# A Survey of the U.S. Energy Service Company (ESCO) Industry: Market Growth and Development from 2008 to 2011

Andrew Satchwell\*, Charles Goldman\*, Peter Larsen\*, Donald Gilligan\*\*, and Terry Singer\*\*

\*Lawrence Berkeley National Laboratory

\*\*National Association of Energy Service Companies

Report Summary
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### **Overview of Report**

- Approach, Data, and Methods
- Overview of ESCO Industry
- ESCO Market Activity and Perceived Trends
- Implications for Policymakers

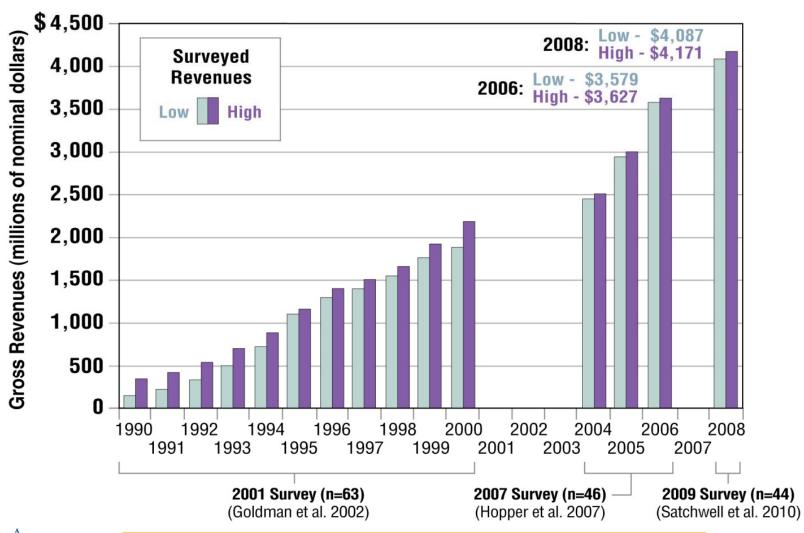


### Approach, Data, and Methods

- Survey instrument sent to ESCOs using the following sources:
  - NAESCO ESCO membership list
  - DOE-qualified energy service company list
  - Qualified performance contractors on state lists
- Response rate:
  - 2007 survey <u>72%</u> (33 out of 46)
  - 2009 survey 55% (29 out of 53); but all large ESCOs responded
- Survey questions:
  - Current revenues by market segment, contract type, and technology
  - Anticipated revenues in the next three years
  - Factors influencing trends in industry costs and savings

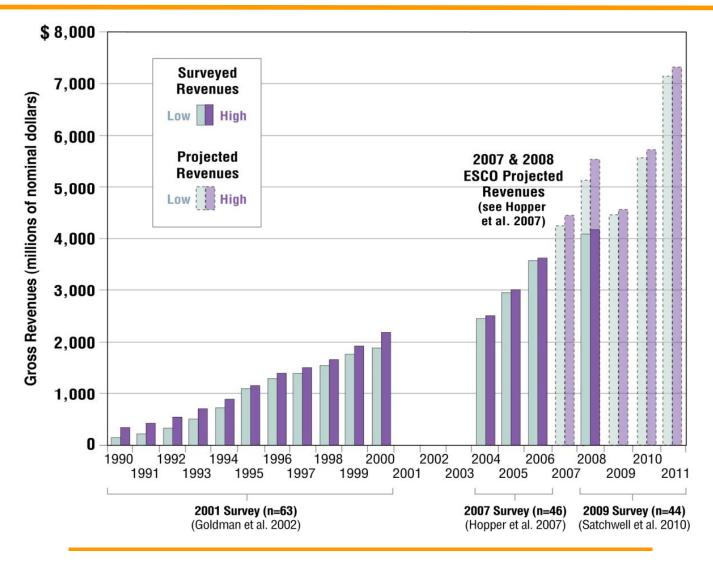


### **Estimated Size of U.S. ESCO Industry**





### **Growth Projections for U.S. ESCO Industry**





### ESCO Industry: Recent activity (2006 to 2008) and projected market growth (2008 to 2011)

- U.S. ESCO industry revenues increased to \$4.1B in 2008, despite general economic slowdown
  - 7% annual growth from 2006 to 2008
- ESCOs project revenues to be ~\$7.3B in 2011; growing by 26% per year
  - ESCOs are optimistic about their business prospects over the next 2-3 years, even though the economy is just beginning to recover from severe recession
  - ESCOs hope to capitalize on American Reinvestment and Recovery Act energy efficiency programs funding and the significant ramp-up in ratepayer-funded energy efficiency and renewable programs

