

Organizing an EPC Program ESCO Perspective

NASEO

Midwest EPC Meeting

Indianapolis

July 30, 2008



Agenda

- Why Do Energy Performance Contracting?
- ESCO Industry Overview
- Project Financing
- Program Design
- Program Marketing



Why Do EPC?

- Seems difficult and complex
- Takes a lot of time
- What are the rewards for taking a risk?



EPC Benefits

- + Improve facility energy and water efficiency
- + Replace aging equipment using 3rd party financing
- + Decrease maintenance costs
- + Free-up budget dollars to fund primary activities
- + Increase productivity from improved indoor air quality (IAQ) and building comfort conditions
- + Enhance local economy



ESCO Industry Overview

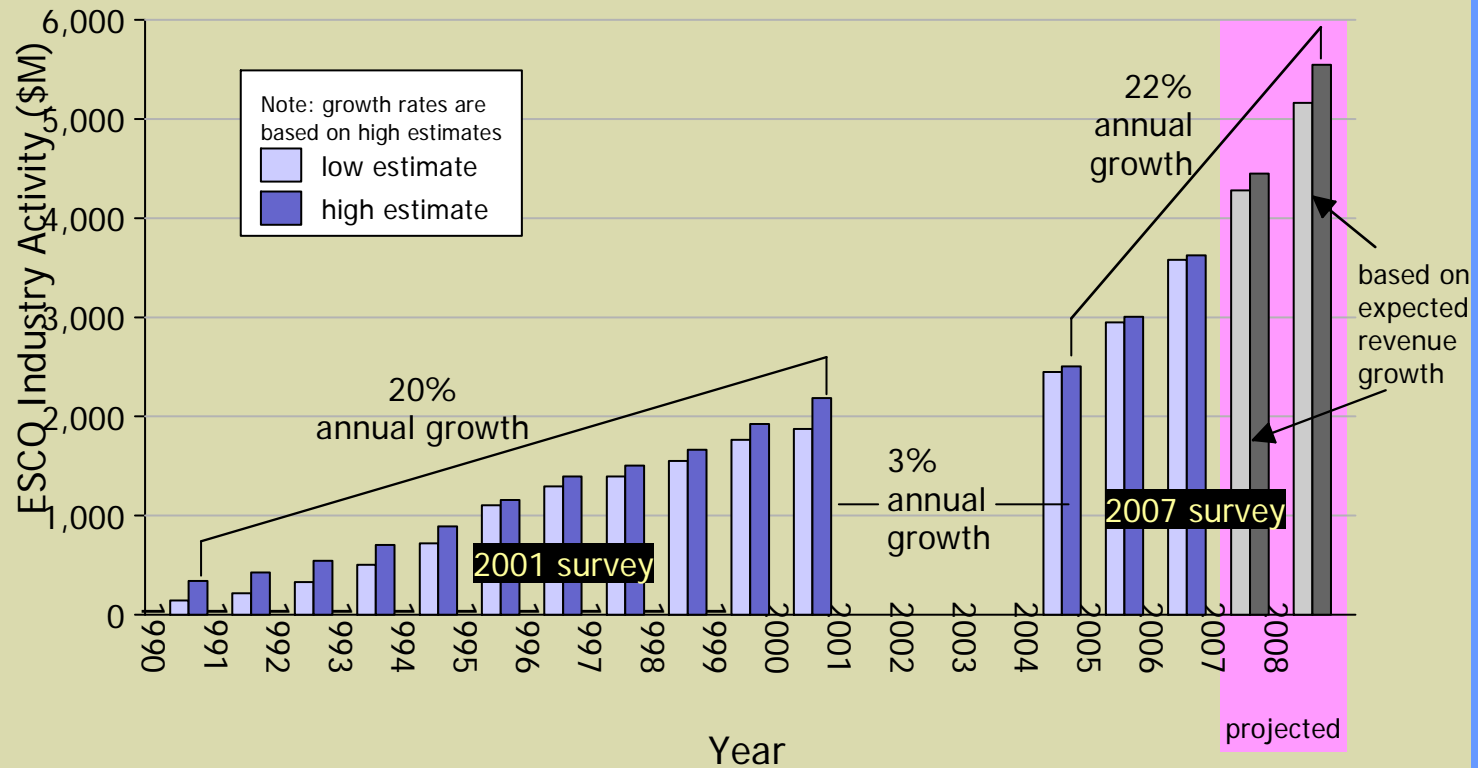


EPC Delivered by ESCOs

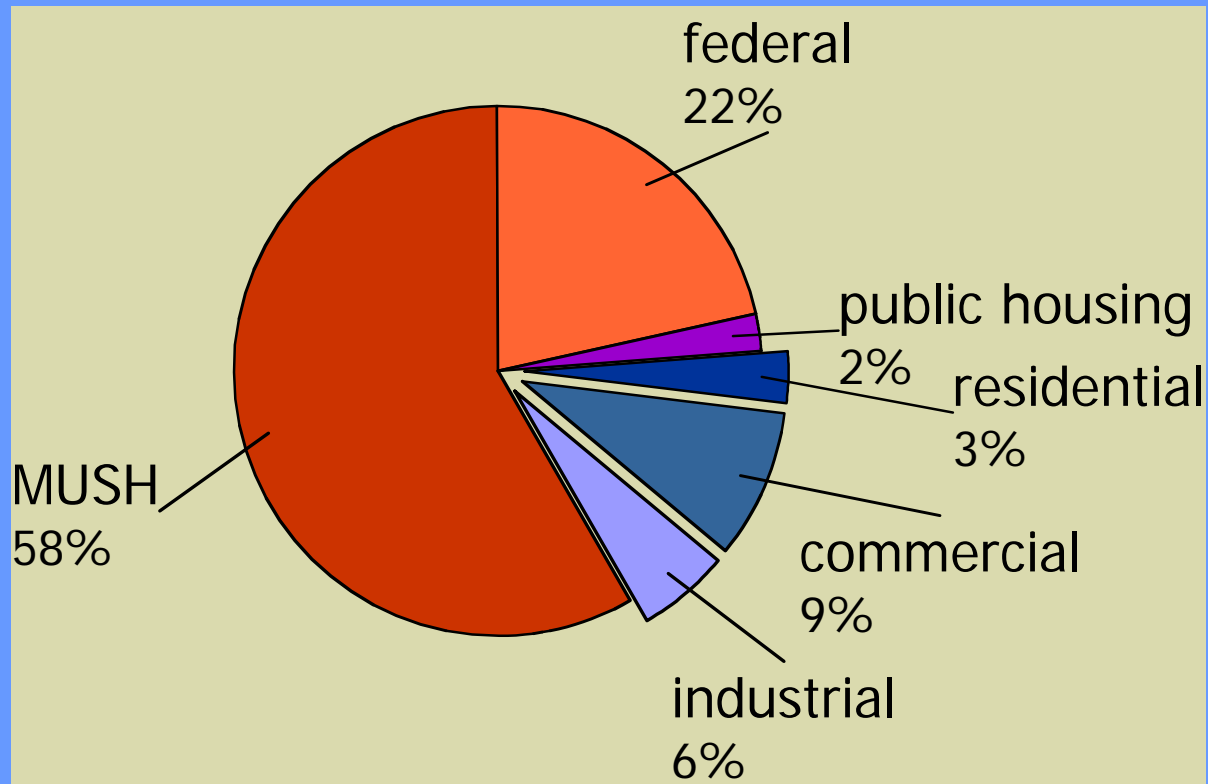
- NAESCO has about 30 member ESCOs
- Most are subsidiaries of larger companies
 - Equipment manufacturers
 - Utilities
- National and regional independents



