

## Washington Update

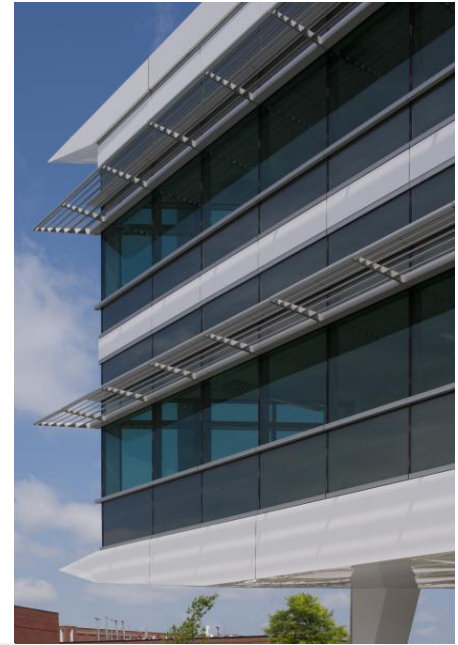
November 3, 2016

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# Overview

- One GW Goal Announcement
- Performance Contracting Update
- Performance Contracting Challenge Extension
- DOE Deep Energy Retrofit Challenge
- Better Buildings Lab Accelerator Launch
- AFFECT 2017
- Energy Exchange







**One GW Goal**

# 1 GW Goal For Civilian Agencies by 2021

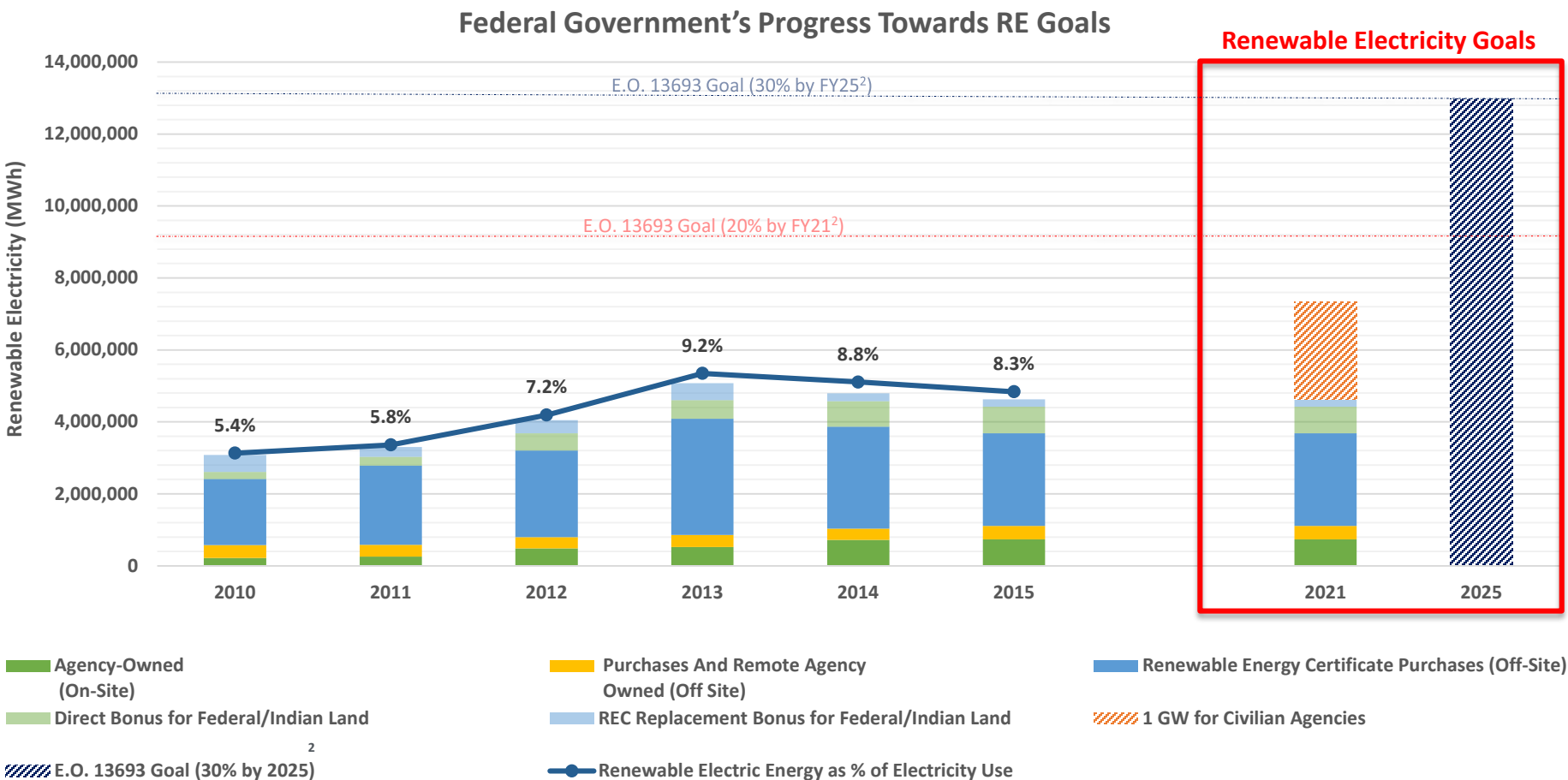
On October 14, 2016, the White House announced a 1 Gigawatt Renewable Electric Energy Goal for civilian agencies by 2021<sup>1</sup>.

