Energy Performance Contracting 101
Leveraging P3s & State Funding for Resilience (8/4/2021)
Presented By: Colorado Energy Office - Dylan Klomhaus, Program Engineer
Colorado Energy Office - Energy Performance Contracting

Our Team

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Energy Performance Contracting in Colorado is a statutorily enabled method for public jurisdictions to leverage utility cost savings to repay annual financing costs associated with facility upgrades.

**Local Government Statute**

C.R.S. 29-12.5-101(2017)

**State & Higher Ed Statute**

C.R.S. 24-30-2001 (2016)
Colorado Statute: Things to Remember

Colorado Statute establishes EPC guidelines including:

- Guaranteed Utility Cost Savings
- Cost weighted average life of equipment
- Three years of M&V
- Cash flow positive

A Financing and Contracting Mechanism available to public jurisdictions
How It Works - Energy Savings Financing Approach

Unidentified Savings Potential → Identified Savings → Savings Used as Payment

Operating Expense

Before EPC

Annual Operating Costs/Budget

✓ Approved for Grant Match

Annual Operating Costs During EPC

Annual Operating Costs After EPC

Guaranteed Savings

During financing period—savings pay the loan!

After financing period—savings are yours!

Energy Office
Savings Model: Renewable Energy

Energy Cost ($/kWh) vs. Hours

- Purchased Utility
- Renewable Energy Supply
- Renewable Energy Supply
- Approved for Grant Match
- Baseline Energy Requirements
- Purchased Utility Price
A Public Private Partnership (P3)

- **Colorado Energy Office**: Program Administrators, Engineers, Contract Support, Guidance Tools, Standardized Documents
- **Public Jurisdictions**: Cities, Counties, School Districts, State Agencies, Higher Education Institutes, Special Districts
- **Private Sector Firms**: Energy Service Companies (ESCOs), Financial Institutions

- **Energy Performance Contracting**
- **Private Firms**
- **Public Firms**

**Graphic Description**
## State Grants: Dept. of Local Affairs

### Dept. of Local Affairs

The Division of Local Government provides strategic expertise, advocacy, and funding for Colorado communities. DOLA promotes local problem solving, informs decision making and invests in communities.

*DOLA grants for Renewable Energy and Energy Efficiency require a 25% match from the city or county (General grants require a 50% match)*

HB21-1253 appropriated additional $5m Renewable And Clean Energy Project Grants

### Program Benefits

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<tr>
<th>EIAF</th>
<th>Water</th>
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<tbody>
<tr>
<td>- Tier I: Up to $200K grant</td>
<td>- State Revolving Loan Funds</td>
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<tr>
<td>- Tier II: Between $200K - $600K grant</td>
<td>- Community Development Block Grants</td>
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<td>- Colorado Water Conservation Board</td>
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Contact: DOLA Regional Manager
EPC: 5-Step Process

- **Initial Engagement**
  - Step 1: Client Commitment
  - MOU with Colorado Energy Office

- **Solicitation**
  - Step 2: ESCO Selection
  - RFP or Sole-source

- **Detailed Assessment**
  - Step 3: Investment Grade Audit
  - IGA Contract, Project Scope/Report

- **Construction**
  - Step 4: Implementation
  - EPC Contract, Financing Contract

- **Project Review**
  - Step 5: Measurement & Verification
  - Post-Installation Report, Annual Reports
Benefits of Energy Performance Contracting

- **Single Procurement Contract** for design/engineering, installation, startup, and M&V
- Generates **Positive** Cash Flow
- **Guaranteed** energy and maintenance cost savings
- Promotes **local workforce** and **economic development**
- **No-cost support** from the Colorado Energy Office

  - Standardized, state-approved documents
  - Pre-qualified ESCOs
  - Colorado Energy Office engineering & contract support throughout lifecycle of the project
Energy Efficiency Measures

- Lighting Upgrades
- Boiler Replacements
- Pump & Motor Upgrades
- Building Automation System
Electrification & Generation Measures

- Community Solar Gardens, Solar Arrays, Wind, Hydroelectric Generation
- Electric Charging Stations/ Zero-emission Vehicles
- Building Energy Systems: Geothermal, VRF
- Renewable Utility Rates
Targets and Goals as of May 2021

**FY20-21 Client Reach**

- Higher Ed: 30 (73%)
- State Agency: 22 (44%)
- County: 31 (38%)
- Municipality: 56 (14%)
- School District: 81 (34%)
- Special District: 15

**$40M**
Savings for Colorado Jurisdictions

**134M**
Square-footage Improved

**239M kWh**
Savings in Electricity Use

**$707M**
Invested in Facility Improvements

Thank you! Contact: ceo_epc@state.co.us.
CASE STUDY: San Miguel County

SUMMARY

Utilizing the EPC Program, SMC implemented Energy Efficiency, Renewable Energy, Battery Storage, Beneficial Electrification & Resiliency measures. Press Release

Work with your utility first

PROJECT DATA

Outcomes

- Eliminate fossil fuels at 3 county facilities
- 264 kW of Solar PV at 5 facilities
- 190 kw, 580 kWh battery storage with microgrid
- 368,000 kWh - 3,900 Therms - 500 gal propane
- 50% to building carbon neutrality
- Reduced price volatility
- Improved occupant comfort

Funding Sources

- $2.2M in state grants (DOLA RENW)
- $660k TELP
- $200k Capital Contributions

Project Goals

- Carbon Neutrality
- Save taxpayer $
- Increase resiliency for mission critical services