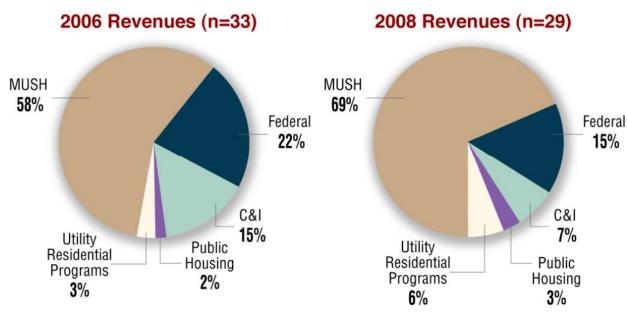


### Comparison of 2008 Reported and Projected Revenues

- 2008 surveyed revenues vs. projected revenues were less than anticipated (\$4.1 vs. \$5.5B)
- Several factors may account for gap between 2008 reported revenues and ESCO projections of 2008 revenues from previous LBNL study (Hopper et al 2007)
  - General downturn in the U.S. economy
  - ESCOs' projected activity level in private sector markets did not materialize (e.g. commercial real estate market declined)
  - Overly-optimistic projections
  - Changes in the project finance market
  - Slower than expected acceleration of the federal ESPC market
  - ESCO industry consolidation

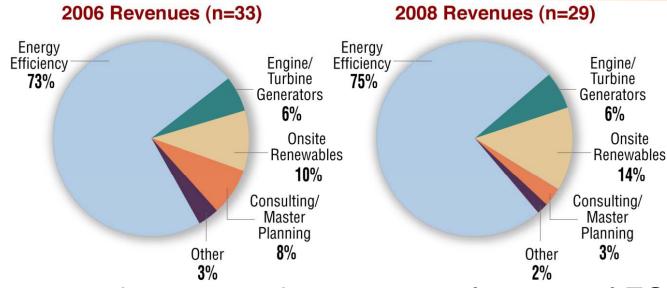


### ESCO Market Activity: Industry Revenues by Market Segment



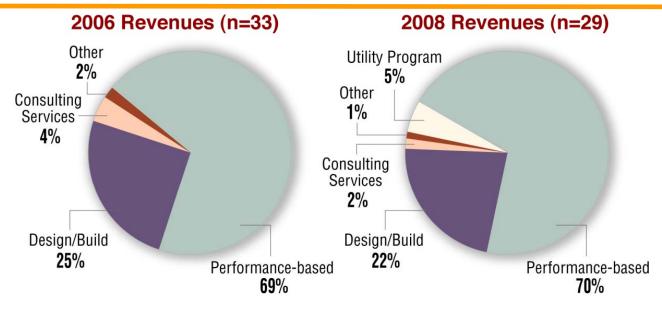
- MUSH markets account for \$2.8 billion in ESCO revenues in 2008; about 69% of total ESCO industry activity
- ESCO activity in the federal market appears to account for a somewhat lower share of total industry revenues in 2008 compared to 2006 (22% vs. 15%)

### ESCO Market Activity: Industry Revenues by Project/Technology Type



- Onsite renewable generation accounts for 14% of ESCO industry revenues in 2008 (~\$570 million)
- Contributing factors to increased deployment are:
  - ESCOs leveraging publicly-funded incentives
  - Bundling renewable energy with energy efficiency improvements to help customers meet various goals (e.g., energy independence, environmental footprint reductions)