- All additional renewable electric energy, from a FY15 baseline, reported in FY21 counts.
- All strategies for obtaining renewable electric energy, in order of priority ranking as defined in Executive Order (E.O.) 13693 count.
- The 1 GW Goal will help civilian agencies stay on track towards achieving the Executive Order (E.O.) 13693 renewable electric energy target.
- More details on the 1 GW Goal from the Council on Environmental Quality are expected to be announced soon.

<sup>1</sup> <https://www.whitehouse.gov/blog/2016/10/14/continuing-administrations-commitment-deploying-clean-energy-federal-facilities>

# Federal Government's Progress Towards RE Goals

Civilian agencies will need to generate or purchase an additional over 2,700,000 MWh<sup>1</sup> of renewable electric energy to meet the 1 GW goal by 2021.



<sup>1</sup> Estimated based on the proportion of renewable electric energy sources in FY15.

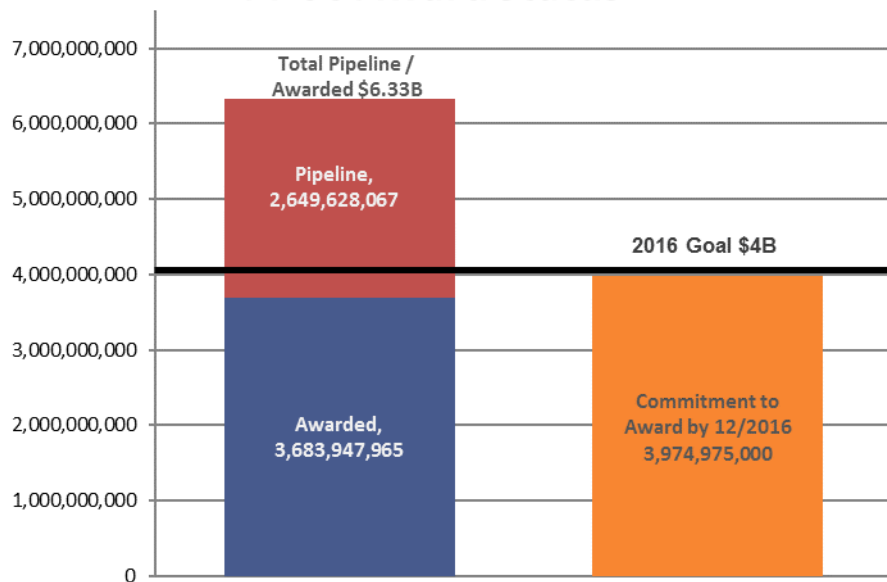
<sup>2</sup> Estimated renewable electric energy consumption target, if the federal government reduces it's energy consumption by 2.5% each year and the federal government's building footprint remains unchanged from FY15.



