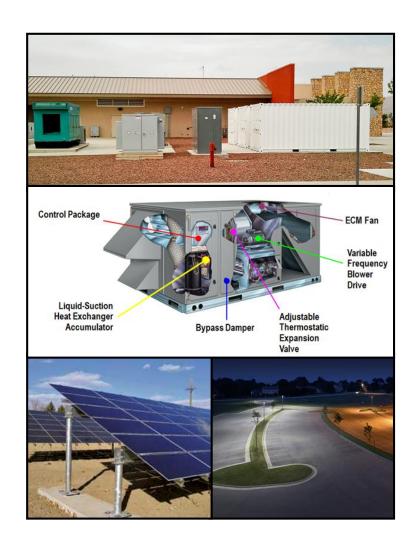
Military Installation Energy Consumption





## **Energy and Water**

- Smart and secure installation energy management
  - ♦ Microgrids
  - ♦ Energy storage
  - Ancillary service markets
  - ♦ Cybersecurity
- Efficient integrated buildings and components
  - ♦ Design, retrofit, operate
  - ♦ Enterprise optimized investment
  - Advanced components
  - Intelligent building management
  - Non-invasive energy audits
- Distributed generation
  - ◆ Cost effective
  - ♦ On-site
  - ♦ Emphasis on renewables





## **Energy Technology Maturity**

**ESTCP Investments** 

Invention Translation Adoption Diffusion

R&D Initial prototype TRL 3-6 Product development Beta prototype TRL 7-9 Pilot production Pre-commercial TRL 9 Full-scale production Commercial product TRL 9

	Translation	Adoption	Diffusion
Performance & Cost	Value proposition or price is unclear or ill defined.	Value and risks understood by specialist or for some applications. Limited or no independent validation.	Risks and value understood for most applications. Education of broader community underway.
Industry, supply chain, & support	Developers required for demonstration. Building industry not engaged.	Limited commercial availability. Support and distribution partnerships not well developed.	Technology is available and sustainable but not usually specified.



## **ESTCP Technology Considerations**

- Relevance to solicitation topic
- Potential impact
- Applicability to military installations
- Technology maturity
- Technology transfer potential
- Cost



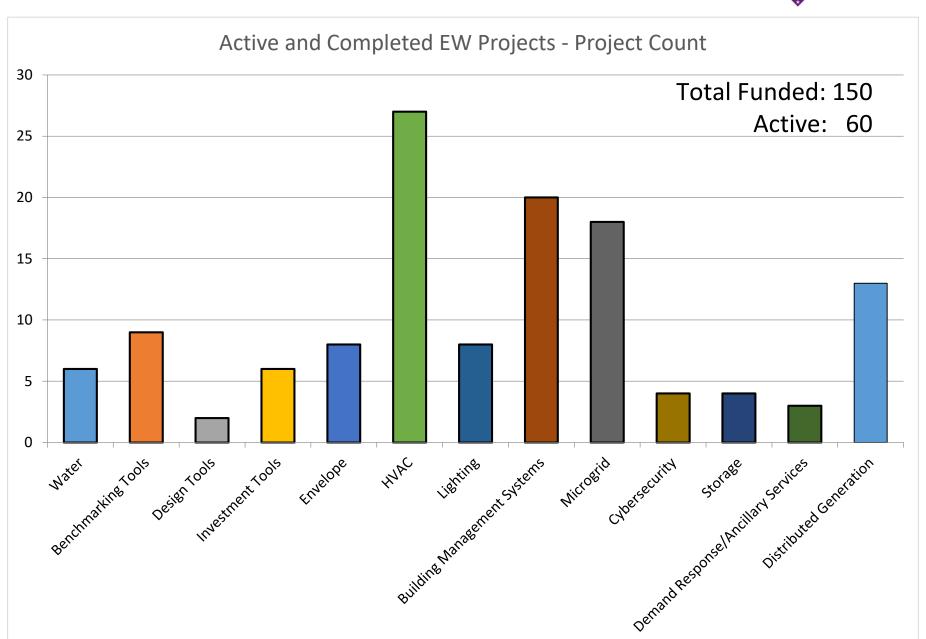


Broad Agency
Announcement (BAA)

Department of Defense Call

Fed Organizations Outside DoD Call







# Website: www.serdp-estcp.org



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#### Contact

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