

ENERGY SAVINGS PERFORMANCE CONTRACTING

SAVES ENERGY, SAVES TAXPAYER MONEY, CREATES JOBS

Tuesday, January 14, 2014
3:00 PM – 4:00 PM

SPEAKERS:

- Jennifer Schafer, Executive Director, Federal Performance Contracting Coalition
- Chris Hickling, Director, Edison Electric Institute
- Steve Nadel, Executive Director, American Council for an Energy-Efficient Economy
- Ross Eisenberg, Vice President, National Association of Manufacturers

FEDERAL PERFORMANCE CONTRACTING TO IMPROVE ENERGY EFFICIENCY

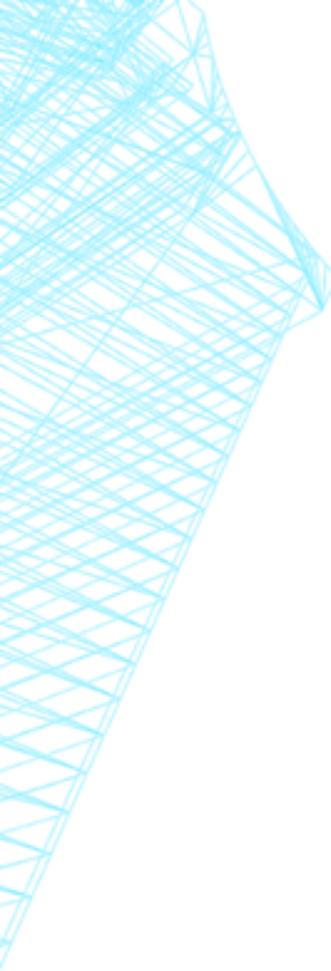
What is it and why is it important? What are the CBO scoring implications when Congress tries to ensure that the federal government get more energy efficient? Is there a path forward?



FEDERAL PERFORMANCE CONTRACTING COALITION

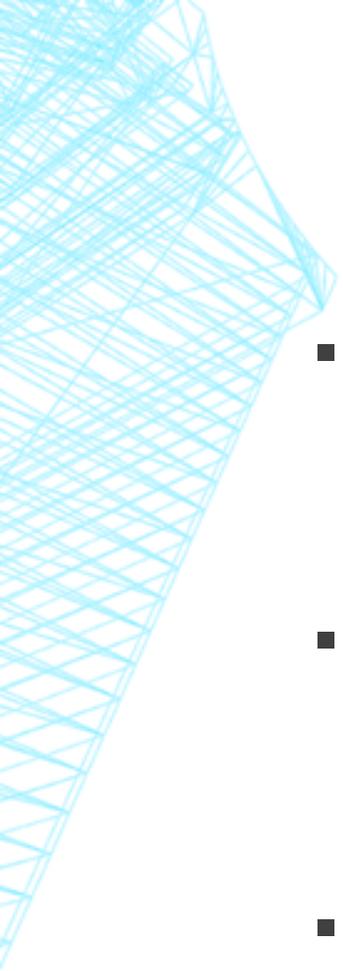
- The FPCC is a coalition representing the companies that perform over 90% of the ESPCs within the Federal Government
- Current Members:
 - Ameresco, Inc.
 - Chevron Energy Solutions
 - Constellation Energy
 - Honeywell
 - Johnson Controls Government Systems, LLC.
 - Lockheed Martin Services, Inc.
 - NORESKO, LLC
 - Schneider Electric Buildings Americas, Inc.
 - Siemens Government Technologies, Inc.
 - Trane U.S., Inc.





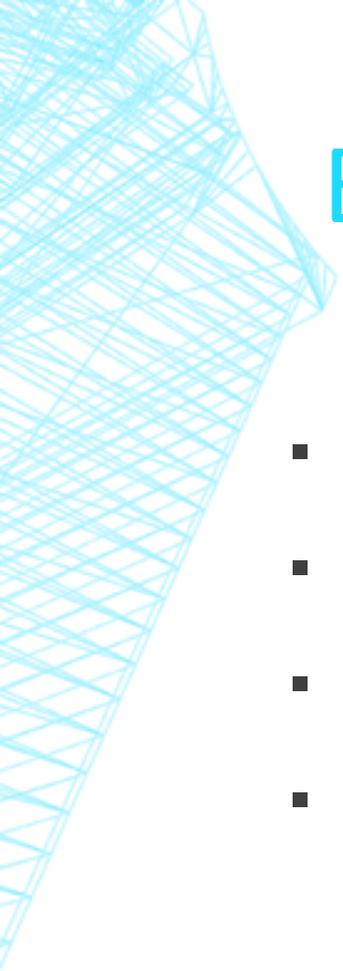
ENERGY SAVINGS PERFORMANCE CONTRACTING

- In an ESPC, a private company designs, finances, acquires, installs and maintains new energy efficiency-related equipment. Savings are guaranteed to the government, allowing the government to use the utility savings to pay back the investment. By law, the government agencies pays no more than it would have paid for utilities.
- Term of up to 25 years
- Government retains all the savings after the contract term.



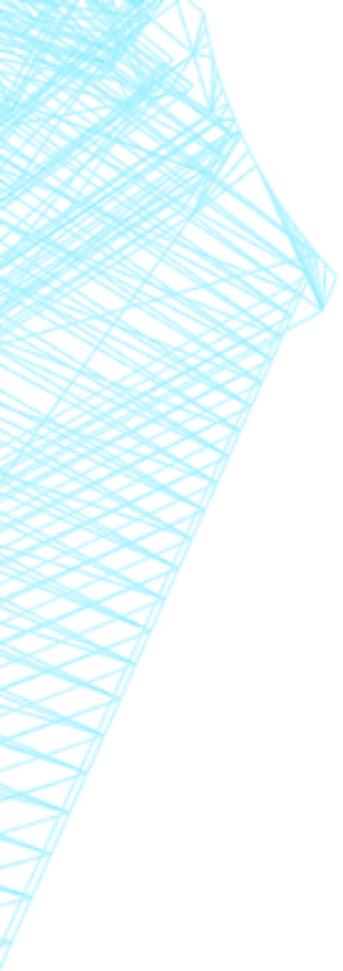
ADMINISTRATION COMMITMENT

- Announced in 2011 a two year, \$2B effort using private sector dollars to invest in government agencies and acquire long lasting energy savings
- Energy Savings Performance Caucus initiated a letter signed by 145 (55 Republicans and 90 Democrats) members of the House and Senate requesting a continued effort beyond 2013.
- Announced in December 2013 the intention to continue the effort.