# **Performance Contracting Update**

# President's Performance Contracting Challenge Status (October 15, 2016)

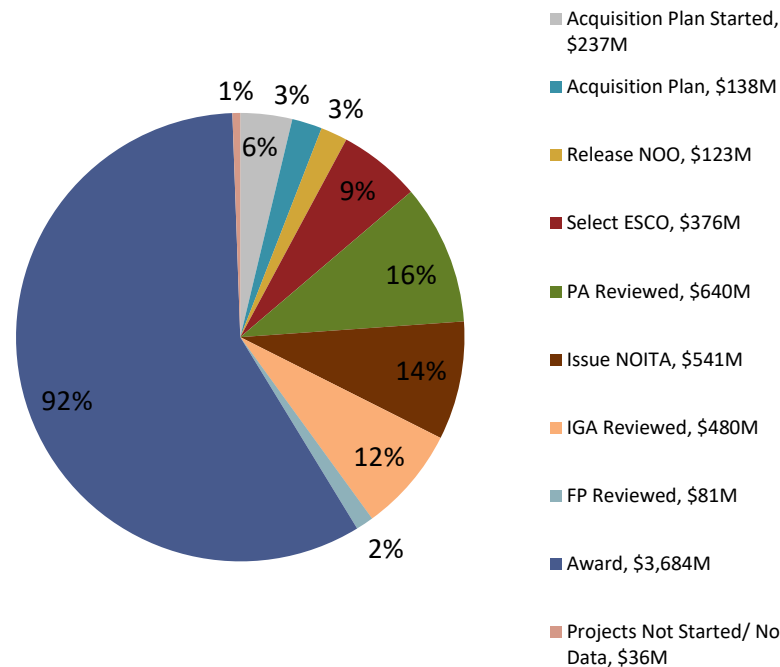
## PPCC Award Status



**Pipeline:** Amount of project costs in procurement process and expected to award.

**Awarded:** Amount of project costs awarded.

**Agency Commitments:** Amount in project costs committed to. Total of pipeline and awarded values may exceed commitment value due to additional projects beyond original agency baselines.