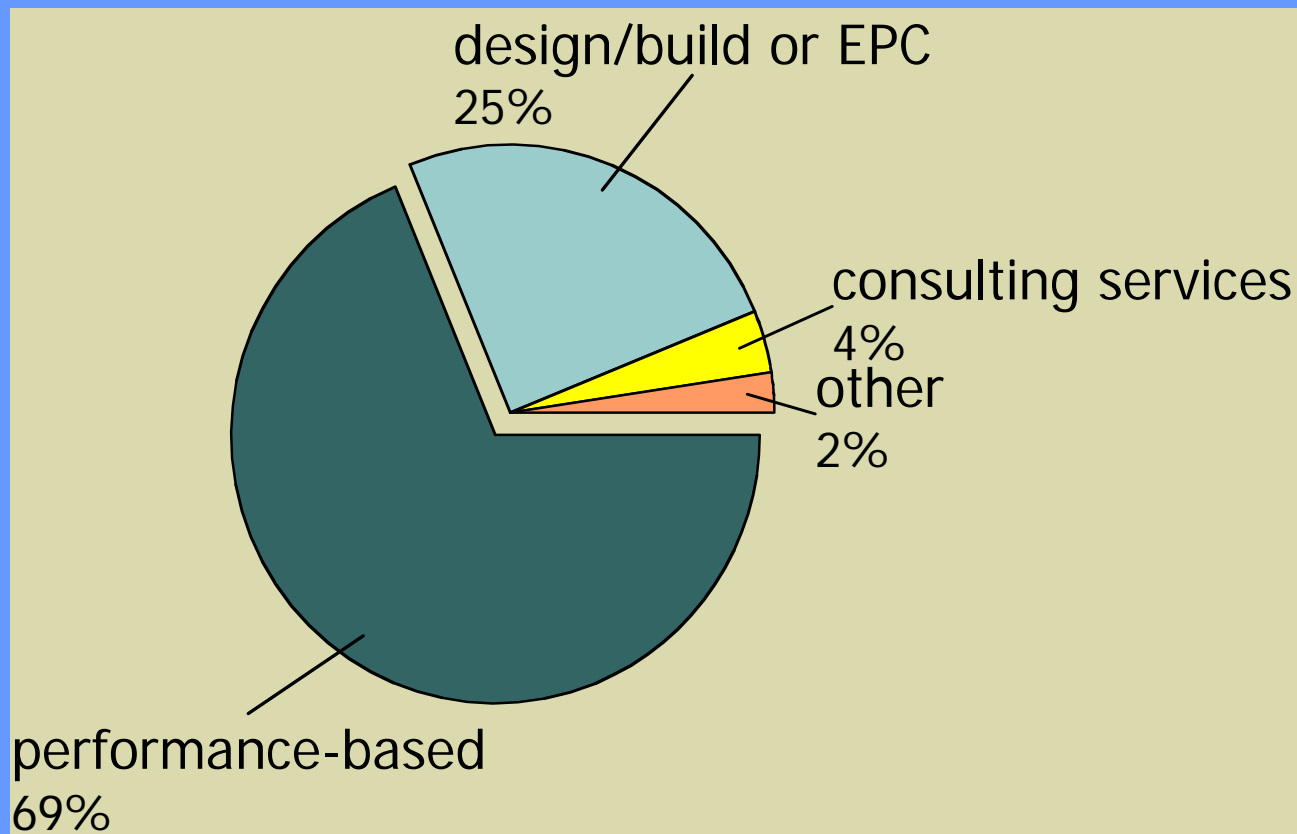
ESCO Industry Size



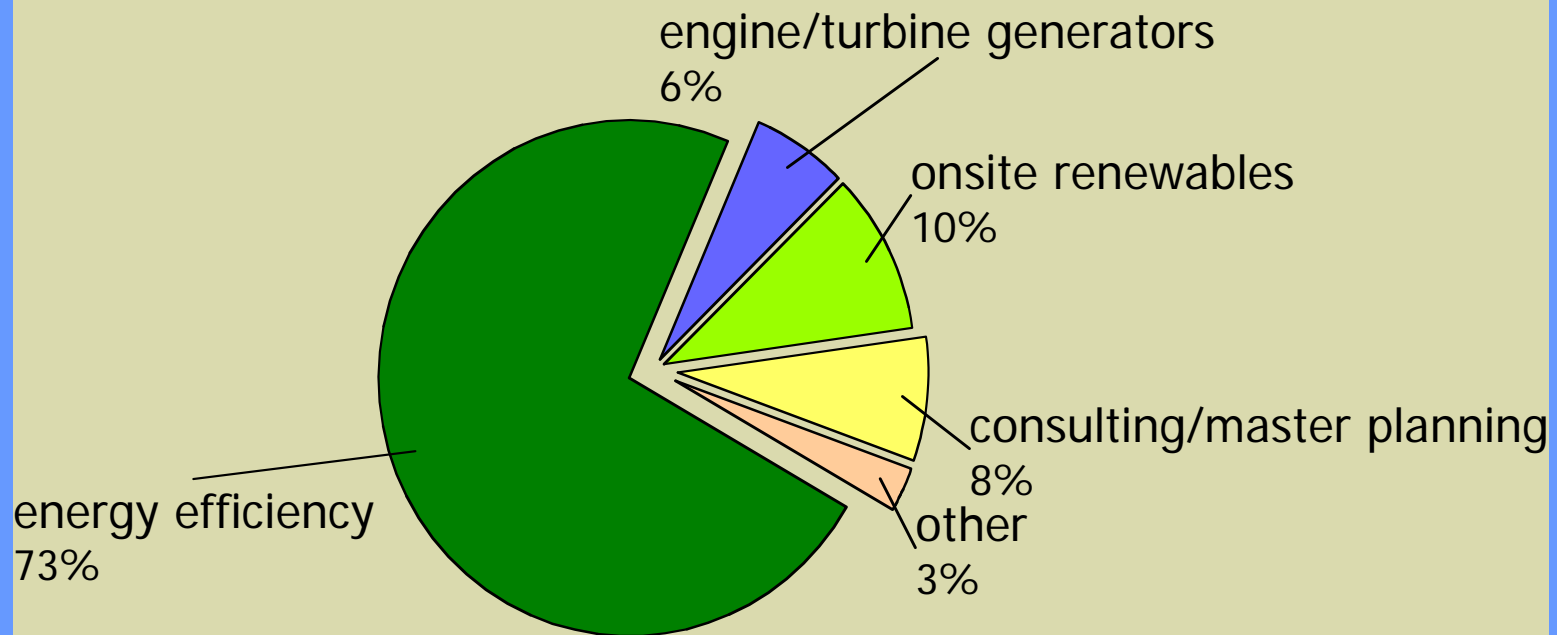
ESCO Market Segments



ESCO Contracting Arrangements



Technology/Project Types



Basic EPC Projects

- Lighting and/or HVAC (95%)
- Typical project costs: \$1 - \$2 million
- 23% median electric savings



Advanced EPC Projects

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



Project Financing



Project Finance Market

- Mature, competitive
- Major international companies
- Local and regional specialty companies
- Local and regional banks



Financing Options

- Cash
- Bank Loan
- General obligation bonds
- Leases
- ESCO Financing
- Utility Rebates or Purchase of Savings
- Power Purchase Agreements



Cash

- Budget allocation
- Agencies often have to wait for years
- Many other priorities in lean times



Bank Loans

- Direct loan to agency
- Source is a local or regional bank
- Unconditional obligation to repay
- Usually not available to government customers



General Obligation Bonds

- Secured by full faith and credit
- Payable from property taxes
- Require voter authorization
- Considered the best credit by investors
- Lowest rates
- Takes time to structure and issue



Lease-based Financing

- Municipal lease
- Master lease
- Certificates of Participation
- Lease Revenue Bond



Municipal Lease

- Operating lease
 - No debt on balance sheet
- Tax exempt rates
- Customized terms
- Very competitive marketplace
- Can be negotiated and funded quickly



Master Lease

- Umbrella lease for several projects
 - Usually a single owner
- General terms and conditions
 - Negotiated once
- Individual projects funded as they occur



Certificates of Participation (COP)

- Funded by group of investors
- Used for pool financing
 - Multiple projects with multiple owners
- Higher issuance cost than municipals
- Lower interest rate than municipals
- Often fully committed with waiting lists



Lease Revenue Bond

- Similar to a COP
- One government agency raises the funds and lends to other agencies
- Lease proceeds repay the bonds
- Usually long process to access funds
 - Committees and control boards



Power Purchase Agreements

- Used for DG or CHP projects
 - Renewable or fossil generation
- Customer buys the output of the project
 - *e.g.*, kWh + pounds of steam
- Customer does not own project
 - Little or no technology risk



Program Design



Key Program Design Elements

- Program Goals and Objectives
- Global Strategies
- Program Implementation Strategies



Goals and Objectives

- Make EPC routine
- Meet mandated energy and GHG goals
- Multiply available funding
- Minimize long term operating and capital costs
- Improve comfort, IAQ and productivity
- Maximize economic development



Global Strategies

- Efficient processes and procedures
- Life cycle costs rather than the first costs
- Contract terms that maximize capital improvements and investments
- Incorporate real operating savings



