

# Colorado Energy Office's Key Accomplishments since 2012



## Colorado Energy Office

Colorado Energy Office (CEO) was renamed and restructured by HB12-1315, and funding was appropriated for five years.

### COLORADO ENERGY OFFICE MISSION

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.

CEO is driving change in the way Colorado consumes and produces energy. By capitalizing on Colorado's diverse energy resources, innovative technology, and long-standing energy efficiency programs, CEO is working to support Coloradans' desire to make energy-related choices that benefit both the economy and the environment. Since the passage of HB12-1315, CEO has been focused in three market areas: building and facility energy efficiency, alternative fuel transportation and innovative energy production. The following is a summary of CEO's long-term goals and key accomplishments.

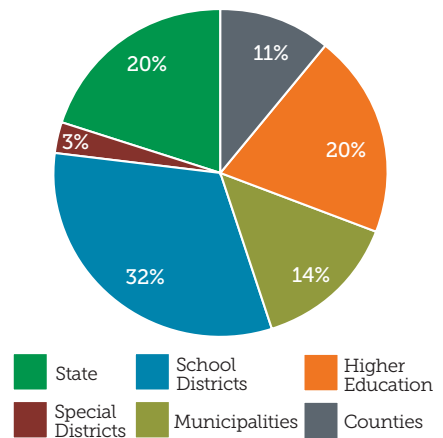
### Building and Facility Energy Efficiency

Energy efficiency is a critical part of the state's economic and environmental health—directly impacting costs and air quality.

#### Accomplishments:

- Low-income Energy Services:** Since 2012, the CEO Weatherization Assistance Program (WAP) has served 14,173 eligible households across every county in the state. Installed improvements have saved clients more than \$6.7 million on their energy bills, more than 4.1 million therms of natural gas, and more than 20.5 million kWh of electricity. On average, WAP annually serves more than 2,800 residences, saving them an average of more than \$200 per year on energy costs and bringing utility payments closer to parity with non-income qualified counterparts.
- Energy Performance Contracting:** Since Colorado established its Energy Performance Contracting Program (EPC) in the mid-1990s, 146 public jurisdictions have used EPC to improve energy performance in its facilities. With 194 EPC projects completed, Colorado has reached over a half billion dollars in capital improvements while netting over \$31 million in annual energy savings. Jurisdictions have used EPC to improve the performance of a multitude of public buildings in communities across 75% of Colorado counties.

Better Buildings through EPC  
Total Investments by Market Segment  
\$514,713,505 as of August 2016



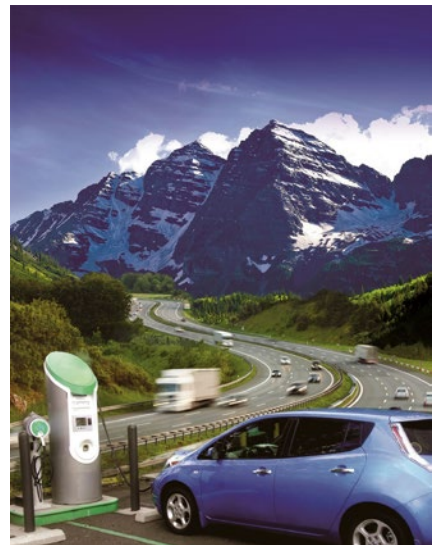


■ **Energy Savings for Schools:** Launched in fiscal year 2016, the Energy Savings for Schools (ESS) program provides free energy and water audits, renewable energy assessments, technical support to identify and implement priority projects, and assistance in securing financial resources. Since the program's launch, 21 schools have signed up to participate in the ESS program, and CEO has secured \$733,600 in grants to help rural and low-income Colorado school districts implement measurable savings.

■ **Agriculture Facilities:** Building on a successful pilot project in 2014 with 12 producers, in July 2015, CEO launched the statewide Colorado Agricultural Energy Efficiency Program with a goal of supporting 200 producers over three years. This program provides free energy audits and technical assistance, and helps secure financial resources for dairies and farms with powered irrigation. In fiscal year 2016, the program enrolled 74 producers. Currently, 29 producers are working toward implementation of energy efficiency improvements while leveraging more than \$400,000 in U.S. Department of Agriculture (USDA) funding. In 2016, CEO secured a \$1.1 million grant from USDA to help finance improvements. Working with approximately 200 producers over a two-year period, the improvements will generate more than \$4.5 million in potential savings over five years.



