

ESPC and Commercial PACE

ESC MT Conference

Charlotte, NC

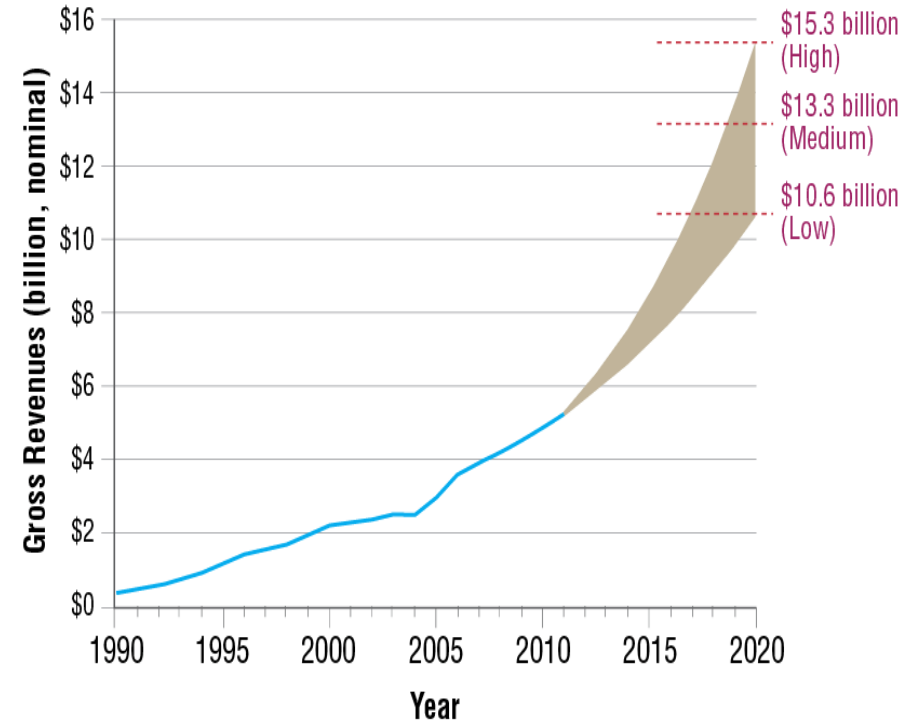
September 1, 2015

Overview of Presentation

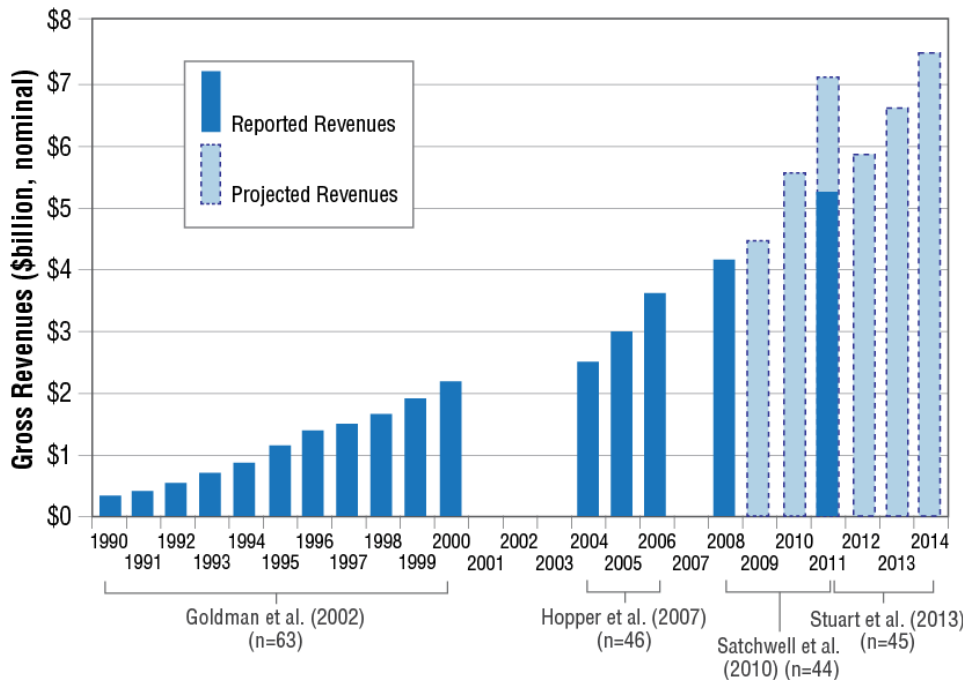
- ESCO Industry Snapshot
 - ESCO Industry Growth
 - Revenue Shares and Trends
 - Market Drivers
- Remaining Market Potential
 - COM is the Great White Whale
- Mismatch of ESPC and COM Retrofits
- ESCO Experience in the COM Market

INDUSTRY SIZE: CURRENT AND PROJECTED

- The ESCO industry continued to grow at a steady pace--despite the onset of a major recession--reporting revenues of approximately \$5.3 billion in 2011.