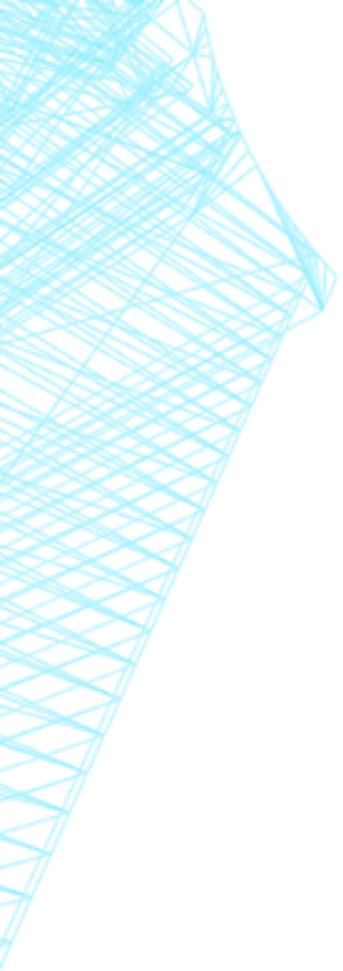
BIPARTISAN AGREEMENT IN CONGRESS

- Gardner/Welch bill, H.R.2689/S.1308 to have an ESPC goal in statute
- Rep. Huffman bill to expand the use of ESPCs to alternative fueled vehicles
- Similar provision in Shaheen Portman was stripped because of a score
- Efforts to extend expiring energy intensity goals of the federal government have been stymied by CBO scoring



HISTORY OF SCORING ESPCS

- 2002 – score triggered by ESPC extension
- 2007 – score triggered by permanent extension of ESPCs
 - Score for section 432 of EISA threatened
 - Score for any expansion of ESPC authority
- 2008 – NDAA efforts to change a DOD renewable energy goal to a mandate
- 2011 – expansion of ESPCs to electric vehicles does not score
- 2013 – Expansion of ESPCs to alternative fuel vehicles scores
- 2013 – efficiency goals score, as does a sense of the Senate



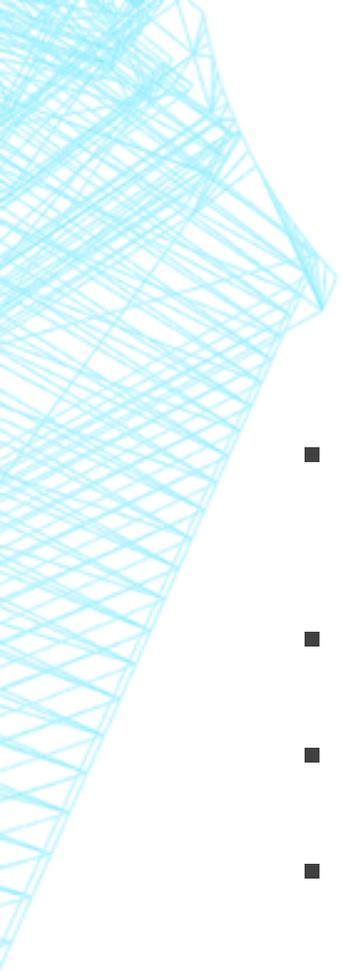
TECHNICAL ASPECTS OF SCORING

- There are two spending categories: mandatory and discretionary
- When agencies enter into binding contracts, they incur mandatory spending
- During an energy performance contract, repayment comes from utility bill savings, which are paid through appropriations (discretionary)
- Summary:
 - “Cost” of the contract falls into the mandatory budget category
 - Savings are of appropriated dollars and fall into the discretionary category
- Further complicated by the long term nature of the contracts



CBO SEEMS TO HAVE CHANGED THEIR APPROACH TO SCORING

- In 2007, a section of EISA (432) would have scored if agencies had been mandated to implement efficiency audits. The mandate was dropped and no score was assigned
- In 2013, a sense of the Senate regarding performance contracting was threatened with a score
- In 2013, efforts to extend (not increase) the efficiency GOALS of the federal government for five years would trigger a score of a half a billion dollars
- In 2013, extending term for UESCs will score

