

## Climate Adaptations and Futures Webinar Series: Economic Recovery Through Energy Cost Savings

The [Colorado Energy Office Energy Performance Contracting \(EPC\) Program](#) is a proven tool for local governments to finance public facilities improvements. The Colorado Energy Office works with communities to provide technical assistance, and access to a pre-qualified list of Energy Services Companies (ESCOs) to support the communities energy goals. The cornerstone of the EPC program is the investment grade audit, performed by the ESCO. This audit takes a deep dive into the potential energy savings that the local jurisdiction can realize, and forms the basis for the recommended facility upgrades or efficiency measures that will be recommended for implementation.

### What is Energy Performance Contracting?

Energy Performance Contracting (EPC) is a financing and contracting tool that allows public entities to use savings from energy improvements to fund capital projects.

## Benefits of Energy Performance Contracting

The EPC program was designed to be a simple and smooth experience for public facility owners. The program is ideal for a public entity experiencing high utility costs; with a capital improvement or deferred maintenance need; with budgetary constraints; or with climate or sustainability goals.

The benefits of the program for public jurisdictions are:

- A single procurement contract for the whole process.
- Positive cash flow.
  - The project is often designed with no upfront capital needed and designed to return at least \$1 in positive cash flow, making each project TABOR compliant and reducing the burden on the local jurisdiction.
- Guaranteed energy and maintenance costs savings through the ESCO.
  - If the ESCO's expected savings are not realized, it is the responsibility of the ESCO to make the public jurisdiction whole again through either a lump sum payment, or further energy cost savings.
- The program supports and encourages the hiring of local workforce, keeping jobs in Colorado.
- Jurisdictions also receive no-cost technical assistance and coaching from the Colorado Energy Office throughout the program.

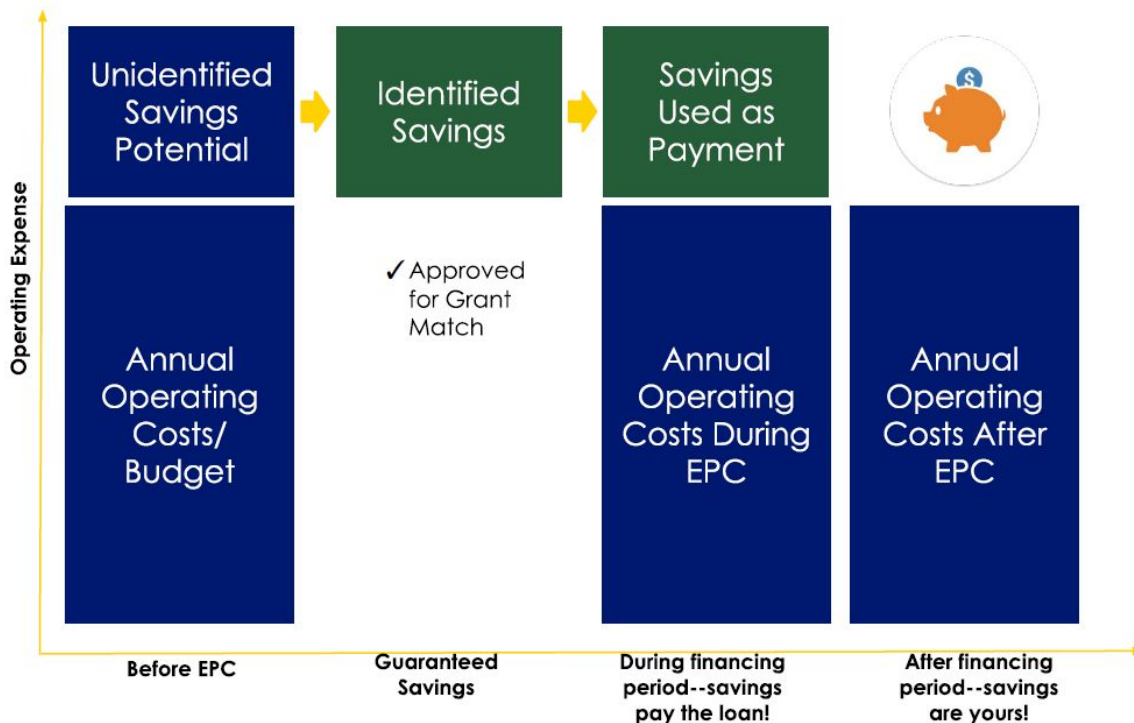
### Colorado Energy Office EPC Program Facts

- 23 Years
- 200 Million kWh saved
- \$40 million in actual cost savings

# The Energy Performance Contracting Process

- 1) The client commits to the program.
- 2) The client selects an ESCO from the Colorado Energy Office's pre-qualified list.
- 3) The ESCO conducts an investment grade audit.
- 4) The ESCO implements the project.
- 5) The ESCO and CEO conduct measurement and verification checks to ensure that the project is realizing the expected energy savings goals.

## Energy Savings Financing Approach



## Case Studies

### Walden, CO

The Town of Walden installed the first ever floating solar array to operate in a cold climate with the assistance of the EPC program.

The aim of the project was to offset the increase in energy usage from upgrades to the town's water treatment plant. The EPC process identified that one of the water retention ponds for the water treatment plant could be used to support a 75kW floating solar array. Walden utilized

\$200,000 in utility and government incentives, as well as funding from the Department of Local Affairs, to complete the project. The floating solar array is expected to guarantee 2.5 million kWh in energy savings over the next twenty years, which is an electricity saving of \$8,301 per year.



### Roswell, NM

Yearout Energy, a pre-qualified ESCO with the Colorado Energy Office, completed an EPC project for Roswell, NM, to retrofit the city's water meters.

The project aimed to retrofit over 19,500 water meters to solid state meters including an Advanced Metering Infrastructure (AMI) collection system. The AMI system provides real time data on water usage, enabling the city to identify and stop water leaks, aid water conservation, provide more in depth customer education, and better enforce drought restrictions. The project also included remote disconnect valves on all residential meters which allows the city to remotely shut off individual water meters from a central hub, rather than sending a truck to individual houses to turn on or turn off the water supply.

This project recovered over 400,000K gallons of water and delivered over \$1.6 million dollars in revenue improvements and anticipated savings. The project has an 11.7 simple payback period and took just over two years to complete including the investment grade audit, propagation studies, and then implementation of 19,500 meter upgrades.