


## Performance Contracting 101

The Fundamentals of  
Energy Savings  
Performance  
Contracting



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### What is Energy Savings Performance Contracting (ESPC)?

Simply put, an ESPC converts dollars spent on wasted energy into energy-saving capital improvements in the customer facility. An ESPC uses capital supplied by third parties – banks or specialized energy project finance companies – and is structured to be self-financing, *i.e.*, the total cost of the project is paid from guaranteed savings.



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### How Does ESPC Work?

- ESCO identifies energy saving opportunities.
- ESCO implements improvements paid from savings.
- ESCO arranges financing from all available sources.
- ESCO guarantees that savings will meet or exceed annual debt service payments to cover project costs.
- ESCO pays any savings shortfalls.



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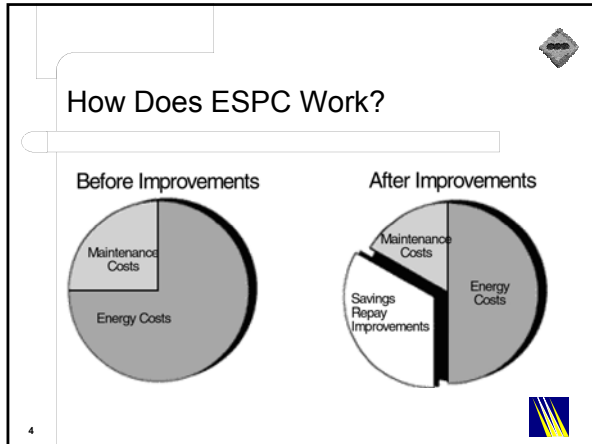
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- ### ESPC Project Services
- Preliminary Audit or Project Scoping
  - Investment Grade Audit
  - Engineering Design
  - Arrange Project Financing
  - Construction Management
  - Commissioning
  - Monitoring and Verification (M&V)
  - Operations & Maintenance (optional)

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- ### Typical ESPC Measures
- Lighting
  - Heating Ventilation & Air Conditioning (HVAC)
  - Energy Management Systems
  - Motors and Variable Speed Drives
  - Building Envelope Measures
  - Water Conservation Measures

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### Advanced ESPC Measures

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



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### What Makes ESPC Different?

- ESPC creates jobs without new taxes - every \$1 million of ESPC project value creates about 10 direct jobs in engineering, construction and equipment manufacturing
- ESCO assumes project technical risk
- ESPC uses taxpayer dollars to save taxpayer dollars long term
- Project costs paid from savings
- One company delivers all services
- Project savings guaranteed by ESCO



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### The ESCO Industry Has Delivered:

- \$40B in projects since 1990
- \$50B savings – guaranteed and verified
- 330,000 person-years of direct employment
- \$25 billion of infrastructure improvements
- 420 million tons of CO<sub>2</sub> savings at no additional cost



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### US ESCO Industry Overview

- NAESCO ESCO Members Represent 95% of the U.S Market
- ESCOs provide turnkey projects
  - Full range of efficiency and renewable technologies
  - Project costs paid from savings
- NAESCO members delivered about \$5 B of energy efficiency projects in 2010
  - ≈ All US utility EE programs combined



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### ESCO Business Model

- Specialized construction business
  - Deliver large, comprehensive projects
  - 10+ year paybacks
- Design/build delivery
- Public sector is more than 80% of business
- Building improvements a major driver
- Guaranteed savings
- About 20% of projects use utility incentives



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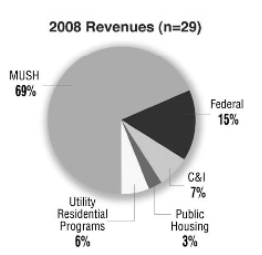
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### ESCO Market Segments



Market Segment	Percentage
MUSH	69%
Federal	15%
C&I	7%
Utility Residential Programs	6%
Public Housing	3%



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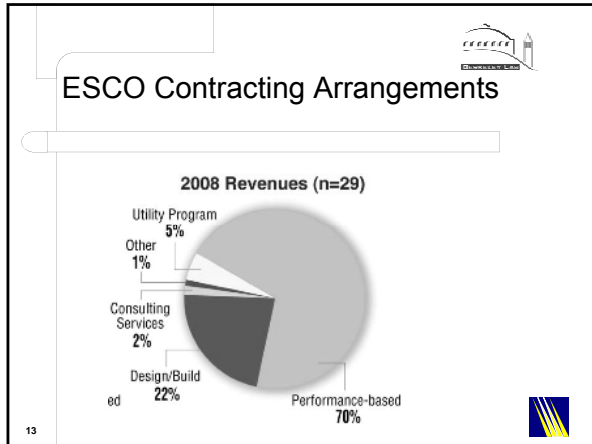
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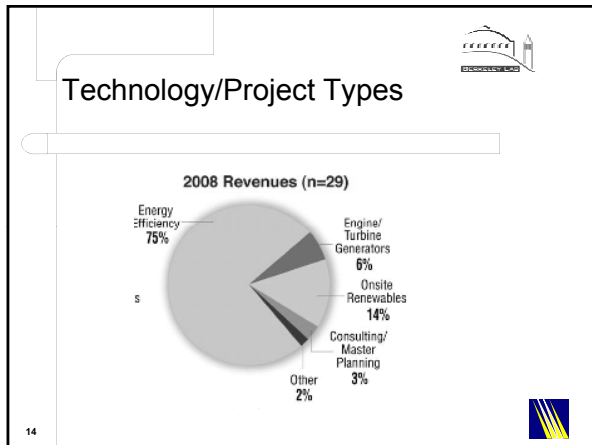
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### North Little Rock Schools

- North Little Rock

North Little Rock Schools	
	<p>ESCO: Trane</p> <p><b>Project Scope:</b> North Little Rock High School's east campus, The main building at Lakewood Middle School and Ridge Road Middle Charter School</p> <p><b>Project Savings:</b> \$98,600 Annually</p> <p><b>Upgrades Included:</b> upgraded HVAC, Building automation systems (BAS) and efficient Lighting</p>

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