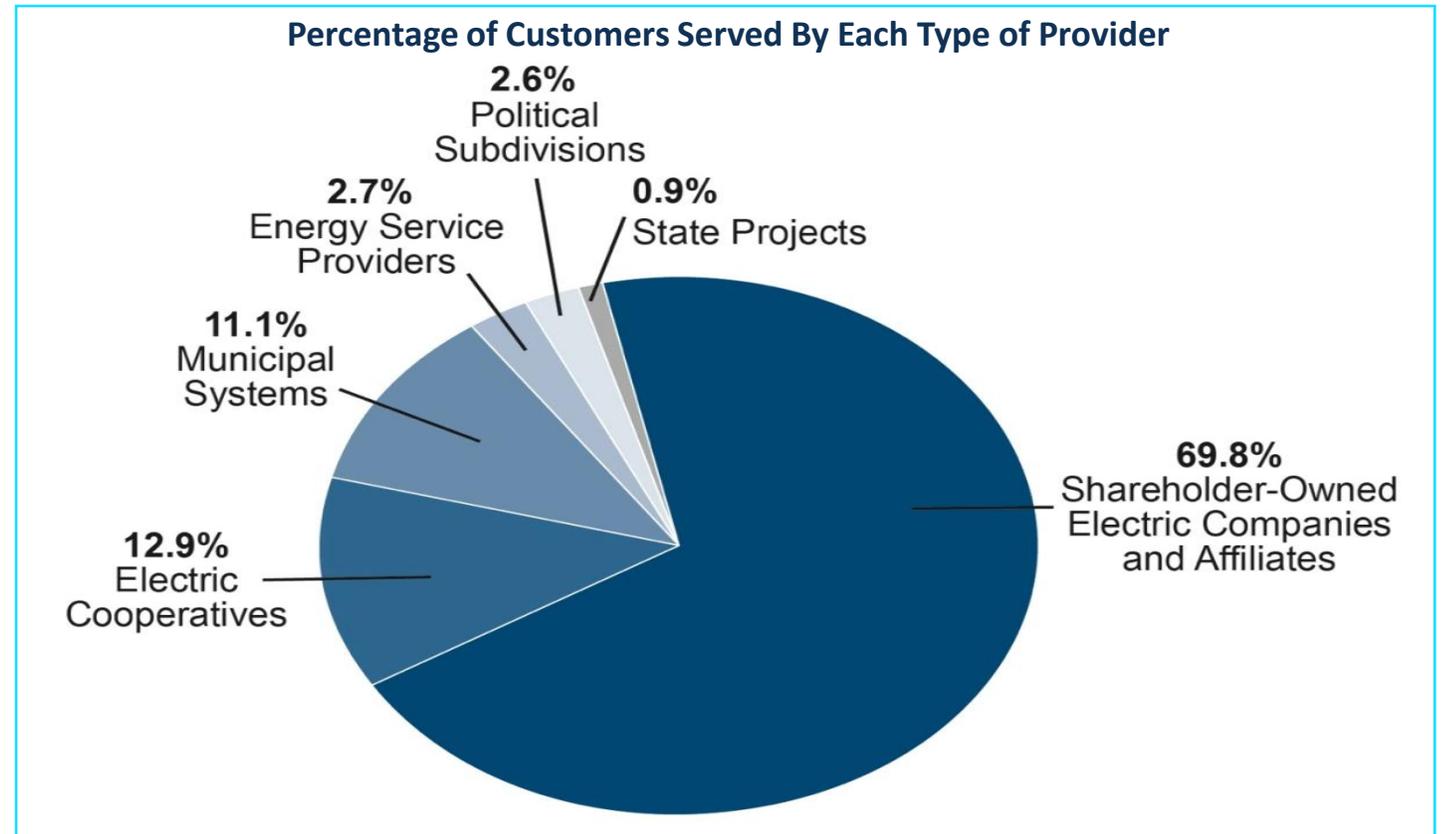


OMB ACCOUNTING IS DIFFERENT

- Memos from OMB in 1998, 2006 and 2012 reasserting that energy performance contracting does not score
- Recognition of the guarantee of savings
- Recognition of the long term downward pressure on budgets as a result
- This leaves Congress in a situation where they cannot act but rather have to leave all of these efforts to the Administrative branch of government

EEl OVERVIEW

Organized in 1933, the Edison Electric Institute (EEl) is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for 220 million Americans, directly employ more than 500,000 workers and represent nearly 70 percent of the U.S. electric power industry.



Note: Federal Utilities serve <0.1% of customers.

Source: Edison Electric Institute, Business Information Group, based on 2011 data from the U.S. Department of Energy, Energy Information Administration (EIA).

March 2013 © 2013 by the Edison Electric Institute. All rights reserved.

WHAT ARE UTILITY ENERGY SERVICE CONTRACTS?

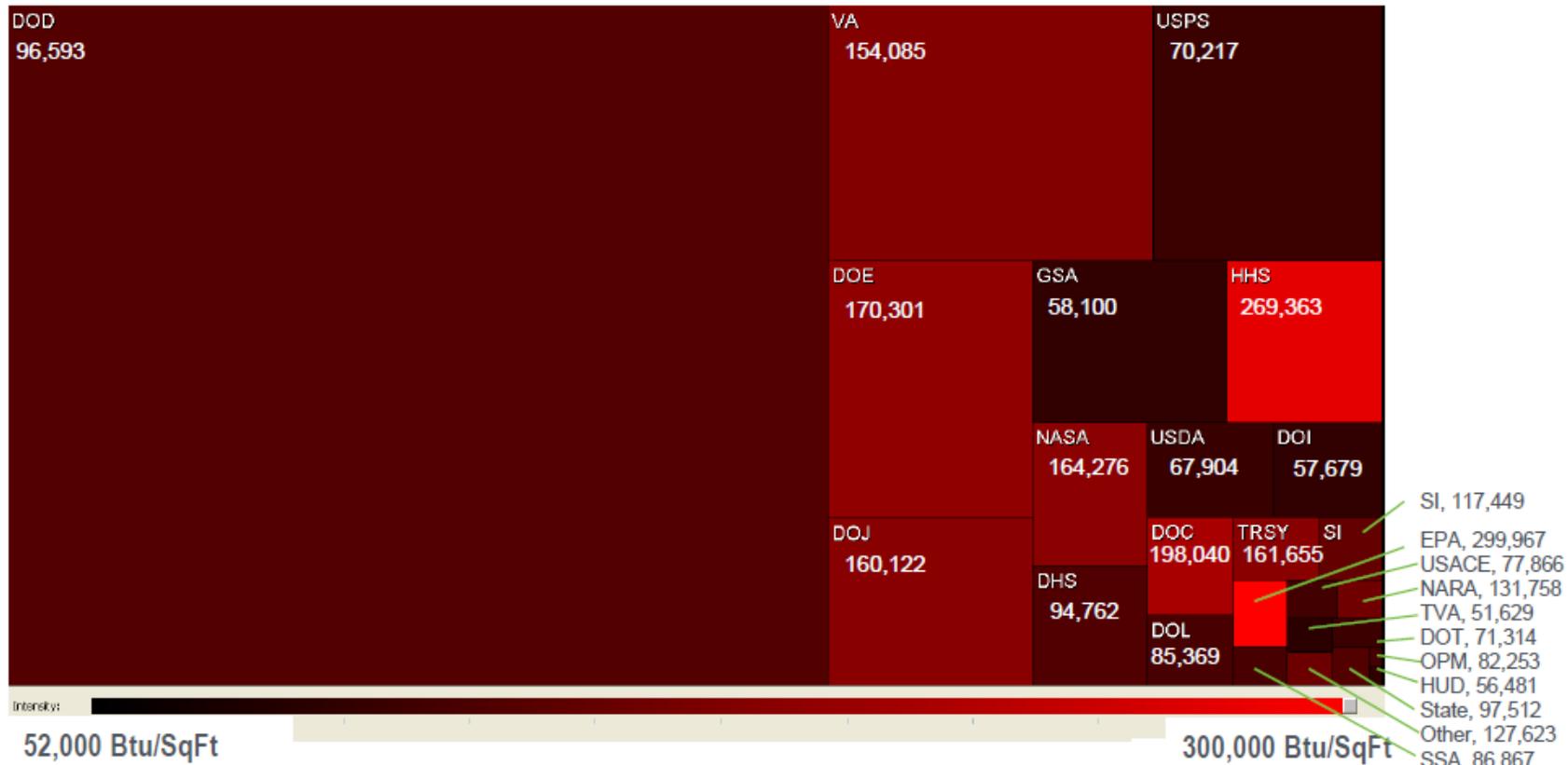
- Utility Energy Service Contracts (UESCs), like other performance contracting vehicles, use private-sector funding to pay for energy efficiency and renewable energy projects. Just like ESPCs, after the contract is paid back, taxpayers retain all future energy savings.
- 1,780 projects since 1991; total capital investment of more than \$2.7 billion.
- EEI members offer UESCs and ESPCs – and partner with other private sector energy companies on projects.
- Two Differences: 1) UESCs are only used at federal facilities (no MUSH market activity). 2) Sometimes, constrained by a 10-year term.