# **ESCO Market Activity:**Industry Revenues by Contract Type

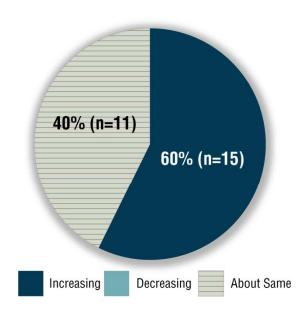


- Performance-based contracting continues to be the dominant arrangement with customers
  - These contracts account for 69% of revenues in 2008 (~\$2.8 billion)
  - Driven and enabled by legislative or procurement requirements placed upon institutional sector customers that allow for long-term performance-based contracts



## Perceived Trends in Project Installation Costs

 "Have project installation costs been increasing, decreasing, or staying about the same over the past decade?"



Factor[1]	Rank	Average Score <sup>[2]</sup>
ESCO production inputs (e.g., labor and material costs)	1	2.6
Market barriers (e.g., transaction costs, contract rules)	2	5.1
Demand for comprehensive/capital-intense retrofits	3	5.1
Other factors	4	6.3

On average, ESCOs scored this factor in the top-3 as most influential...

<sup>[2] 1=</sup>most influential; 9=least influential.

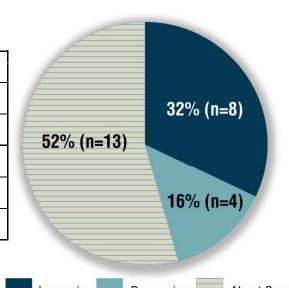


<sup>[1]</sup> The survey included nine factors for ESCOs to rank; LBNL combined the nine factors into four mutually exclusive factors for purposes of analysis and reporting.

### Perceived Trends in Project O&M Savings

 "Have O&M savings been increasing, decreasing, or staying about the same over the past decade?"

	Factors[1]	Rank	Average Score <sup>[2]</sup>
>	Customers more willing to recognize savings	1	2.8
	Better methods to estimate O&M savings	2	3.1
	Changes in labor costs (ESCO and external)	3	3.3
	New technologies	4	3.5
	Changes to internal ESCO policies regarding O&M estimation	5	4.5



On average, ESCOs scored this factor in the top-3 as most influential...



<sup>[1]</sup> Survey included seven factors for ESCOs to rank; LBNL combined the seven factors into five mutually exclusive factors for analysis purposes. Ranking factors were based on assumption that O&M savings have increased over time.

<sup>[2] 1=</sup>most influential; 7=least influential.



### **Summary and Implications for Policymakers**

- ESCO industry was able to expand in recent years (2006 to 2008) despite a severe economic recession
  - ESCO's project significant growth in revenues through 2011 (~25% per year)
  - Expected drivers include: (1) large infusion of federal ARRA dollars to support state and local government EE programs and (2) increased spending in ratepayer-funded energy efficiency programs
- ESCOs are installing a more comprehensive mix of technologies at project sites
  - This trend likely to continue in future
  - Expected drivers include: (1) ratepayer-funded energy efficiency programs that encourage comprehensive retrofits in all end uses and (2) government initiatives that support deployment of renewable energy projects



# Summary and Implications for Policymakers (cont'd)

- The public/institutional market sector continues to be the dominant market for ESCOs
  - Going forward, ESCO market growth is likely in the public/institutional sector driven in part by "lead by example" programs established by state and local governments, the infusion of federal stimulus dollars, and continued support by the federal government for performance contracting
- Average size of ESCO projects continues to increase driven primarily by customer demand for more comprehensive projects and capital-intensive technologies
  - Given increasing project size and costs, ESCOs need to continue to focus on customer economics and value proposition
  - Means delivering additional savings and value to customers through a combination of energy and O&M savings, capital cost avoidance allowances and other non-energy benefits



#### For More Information:

#### Download the report:

http://eetd.lbl.gov/ea/emp/ee-pubs.html

#### LBNL Contacts:

Andrew Satchwell, <u>Asatchwell@lbl.gov</u>, (510) 486-6544 Charles Goldman, <u>CAGoldman@lbl.gov</u>, (510) 486-4637 Peter Larsen, <u>PHLarsen@lbl.gov</u>, (510) 486-5015

