BUILDING EFFICIENCY

COLORADO ENERGY PERFORMANCE CONTRACTING PROGRAM



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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Colorado Statutes

Energy Performance Contracting in Colorado is a statutorily enabled method for public jurisdictions to leverage utility confinancing costs associated with facility upgrades.

Local Government Statute

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

TITLE 29 GOVERNMENT - LOCAL : ENERGY

CONSERVATION: ARTICLE 12.5. Energy Conservation

Measures

State & Higher Ed Statute

C.R.S. 24-30-2001 (2016)

TITLE 24 GOVERNMENT - STATE : PRINCIPAL DEPARTMENTS :

ARTICLE 30 DEPARTMENT OF PERSONNEL - STATE ADMINISTRATIVE

SUPPORT SERVICES: Part 20 Utility Cost

Savings Measures



Colorado Statute: Things to Remember

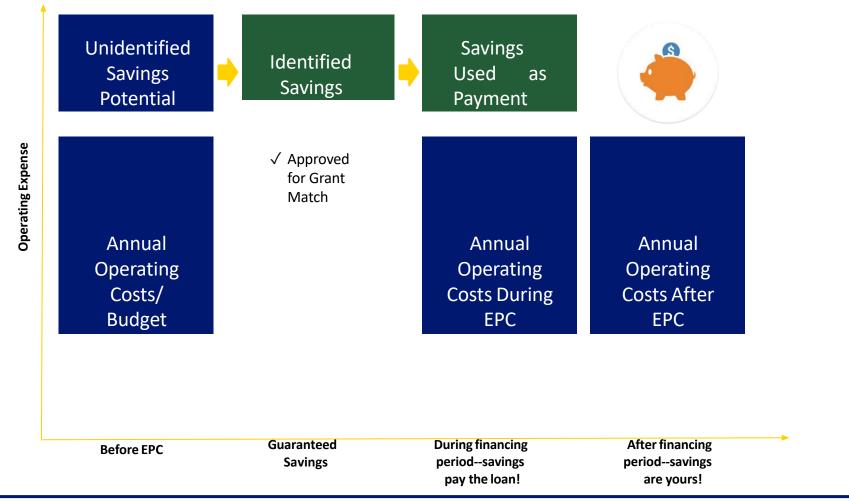
Colorado Statute establishes EPC guidelines including:

- ✓ 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

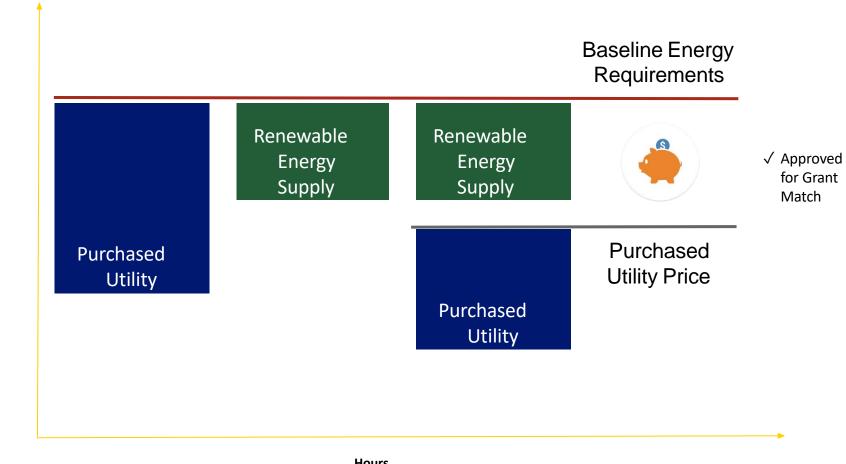


How It Works - Energy Savings Financing Approach





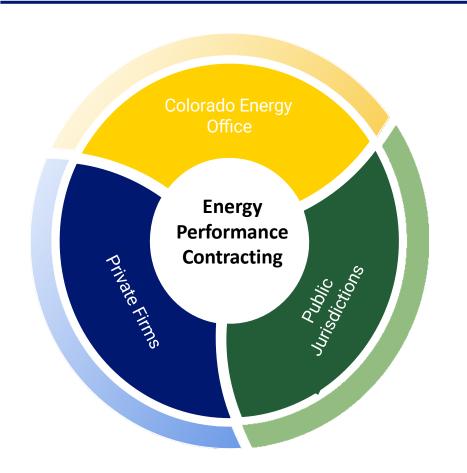
Savings Model: Renewable Energy





Energy Cost (\$/kWh)

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



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

EIAF

- Tier I: Up to \$200K grant
- Tier II: Between \$200K \$600K grant

Water

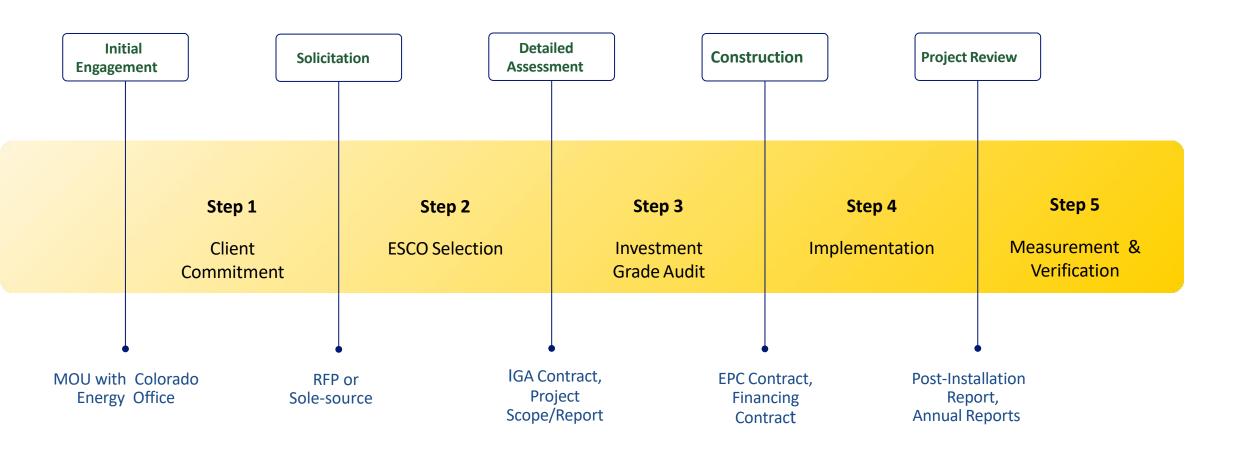
- State Revolving Loan Funds
- Community Development Block Grants
- Colorado Water Conservation Board





Contact: DOLA Regional Manager

EPC: 5-Step Process





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



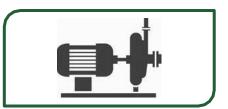
Energy Efficiency Measures



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





Higher Ed: 30 (73%)



State Agency: 22 (44%)



County: 31 (38%)



Municipality: 56 (14%)



School District: 81 (34%)



Special District: 15



Savings fo

Colorado

Jurisdictions

134M

Square-footage

Improved

239M kWh

Savings in

Electricity Use

\$707M

Invested in Facility

Improvements



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 Goals

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



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 (DOLARENW)
- \$660k TELP
- \$200k Capital Contributions