**Note:** Sum of percentages equals 158% due to agency pipeline development exceeding \$4B PPCC goal.

**Acquisition Plan Started:** Projects in the process of acquisition

**Acquisition Plan:** Completion of agency's acquisition

**Release NOO:** Release of the Notice of Opportunity to perform a performance contract.

**Select ESCO:** Selection of the Energy Service Company that will perform the work.

**PA Reviewed:** Review of the Preliminary Assessment outlining the work to be completed.

**Issue NOITA:** Issuance of the Notice of Intent to Award the contract

**IGA Reviewed:** Review of the Investment Grade Audit and cost/savings proposal.

**FP Reviewed:** Review of the Final Proposal

**Award:** Awarding of the contract to the energy service company

# Federal Performance Contracting Challenge Extension

## White House Announcement 10/4/16:

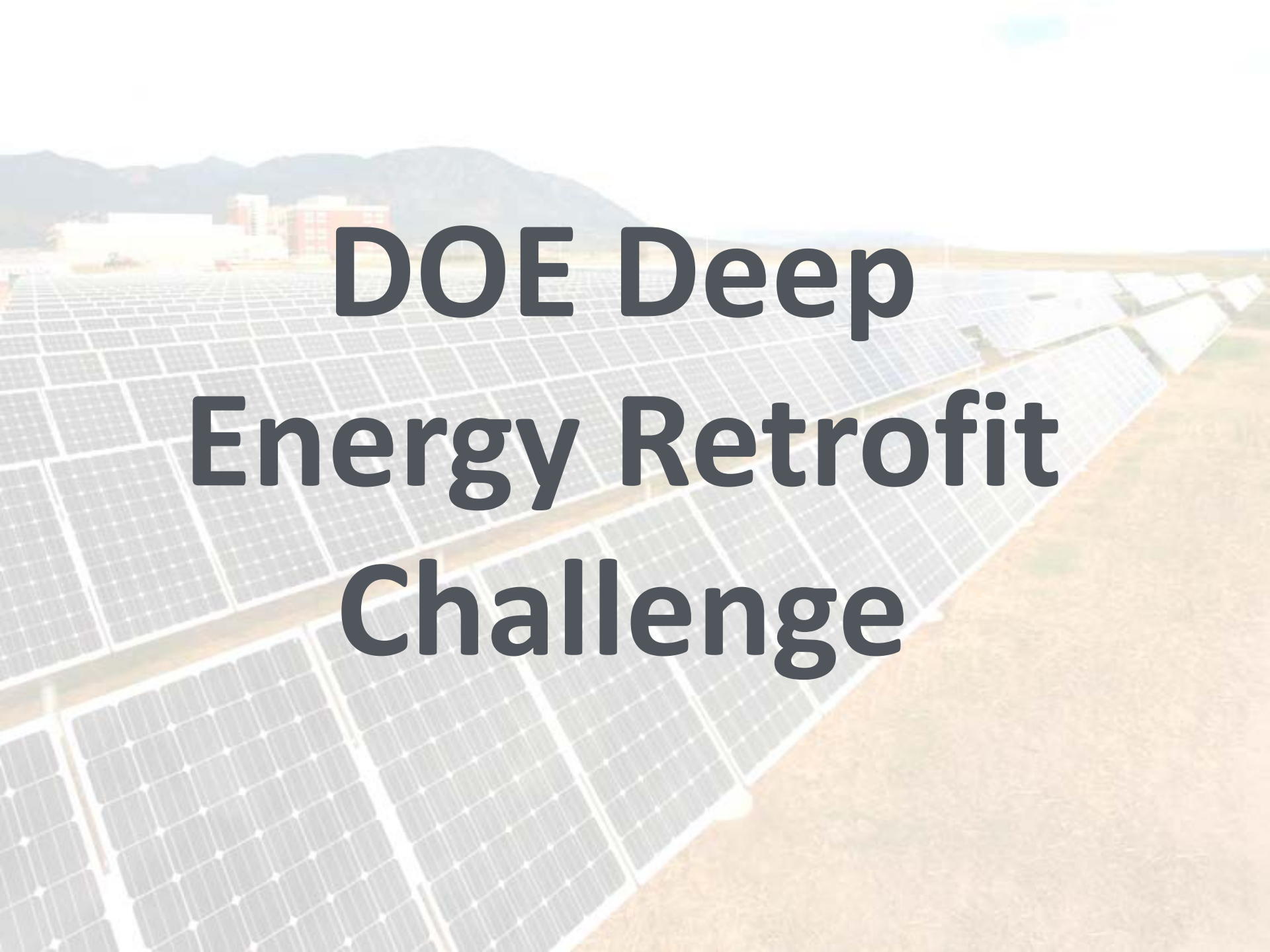
*Since the beginning of the Obama Administration, federal agencies have awarded over \$3.5 billion in energy efficiency performance contracts and are **on track to reach our \$4 billion goal by the end of 2016.***

*Now, we're building on that success and expanding the challenge to water efficiency as well. The Administration's new goal is to seek **\$2 billion in additional energy performance contracts over the next 3 years, and to achieve 2 billion gallons of water savings.***

## Goal Determination:

- \$2B in investment over 3 years, or ~\$55M/month, is equal to past PPCC steady state award rate
- \$2B in projects over the \$4B goal has already been identified by agencies
- 2B gallons of water savings over 3 years is equal to the average water savings accomplished under PPCC awards to date
- New goal keeps the pace and level of past PPCC efforts in place going forward





# **DOE Deep Energy Retrofit Challenge**

# DOE Deep Energy Retrofit Challenge

- Collaboration between DOE Sustainability Performance Office (SPO), FEMP, NREL, and the Rocky Mountain Institute
- Objectives:
  - Implement \$125 million in performance based contracts that achieve > 50% savings in treated buildings at DOE sites, by end of FY18
  - Make DOE National Laboratories and other facilities showplaces for energy efficiency in existing buildings
- Modeled after a similar effort at GSA that was successful in doubling the level of energy savings achieved in a portfolio of projects across the US totaling \$524 million
- Announced at the Energy Exchange in August 2016, the Challenge is already generating interest at a number of DOE sites
- NREL team assisting sites in developing broad project scope and Notice of Opportunity
- Two design charrettes planned to analyze barriers to achieving deeper energy savings in projects at DOE sites
  - December 14: DOE only
  - Early CY17: DOE, ESCOs and Sites



**Better Buildings  
Smart Labs  
Accelerator  
Launch**

# What is a Better Buildings Accelerator?

- Targeted, short term, partner-focused efforts
- Each demonstrates specific innovative policies and approaches to accelerate investment in energy efficiency
- Address persistent barriers that stand in the way of greater efficiency
- There are 10 different Accelerators, including:
  - Data centers
  - Combined heat and power
  - Energy saving performance contracting
  - Wastewater infrastructure
  - Energy data
- And now... Labs!