Implementation Strategies

- Establish quantitative program goals
- Identify a program lead agency
- Standardize program documents/procedures
- Obtain stakeholder buy-in
- Pre-qualify ESCOs
- Provide resources and services that facilitate timely project reviews and approvals



Quantitative Program Goals

- Mandate specific, feasible goals
 - Governor's Executive Order
 - Administrative policy requiring use of energy performance contracting over traditional capital appropriations process
- Provide incentives to agencies
 - Allow agencies to keep excess savings for duration of contract



Program Lead Agency

- Promotes program to state agencies
- Provides training, education, technical assistance
- Assists with contract review and negotiations
- Assists agency to obtain project approvals
- Assists with facilitating project progress
- Collects and reports project and program results



Program Lead Agency

- Commit sufficient staff resources to effectively promote and manage the program
 - Participate in and support user agencies through each phase of the project
 - Retain staff continuity in the development and provision of services
 - Identify EPC experts familiar with large complex EPC projects



Standard Documents & Procedures

- Develop standardized procurement, evaluation and contracting documents which can be customized
 - RFQ
 - RFP
 - Evaluation Ranking Forms
 - Investment Grade Energy Audit
 - Energy Services Agreement



Standard Documents & Procedures

- Develop and publish on website procurement, evaluation, contracting and approval procedures
- Checklists for compliance with statutory and state program requirements
- Step-by-step procurement guidance
 - Clearly define agency roles
 - Develop and provide necessary training



Stakeholder Buy-in

- Identify major stakeholders/decision makers in the state and/or individual agency
- Obtain program buy-in from state/agency stakeholders
- Obtain buy-in on documents and procedures
- Obtain buy-in from the ESCO industry to expedite program adoption and project implementation



Pre-qualify ESCOs

- Establish a pool of qualified ESCOs
 - Use a detailed and rigorous RFQ process which includes client references
 - Specify qualification period (3 years is recommended)
 - Require agencies to use ESCOs from qualified pool

- Limit number of ESCOs responding to RFPs



EPC PROGRAM MARKETING

Build it and they will
come only works in the
movies

Marketing Overview

- Marketing Challenges
- Target Audiences
- What's the Message?
- Delivering the Messages
- Proven Marketing Strategies
- Marketing Plan



Marketing Challenges

- Agencies don't like change
 - Better to continue inefficient, but familiar, practices
- Agencies don't like deviations from conventional spec and bid practices
- Agencies don't know ESCOs or ESCO business model
 - Concerns about cost transparency



Marketing Challenges

- Agencies don't think ESCOs can design and deliver projects
- Agencies think capital projects will be funded soon
- Finance officers don't understand the availability and cost of third-party financing



Target Audiences

- Governor's Staff
- Budget Office, Comptroller, Treasurer
- Landlord agency (DGS, GSA, DOA)
- Agencies that operate large facilities
- Agencies that are "opinion leaders"



What's the Message?

- Governor's mandate
 - Energy efficiency, green buildings or both
- Administrative mandate
 - Scorecards and other evaluations
- Budget pressures
 - Reduce operating expenses
 - Modernize buildings with minimal capital



Sample Agency Messages

- EPC projects can produce faster and more comprehensive results.
- EPC reduces:
 - Time to collect and analyze data on project investment options
 - Time to secure individual project approvals and develop project specs and contracts



Sample Global Messages

- Meet mandates without budget burdens
 - Energy use reduction
 - GHG reduction
- Facility modernization
- Improved building conditions and productivity
- Economic development



Sample Agency Messages

- Customized projects meet agency needs
- Reduce project procurement costs
- Leverage capital budget funds
- Select equipment based on “best value”
- Standardize parts/equipment inventory
- Reduce maintenance and repair costs
- Improve functionality of building controls



Delivering the Messages

- Program Kickoff Meeting
- E-mail newsletters
- Website
 - Training materials – narrated slides
 - Program documents and contracts
 - Project success stories
- Workshops and training
 - Facility operating personnel
 - Agency financial officers



Proven Marketing Strategies

- Use US EPA software tools
 - Benchmarking and cash flow analysis
- Communicate program objectives and procedures
- Involve agency staff in projects
- Publish case studies and encourage interaction with agencies that have done EPC projects
- Resolve program performance problems quickly



Thank You

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