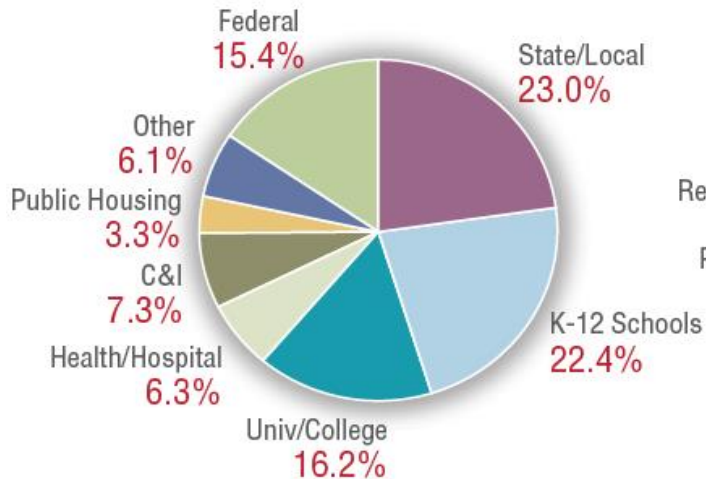


- We project that the ESCO industry will more than double in size from ~\$6 billion (2013) to \$11-\$15 billion (2020).

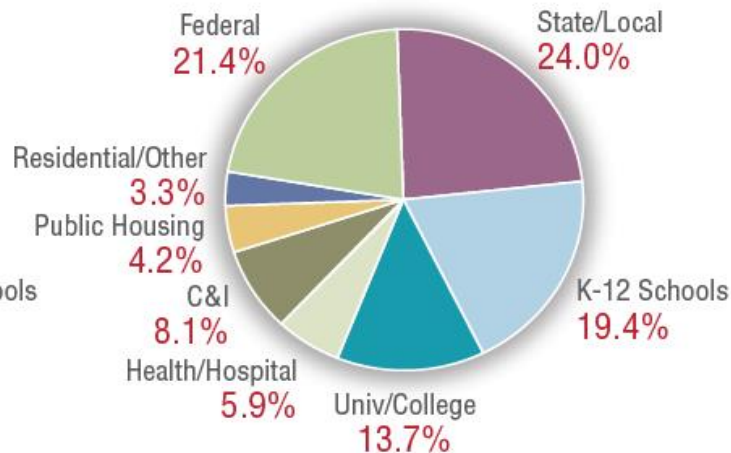


2008 & 2011 REVENUE SHARES

2008 Revenues (n=29)

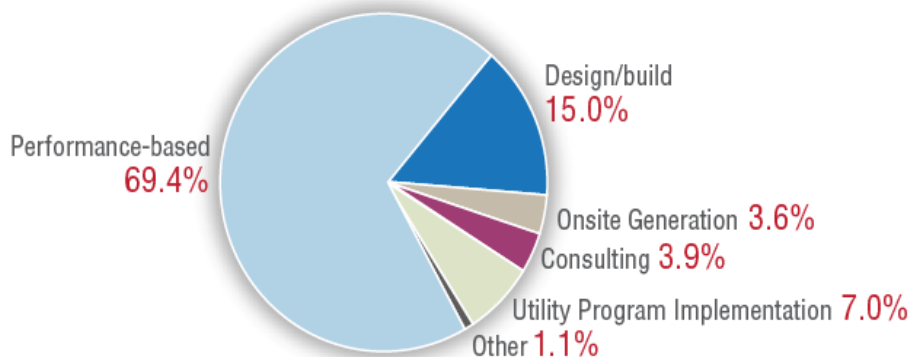


2011 Revenues (n=35)



• ~85% revenue from “MUSH”+ Federal market

2011 Revenues (n=34)



• ~70% of 2011 revenue from performance-based contracts; 15% from design/build.