LEGISLATION OF INTEREST TO EEI

- **H.R. 3587** (Reps. Gardner, Welch, Bucshon); **S.1652** (Sens. Schatz, Alexander, Coats) – Clarifies that UESCs may have a term of up to 25 years.
 - **FEMP and GSA agree that UESCs can go up to 25 years.** 2000 Butterworth Memo: *“You have asked if GSA has the authority to enter into energy management contracts that extend beyond 10 years. I believe GSA does have this authority.”*
 - Congressional intent that federal agencies should have access to utility programs *“to the same extent permitted other customers of the utility.”*
 - But since code is silent on term, some agencies – DOD in particular – limit UESC term to 10 years.

LEGISLATION OF INTEREST TO EEI

FY 2012 Federal Facility Energy Consumption (306.7 Trillion Btu) and Intensity (101,139 Btu/Sqft)



- The largest energy user in the federal government.
- Behind on energy intensity reduction, renewable energy usage, sustainable building goals.

LEGISLATION OF INTEREST TO EEI

- Without a change in contract term, UESC effectiveness is unnecessarily limited, and financing renewables is more difficult.
- Policy encourages “cream skimming” – prioritization of short term payback that will limit future ability to use performance contracting.

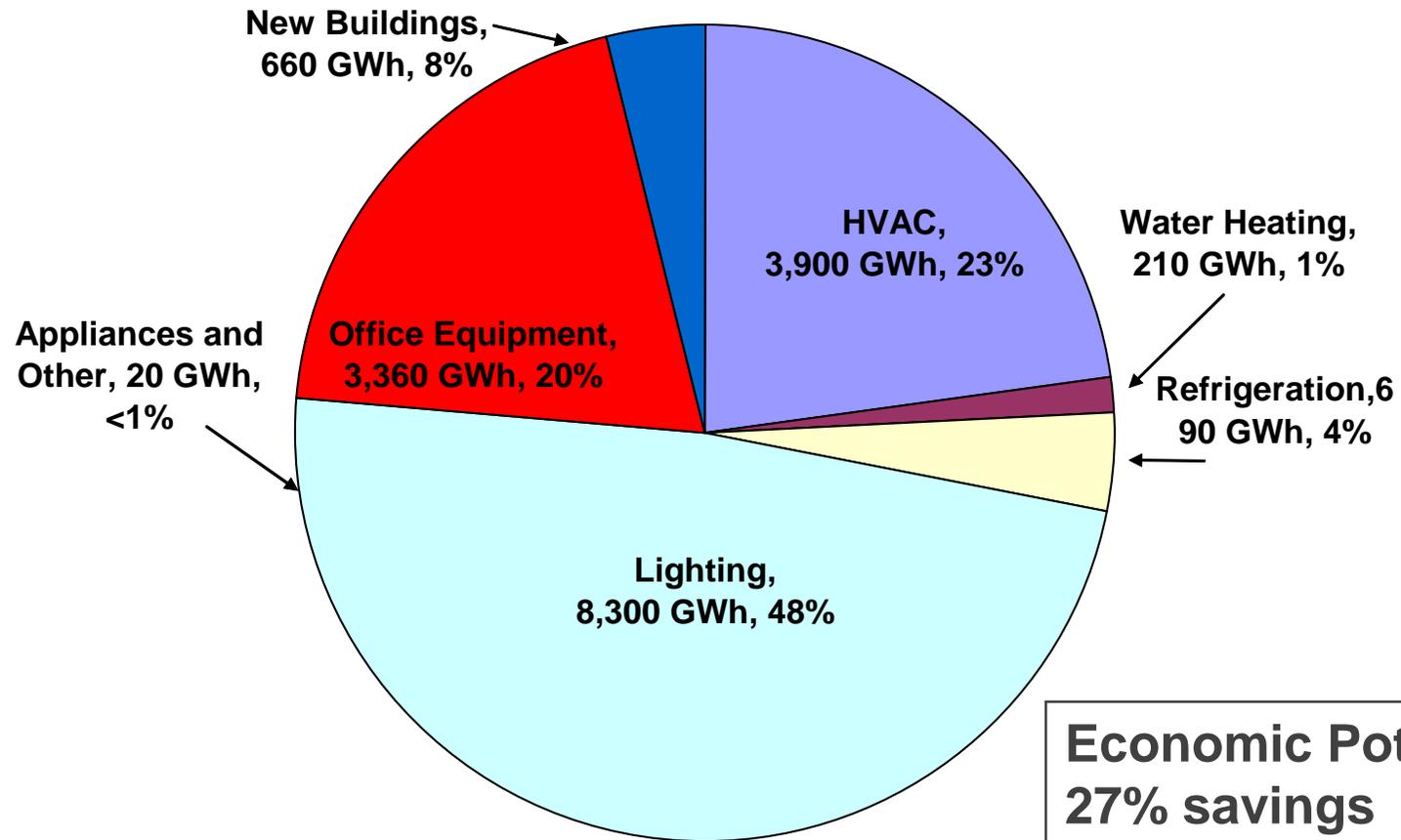
Agency	Funding Mechanism			Total Investment (Thou. \$)
	Direct Obligations	ESPC	UESC	
DOD	\$711,178	\$299,343	\$63,584	\$1,074,105
VA	\$254,863	\$15,100	\$9,734	\$279,697
DHS	\$3,979	\$36,136	\$0	\$40,115
DOE	\$28,989	\$0	\$0	\$28,989
NASA	\$11,432	\$11,900	\$3,466	\$26,798
TRSY	\$3,756	\$0	\$8,500	\$12,256
HHS	\$10,122	\$0	\$2,000	\$12,122
DOJ	\$30	\$0	\$10,477	\$10,507
GSA	\$9,186	\$0	\$0	\$9,186
TVA	\$8,997	\$0	\$0	\$8,997
USDA	\$8,859	\$0	\$0	\$8,859
DOT	\$417	\$8,200	\$0	\$8,617
DOI	\$6,420	\$969	\$953	\$8,341
EPA	\$8,216	\$0	\$0	\$8,216
SSA	\$6,935	\$0	\$0	\$6,935
State	\$0	\$3,833	\$0	\$3,833
DOL	\$3,541	\$0	\$0	\$3,541
NARA	\$2,000	\$0	\$0	\$2,000
USPS	\$935	\$0	\$0	\$935
DOC	\$446	\$0	\$0	\$446
OPM	\$415	\$0	\$0	\$415
SI	\$65	\$0	\$0	\$65
HUD	\$0	\$0	\$0	\$0
USACE	\$0	\$0	\$0	\$0
Total	\$1,080,781	\$375,482	\$98,713	\$1,554,976

AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY: ACEEE

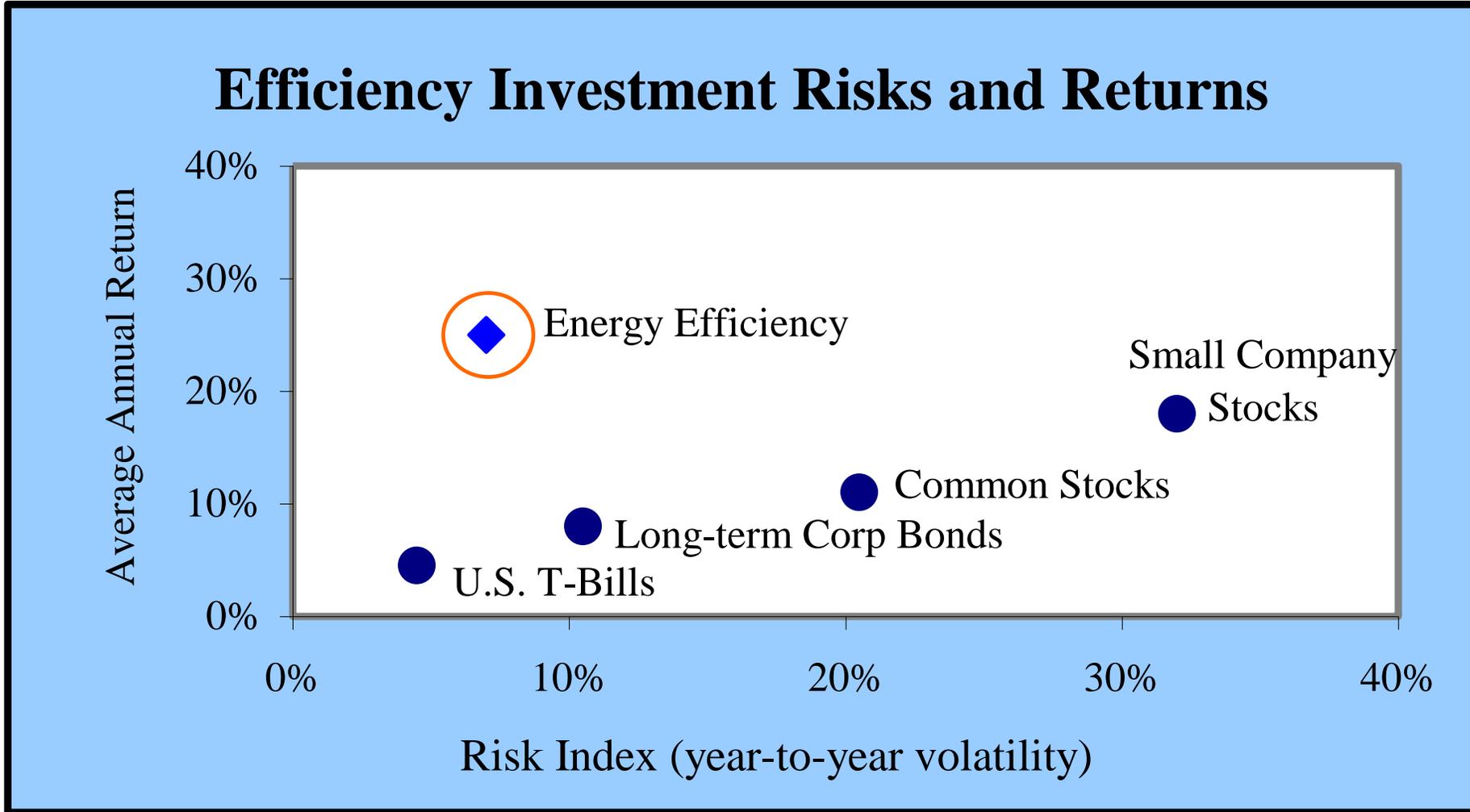
- Non-profit energy-efficiency “think tank” founded in 1980
- Conduct research on best practices, costs and benefits
- Work to advance energy efficiency technologies, policies and programs at the federal, state and local levels



OHIO COMMERCIAL ELECTRIC EFFICIENCY POTENTIAL IN 2025 BY END-USE



EFFICIENCY INVESTMENTS: LOW RISK, HIGH RETURN



Source: ACEEE estimates adapted from the U.S. EPA and the Vanguard Group

ILLUSTRATIVE PROJECT ECONOMICS

Year	Energy Costs	Investment	ESPC Payments
0	\$ 100,000	\$ 200,000	0
1	90,000	0	\$ 8,500
2	80,000	0	17,000
3	80,000	0	17,000
4	80,000	0	17,000
5	80,000	0	17,000
6	80,000	0	17,000
7	80,000	0	17,000
8	80,000	0	17,000
9	80,000	0	17,000
10	80,000	0	17,000
11	80,000	0	17,000
12	80,000	0	17,000
13	80,000	0	17,000
14	80,000	0	17,000
15	80,000	0	17,000
16	80,000	0	0
17	80,000	0	0
18	80,000	0	0
19	80,000	0	0
20	80,000	0	0



Governor Bryant's Energy Summit



Expanding Capacity Through Energy Efficiency

ACEEE

American Council for an Energy-Efficient Economy

2012 State Energy Efficiency Scorecard

Check out a state to view its energy efficiency performance and ranking in the 2012 Scorecard report.

www.aceee.org



States Most in Need of Improvement Are NE, LA, MO, KS, AK, SD, WY, WV, ND, and MS

- Lead by example: state energy management
- Statewide energy efficiency building codes for new commercial construction
- Initiate an energy efficiency market program analysis

NATIONAL PRESS CLUB

ACEEE

American Council for an Energy-Efficient Economy



PRIVATE CAPITAL NEEDED TO HELP ADVANCE GOVERNMENT OBJECTIVES

- Reduce energy costs in government
- Lead by example
 - Basic retrofits
 - Deep energy efficiency retrofits
 - Efficient new buildings, “zero net energy”
 - Renewable energy



The NAM Agenda



Goal 1: The United States will be the best place in the world to manufacture and attract foreign direct investment.