# Why focus on labs?

***Across the U.S., if all lab buildings improved energy efficiency by 20%, we could save 40 trillion Btus and \$1 billion.***

- Opportunities and Challenges
  - Labs use 3-4 times more energy than the average office building and can account for 70% of a given campus footprint.
  - Significant energy is needed for ventilation, safety, and energy-intensive equipment.
  - Low-cost operational changes, technology upgrades, behavior changes, and operational/strategic energy management systems can improve energy efficiency by 20%-40% cost effectively.

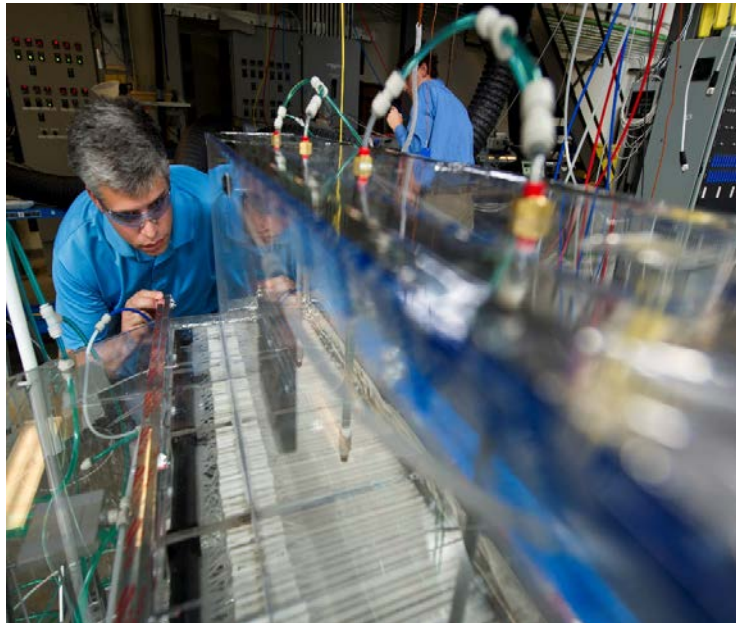


# Partner Commitment

- Establish a 10-year energy-efficiency target of at least 20% across laboratory building portfolio
  - Implement no- and low-cost savings measures at one lab to achieve a 5% reduction by the end of 3 years
  - Provide DOE with details on the measures taken and savings achieved
- Develop a detailed road map to achieving the 20% target
  - Implement at least one capital investment project and/or establish a strategic energy management plan
- Collaborate with DOE/partners to develop metering and energy performance measurement approaches
  - By the end of year one, develop a metering plan, baseline, and metrics measuring whole building energy performance
- Participate in peer exchanges to discuss code-related barriers and solutions.
- Share results and lessons learned with DOE/partners

# DOE Commitment

- Provide partners with technical expertise and training
- Facilitate networking opportunities to help partners share best practices and innovative solutions
- Develop technical tools and resources to meet Accelerator goals
- Recognize partners' innovative solutions on DOE websites, at conferences, and more






**Assisting Federal  
Facilities with  
Conservation  
Technologies  
(AFFECT) 2017**



# AFFECT 2017

- Notice of Intent released on October 3, 2016 for the 2017 AFFECT Funding Opportunity
- EERE plans to release the Funding Opportunity Announcement in November or December 2016
- Description:
  - AFFECT 2017 will provide grants to federal agencies for projects that are incorporated into a privately financed performance contract, such as an Energy Savings Performance Contract (ESPC) or Utility Energy Service Contract (UESC), or as part of a Power Purchase Agreement (PPA).
  - A key merit review criterion will be how much private and/or agency funds are leveraged against the FEMP AFFECT grant funding. Also, Applicants will be asked to show how the proposed project results are conducive to broader adoption at other Federal facilities and will impact the direction, strategy, and thinking of the agency to engage in similar efforts at other Federal facilities.
  - There are three topic areas to which an application may be submitted under this FOA: (1) Combined Heat and Power (CHP), (2) Renewable Energy (RE), and (3) Energy Efficiency Deep Retrofits.



# Energy Exchange

# Energy Exchange

- 2016 summary
  - Over 2,000 attendees
  - 373 exhibitors
  - 126 technical sessions
  - 14 separate learning tracks
- Agencies should seek approval early:
  - 2017 Administration change
  - Current senior level agency officials are already familiar with the Energy Exchange
  - FEMP may have early bird registration

- Supports sustainability and training needs for:

EPACT 1992	NECPA
EPACT 2005	E.O. 13221
E.O. 13523	ESPC Challenge
EISA 2007	E.O. 13693
Federal Building Personnel Training Act of 2010 (PL 111-308)	FY 2012 Defense Authorization Bill Section 2826, Section 2915a
E.O. 13514	

- Attendees earn International Association for Continuing Education and Training (IACET) learning credits to satisfy the training requirements for those that already hold credentials.