ESPC Market Drivers

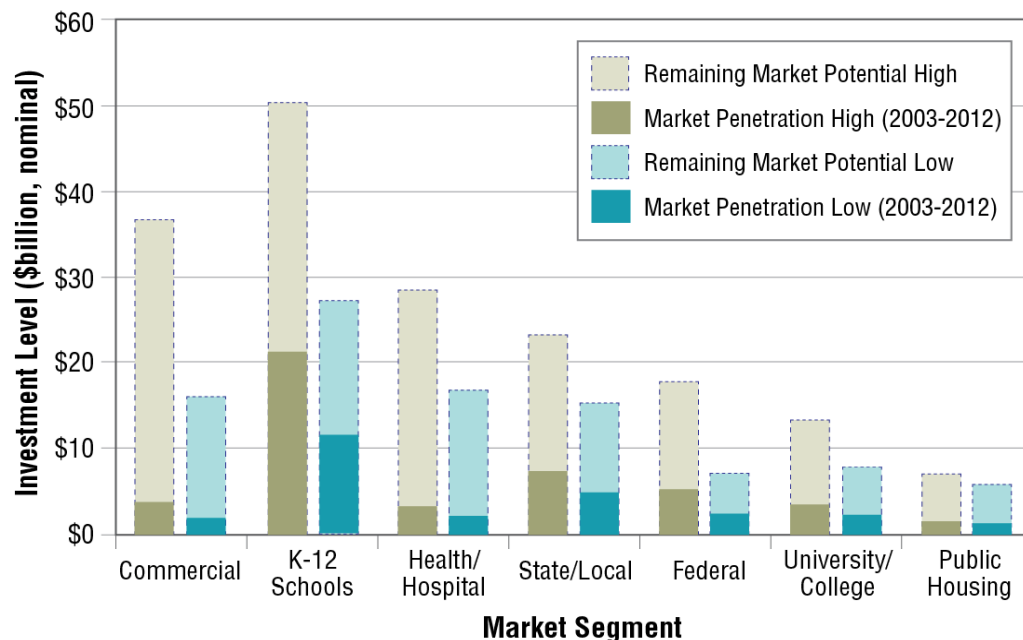
- Federal government
 - EE mandates
 - President's Performance Contracting Challenge
 - Need for capital improvements (GSA budgets)
- MUSH Market
 - EE mandates
 - Need for capital improvements
 - Convert wasted \$\$ to payment stream

MARKET PENETRATION (2003-2012)

- Market penetration of performance contracting is highest in the K-12 schools sector and lowest in the Private Commercial sector...

Market Segment	U.S. Census Region				
	Northeast	Midwest	South	West	U.S.
K-12 Schools	45%	40%	42%	30%	42%
State / Local	39%	30%	30%	45%	30%
Federal	27%	28%	25%	27%	28%
Universities/Colleges	25%	25%	23%	30%	25%
Public Housing	20%	15%	18%	18%	18%
Health/Hospitals	10%	10%	15%	15%	10%
Private Commercial	10%	6%	8%	9%	9%

REMAINING MARKET POTENTIAL



- Remaining investment potential in facilities typically addressed by this industry ranges from ~\$71 to \$133 billion.

Market Segment	Low Estimate	High Estimate
K-12 Schools	\$15.8	\$29.4
Health/Hospital	\$15.0	\$25.6
Private Commercial	\$14.4	\$33.5
State/Local	\$10.6	\$16.3
Public Housing	\$4.7	\$5.7
Universities/Colleges	\$5.7	\$9.8
Federal	\$4.9	\$12.7
Total	\$71.2	\$133.0

- Questions remain about the economic potential of these markets and the accuracy of this estimate...

Mismatch of ESPC and COM

- ESPC delivers comprehensive projects
 - Multiple measures, 10-20 year paybacks
 - Guaranteed savings
 - Debt financing
- Private sector wants short-term NOI increase
 - Lighting and controls, 2-3 year paybacks
 - Don't need guarantees
 - Don't want long term debt

Typical ESPC Measures

- Lighting – Indoor, outdoor, street lights
- Heating Ventilation & Air Conditioning (HVAC)
- Energy Management Systems
- Motors and Variable Speed Drives
- Building Envelope Measures
- Water Conservation Measures
- DG and CHP – renewable or fossil fuel
- Other Systems (kitchen, security, etc.)

Advanced ESPC Measures

- + Renewables – solar, wind and biomass
- + Distributed Generation or CHP
- + Demand Response
- + Water metering
- + Street and traffic lighting
- + Building sustainability

ESCO Experience in COM Market

- Best example is Clinton Climate Initiative
 - High-profile promotion
 - 40 cities signed up
 - 6 major ESCOs enlisted
 - \$5 billion in financing committed from US banks
- One project developed – Empire State Bldg.

Personal Perspective

- 40 years promoting EE to COM owners
 - ESCOs, utilities, public policy, etc.
- COM response: not our business
- Very modest success
- Mandates are key to moving the market
 - Benchmarking, leasing standards, etc.

Questions?

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