Goal 2: Manufacturers in the United States will be the world's leading innovators.

Goal 3: The United States will expand access to global markets to enable manufacturers to reach the 95 percent of consumers who live outside our borders.

Goal 4: Manufacturers in the United States will have access to the workforce that the 21st-century economy demands.



MANUFACTURERS SUPPORT ENERGY EFFICIENCY

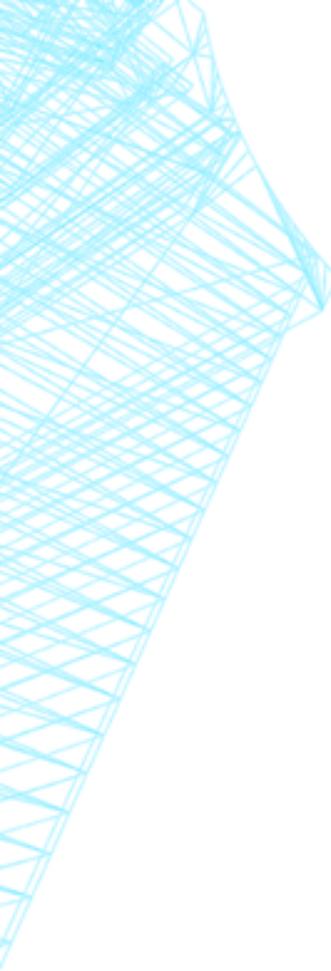
National Association of Manufacturers' Energy Efficiency Task Force Federal Policies to Promote Building Sector Energy Efficiency

- 1. Promote consumer transparency through energy use labeling for buildings.** Direct the Department of Energy (DOE) to develop an "energy performance score" that provides purchasers and lessees of residential and commercial buildings with standard building performance energy metrics, similar to nutrition labels on food and miles-per-gallon ratings on vehicles. A harmonized, consumer-friendly rating system is critical in those states that have enacted market disclosure regulations requiring standard and consistent building energy information to be transaction based and available publicly.
- 2. Improve the existing national database of energy consumption information.** Direct the DOE to improve and enhance the voluntary system for collecting and organizing operational energy use data in buildings for generic benchmarking.
- 3. Encourage open and visible access to energy usage and pricing.** Direct the DOE to provide funding for voluntary programs for buildings that expand real-time energy data access to consumers and foster market solutions based on energy awareness and management.
- 4. Partner with the private sector to support research, development and deployment.** Energy efficiency in commercial and residential buildings represents the largest short-term opportunity to reduce U.S. energy consumption and concomitant greenhouse gas emissions. To capitalize, policymakers should increase federal government investment to research, develop and deploy energy-efficiency standards.
- 5. Save taxpayers money by reducing government energy spending.** The federal government spends more than \$7 billion annually on building-related energy costs—or \$70 billion each decade. Government estimates suggest that at least 15 percent of that spending could be avoided by modernizing energy systems in government buildings. Energy-saving performance contracts (ESPCs) and utility energy service contracts (UESCs) offer attractive mechanisms to leverage private financing to realize guaranteed energy savings and save taxpayers money. Federal policy should establish an annual target for federal agencies of \$2 billion in guaranteed energy savings through ESPCs and UESCs.
- 6. Recognize and value energy-efficiency investments.** Unleash private financing of energy efficiency in commercial and residential sectors by supporting property tax repayment (property assessed clean energy lending), public-private partnerships, bill financing and other mechanisms that guarantee private sector performance and require no upfront cash from the government; integrate energy-efficiency criteria into residential and commercial building loan underwriting standards (the Sensible Accounting to Value Energy Act); and require energy-efficiency disclosure in new and existing home sales backed by federal mortgages.
- 7. Provide an incentive for states to update building codes.** While the current stakeholder-based model building code process for residential and commercial buildings has a successful track record in substantially raising energy efficiency over time, many states and localities fail to keep pace of code updates. Congress should direct the DOE to provide financial and technical support to states and localities for the timely adoption and enforcement of current stakeholder-developed energy-efficiency codes for both residential and commercial construction.

In early 2013, the NAM Energy Efficiency Task Force developed a set of policy principles designed to inform Congress on ways to promote building sector energy efficiency.

These policy principles were crafted with the goal of receiving strong bipartisan support.

Many of these concepts have made their way into legislation in the House and Senate.



WHY PERFORMANCE CONTRACTING MATTERS TO MANUFACTURERS

- Manufacturing in the United States produces more than \$1.87 trillion of value each year, or 11.9 percent of U.S. GDP. For every \$1.00 spent in manufacturing, another \$1.48 is added to the economy—the highest multiplier effect of any economic sector.
- ESPCs and UESCs present tremendous opportunities for manufacturers. The types of products and services that typically fall within the scope of an ESPC or UESC—boilers and chillers, energy management control systems, lighting, windows, doors, insulation, HVAC, energy delivery—create much-needed jobs across the manufacturing supply chain and around the country. In addition, small and medium-sized manufacturers handle the majority of the components of a performance contract.
- A long-term commitment to performance contracting will continue to unlock these benefits throughout the manufacturing supply chain.