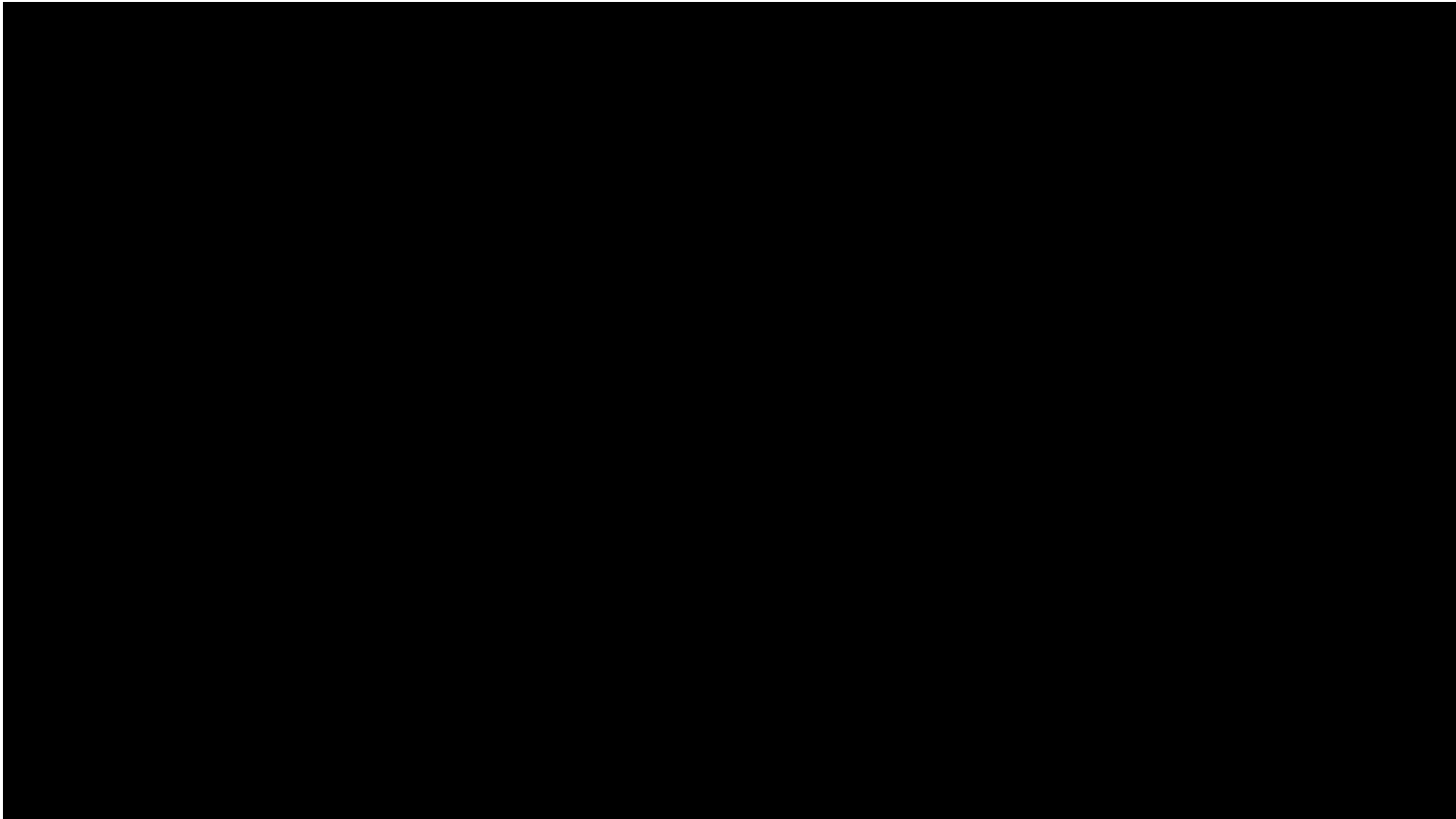
# Energy Exchange 2017



## Save the Date!

Energy Exchange 2017 will be  
held August 15-17 in  
**Tampa, Florida**





QUESTIONS?

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