Colorado’s venture into the private sector with EPC

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Colorado EPC Program Manager

NASEO Financing Committee call, June 19, 2015
Energy Services Coalition
4th Annual Market Transformation Conference
Charlotte NC, September 1, 2015
The CEO's vision is to help Coloradans live more prosperous and healthy lives by promoting innovative energy production and efficient energy consumption practices that are beneficial to the economic and environmental health of the state.

MISSION STATEMENT

The CEO’s mission is to improve the effective use of all of Colorado's energy resources and the efficient consumption of energy in all economic sectors, through providing technical guidance, financial support, policy advocacy and public communications.

DEPARTMENT VISION

The CEO’s vision is to help Coloradans live more prosperous and healthy lives by promoting innovative energy production and efficient energy consumption practices that are beneficial to the economic and environmental health of the state.
Public sector EPC performance, June 2014

- 142 facility owners
- 182 active and completed projects

- Annual savings
  - $28.8 M Utility cost savings guaranteed
  - 141.8 M kWh Electricity
  - 9.95 M therms Natural gas, propane, heating oil & coal
  - 467,200 kgal Water

- $447.4 M total project investments #4 Energy Services Coalition
  - $88.96 Investment per capita #6
- EPC projects in communities across 75% Colorado counties

#4 Energy Services Coalition
#6 Investment per capita
Key elements of our success

- Standardized, state-approved documents
- Pre-qualified ESCOs
- CEO advice and technical support
- Private market-based financing
Is success transferrable to the private sector?

- Lawrence Berkeley National Lab/NAESCO study
- 2011 U.S. Dept. of Energy Competitive Award and cooperative agreement
- Incentivized participation
  - 75% (up to $25,000) of TEA cost per client
- Key elements of success
Goal: Engage 10 companies in the EPC process

Spoke to 32 companies

Vetted 27 prospects

- 6 Owner-occupied and leased office buildings
- 4 Medical (assisted living & hospital)
- 3 Manufacturing
- 3 Mountain resorts (lodging + ski operations)
- 2 Retail space
- 9 Misc: Multi-family, TV, bank, warehouse, community center, ice rink, car dealership, charter school and oil & gas production
Participation, cont.

- Incentivized 13 companies for 16 investment grade audits
  - 2.2 million square feet
- Potential annual savings
  - 12.8 million kWh electricity
  - 450,000 therms natural gas
  - 3,400 kgal water
  - $1.45 million utility cost savings
- Project tracking, as of December 2014
  - 3 conversions: audit to EPC
  - 10 in decision-making mode
  - 3 self-implementing
Participation, cont.

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## Cost of delay vs. realized benefits

<table>
<thead>
<tr>
<th>Participant</th>
<th>kWh</th>
<th>therms</th>
<th>kgal</th>
<th>$ Annl savings</th>
<th>$ Investment</th>
<th>Term</th>
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<tbody>
<tr>
<td><strong>SELF-PERFORMING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Resort 3</td>
<td>2,100,000</td>
<td></td>
<td></td>
<td>204,472</td>
<td>$</td>
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<tr>
<td>Property Mgt 3</td>
<td>272,271</td>
<td>27,533</td>
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<td>42,420</td>
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<td>Cost of delay</td>
<td>3,257,193</td>
<td>51,779</td>
<td>0</td>
<td>$ 304,187</td>
<td>$</td>
<td>-</td>
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<tr>
<td><strong>EXECUTED EPC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Manufacturing 3</td>
<td>892,736</td>
<td>3,649</td>
<td>-</td>
<td>60,934</td>
<td>$ 177,396</td>
<td>3 yrs</td>
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<tr>
<td>Resort 1 - Lodging</td>
<td>1,408,000</td>
<td>210,159</td>
<td>2,235</td>
<td>248,329</td>
<td>$ 1,299,966</td>
<td>6 yrs</td>
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<tr>
<td>Community Center</td>
<td>1,346,006</td>
<td>84,357</td>
<td>2,484</td>
<td>163,333</td>
<td>$ 2,608,916</td>
<td>15 yrs</td>
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<td>Realized benefits</td>
<td>3,646,742</td>
<td>298,165</td>
<td>4,719</td>
<td>$ 472,596</td>
<td>$ 4,086,278</td>
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Lessons Learned
Market benefits

- Deeper retrofits than previously experienced
- Initial projects may lead to a company scaling up adoption of EPC across multiple facilities
- ESCO-client relationship building opportunities
Market barriers

- Client desire for short payback
- Internal financing vs. traditional 3rd party
- Layered corporate decision-making
- Internal competition for savings
- Need for business-friendly contracts
Lessons learned

- Term of property hold
- Financial: ROI or payback required, timing with company budget cycle
- Very bearish on incentivizing
  - If offered, split between audit buy-down and implementation measures
  - Offer on a scheduled basis, rather than open enrollment
  - Federal funding required DUNS and SAMS
- Business-friendly contract docs
- Internal approval processes
Considerations for permanent program design/SEO market intervention
Private sector dynamics in the 5-steps of EPC

- Step 1: Introductions and client approval
- Step 2: Client selects ESCO
- Step 3: Investment grade audit and project proposal
- Step 4: EPC execution and construction
- Step 5: Measurement & Verification of savings guarantee
Other initiatives influencing private sector

- CoPACE, Colorado’s Commercial PACE Program
- BOMA’s launch of a redesigned EPC program
  - Re-launch announcement next week in LA
  - Private-public partnership development
    - LA Better Buildings Challenge
    - State EPC and PACE programs?
    - Advisory Board member
- Investor Confidence Project
Critical elements of permanent program design

- State’s role in addressing a market failure
- Legislative or regulatory basis
- Program funding
- Program staffing
State of Colorado
John W. Hickenlooper, Governor

www.colorado.gov/energy

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