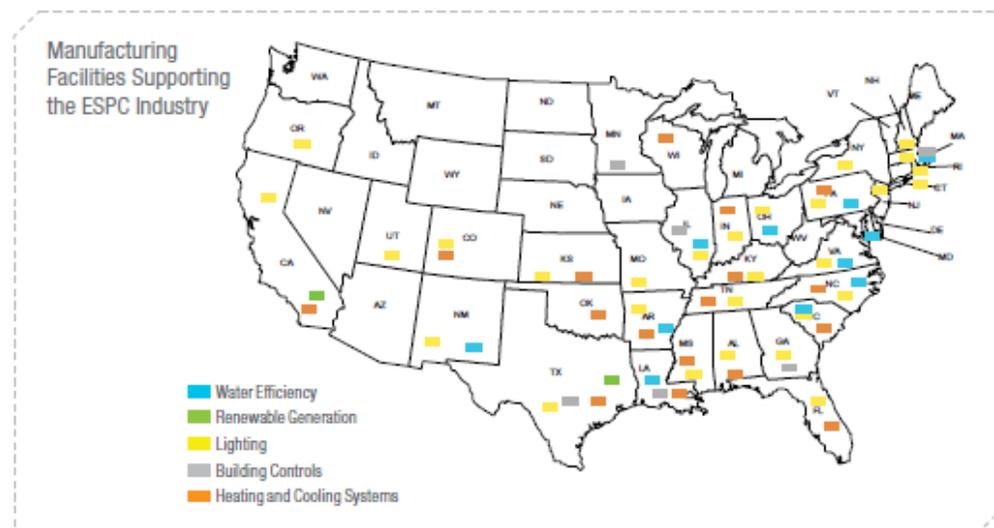
NAM Report on Energy Savings and Performance-Based Contracting Investment Initiative

Executive Summary

- » On December 2, 2011, President Obama directed the heads of all executive departments and agencies to enter into a combined \$2 billion in energy-saving performance contracts (ESPCs) and utility energy service contracts (UESCs) by the end of 2013.
- » Almost two years later, the program is an unqualified success. By the close of 2013, more than \$1.3 billion worth of these projects will have been awarded. Another \$1 billion worth of projects will be in various stages of the development "pipeline," with expectations of an additional \$200 million being awarded early in 2014. The program has created jobs across the manufacturing supply chain.
- » By setting a firm goal this initiative broke down many barriers that have kept agencies from taking on ESPCs and UESCs in the past. Manufacturers believe the President should extend his directive and challenge all federal agencies to meet a five-year, \$5 billion goal.

The Impact of ESPCs and UESCs on Manufacturing

ESPCs and UESCs present tremendous opportunities for manufacturers. The types of products and services that typically fall within the scope of an ESPC or UESC—boilers and chillers, energy management control systems, lighting, windows, doors, insulation, HVAC, energy delivery—create much-needed jobs across the manufacturing supply chain and around the country. In addition, small and medium-sized manufacturers handle the majority of the components of a performance contract.



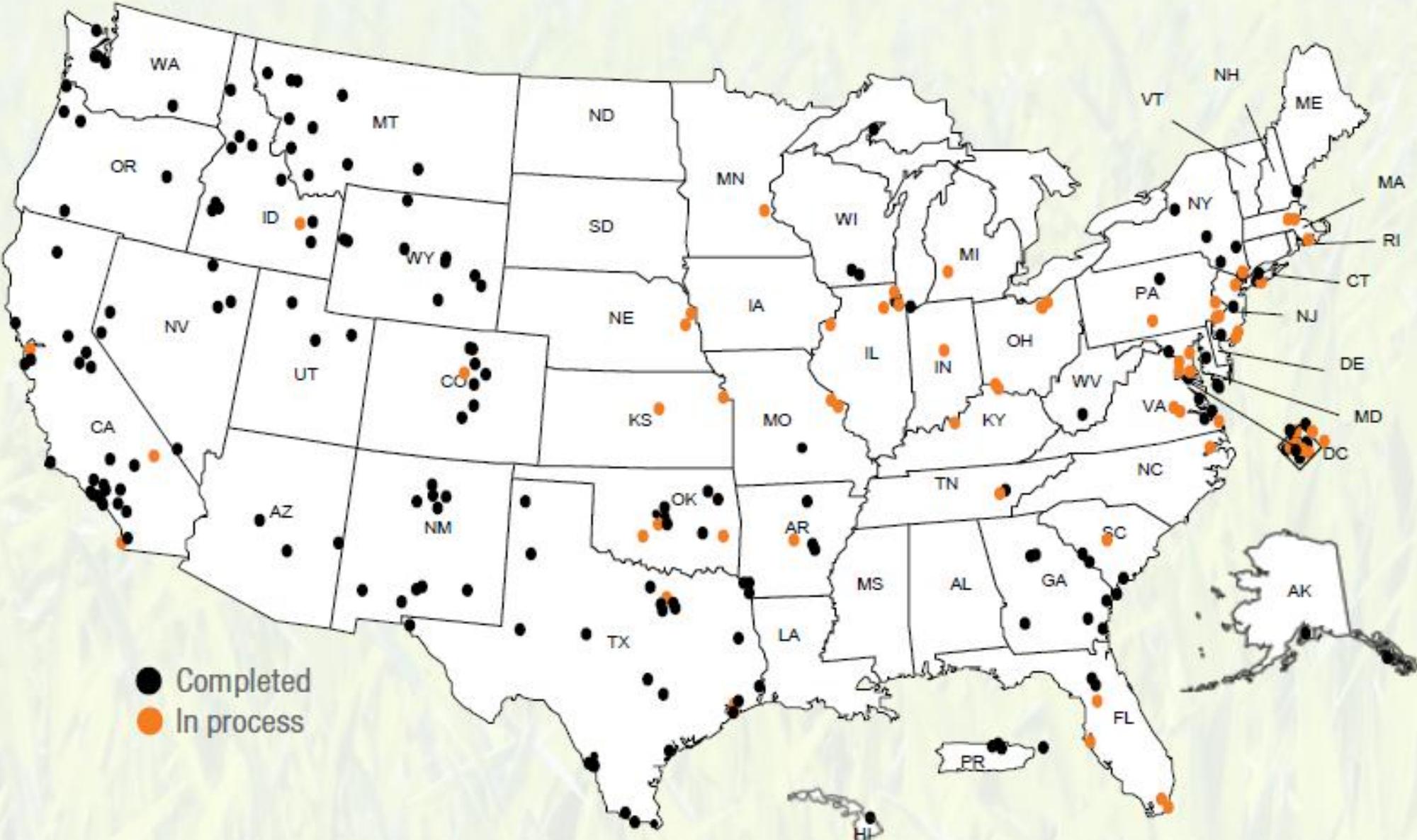
Facts About the Initiative:

- ➔ 23 agencies have participated
- ➔ 305 projects have been identified
- ➔ 100 projects of been awarded to date (need to put this fact in our paper)
- ➔ \$1.03 billion has been contracted or spent
- ➔ \$1.3 billion will have been contracted or spent by end of 2013
- ➔ 100 projects are in the pipeline
- ➔ \$200 million worth of projects will be awarded in early 2014
- ➔ \$1 billion worth of projects are in the pipeline

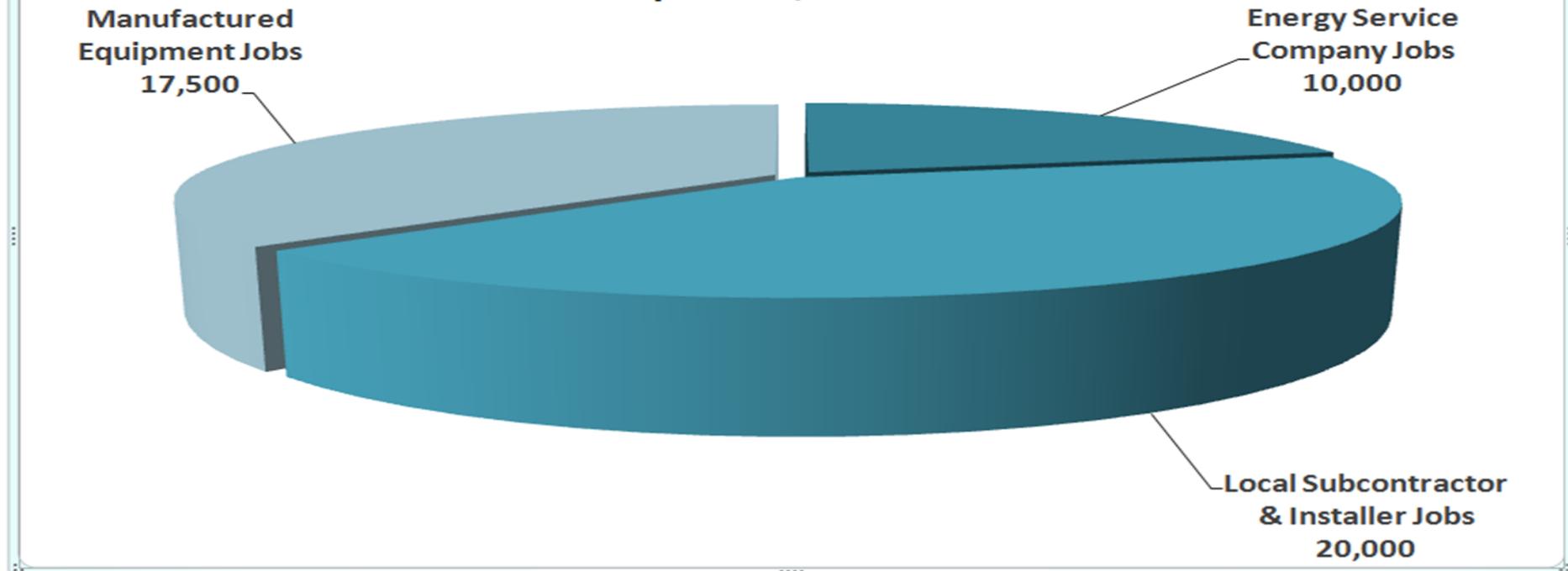
Recommendations and Conclusions

- 1 Continue to direct the use of ESPCs and UESCs over the next five years at a steady rate of \$1 billion per year. These programs will help the federal government accomplish much-needed infrastructure improvements and modernization, reduce energy consumption and create jobs at no upfront costs to taxpayers by leveraging the power of the private sector.
- 2 Streamline the ESPC/UESC process, including the issuance of bids, selection of contractors and approval of projects. The more quickly projects are awarded, the sooner departments and agencies will reach their goals. The Administration should put in place a process by which legal and contracting personnel at all federal agencies can vet their various interpretations of what is allowable under an ESPC/UESC.
- 3 Expand the scope of projects beyond traditional measures (efficient lighting, building controls and HVAC equipment and the associated operations and maintenance) to include proven measures to enhance energy security at all federal facilities. This could include measures such as combined heat and power, microgrids and demand response and waste to energy plants and data centers.

Federal ESPC Projects in the United States (2009-Present)



Direct Job Impact of \$5 Billion ESPC/UESC Directive: Equals 47,500 Jobs



\$5 Billion Investment =

Considering a typical \$10 million ESPC project has a direct job impact of 95 jobs, a \$5 billion total ESPC/UESC projects investment would yield an economic impact of approximately 47,500 direct American jobs:

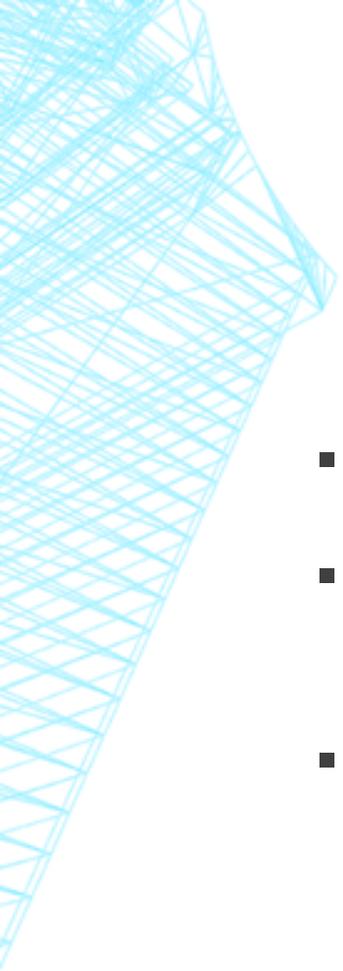
\$5 Billion Investment =

10,000
ESCO Jobs

20,000 Local
Subcontractor Jobs

17,500 Jobs for
Manufactured Equipment

Total = 47,500 Jobs



SCORING

- Chairman Upton letter and Chairman Bingaman letter in 2011
- Interest in finding a way to work with CBO rules so Congress can continue to have a role
- This is the “low hanging fruit” of bipartisan energy legislation



THANK YOU!

- For More Information Please Contact:
 - Jennifer Schafer, Executive Director, Federal Performance Contracting Coalition
 - jasca@cascadeassociates.net
 - Chris Hickling, Director, Edison Electric Institute
 - CHickling@eei.org
 - Steve Nadel, Executive Director, American Council for an Energy-Efficient Economy
 - snadel@aceee.org
 - Ross Eisenberg, Vice President, National Association of Manufacturers
 - REisenberg@nam.org