■ **Residential:** CEO expanded energy-related data fields on Multiple Listing Services from 36% of listed new homes in 2012 to 96% in 2014, helping homebuyers and the real estate industry know more about a home's energy performance. In the new home sector, CEO's code training helped to drive down the average Home Energy Rating Score (HERS) from 63 in 2012 to 55 in 2016. CEO's code training helps jurisdictions adopt the most recent energy code. In 2015, CEO launched the U.S. Department of Energy's (DOE) Home Energy Score (HES) for the existing home sector. The HES is a low-cost score that helps home buyers better understand how to achieve a high performing home at the point of purchase. CEO is actively working with Colorado utilities to incorporate the HES into utility-sponsored energy auditing platforms and DOE to incorporate the HES into federal mortgage programs.



### Alternative Fuel Transportation

Coloradans are increasingly choosing alternative fuel vehicles because of the economic and environmental benefits. Colorado's consistent low price of electricity, locally produced compressed natural gas (CNG), and tax credits make alternative fuel vehicles a compelling choice.

### Accomplishments:

- **ALT Fuels Colorado:** CEO's ALT Fuels Colorado program provides grants for alternative vehicle fueling stations through funding from the federal Congestion Mitigation and Air Quality program, which is focused on providing air quality benefits. To remove barriers to the adoption of alternative fuel vehicles, \$15 million has been slated to build fast-fill compressed natural gas (CNG) fueling station infrastructure between 2014 and 2017. Through fiscal year 2016, CEO has awarded grants for 14 CNG stations across major transportation highways, including connecting the entire I-25 corridor.
- **Charge Ahead Colorado:** CEO's Charge Ahead Colorado program provides grants for electric vehicle (EV) charging stations. Since launching the program in January 2013, CEO has awarded 129 publicly-accessible EV charging stations, giving EV drivers greater confidence when driving between fueling stations. CEO is working with Colorado workplaces to install charging infrastructure through the EV Wired Workplace Initiative.
- **Refuel Colorado:** CEO's Refuel Colorado offers free technical assistance to fleets statewide to identify financial savings and other advantages to converting to alternative fuel vehicles. Since Refuel Colorado's inception, more than 248 fleets have been educated and more than 72 outreach events have been held to facilitate the conversion to alternative fuel vehicles.



### Innovative Energy Production

Energy is vital to the Colorado way of life—powering lights, heating homes and fueling vehicles. CEO is focused on innovations in effective energy production for all of Colorado's abundant resources that contribute to a cleaner, balanced energy portfolio.

### Accomplishments:

- **Low-income Community Solar:** Launched in 2015, CEO is working with utility partners to create distinct community solar models through the Colorado Low-Income Community Solar Demonstration Project. Each utility is testing a different approach to cost recovery, pricing and customer selection. CEO is developing five to 10 community solar models through a grant awarded to GRID Alternatives. The project will serve about 300 income-eligible families living in homes that are eligible for weatherization services and will amount to at least 1 megawatt of installed solar capacity. On average, subscribers to each community solar model are estimated to save 40-50% annually on their electricity bills as a result of innovative crediting structures developed by each utility partner.



■ **Hydropower:** CEO works to uncover the state’s potential for specific types of cost-effective hydropower projects. CEO created the Colorado Small Hydropower Handbook as a guide for project developers, partnered with the Colorado Department of Agriculture on launching a pressurized irrigation program to power 30 irrigation systems over four years, and developed a Pressure Reducing Valve Hydropower Market Assessment to highlight hydropower opportunities within water utility delivery systems.



■ **Oil and Gas:** CEO provided \$750,000 for the Advanced Industries Accelerator grant program, administered through the Office of Economic Development and International Trade. The AIA grant program within the oil and gas industry helps to connect local companies seeking to commercialize innovative technology. During fiscal year 2016, this funding contributed to advances in analyzing rock properties along the wellbores and geospatial software solutions for pipelines and other industry assets. The AIA Grant has been a successful vehicle for CEO to support energy development in the state.



## Finance Tools

One of the major barriers to energy efficiency and renewable energy adoption is access to capital. CEO identifies gaps in the marketplace where capital is not readily available, and works in partnership with lenders and utilities to expand energy finance offerings for their customers. Below are two examples of finance accomplishments:

■ **Colorado C-PACE:** CEO spearheaded the New Energy Improvement District’s development and 2015 launch of Colorado Commercial Property Assessed Clean Energy (C-PACE) program. C-PACE provides commercial property owners a unique mechanism to finance energy efficiency, renewable energy, and water-conservation improvements. C-PACE offers commercial property owners the opportunity to spread energy and water project costs over a term of up to 20 years, and repay them through an assessment on their property tax bill, with no upfront capital outlay. Project financing is provided entirely by private sector lenders. Since the launch, eight counties have opted in, representing 40% of Colorado’s commercial building market.



■ **Qualified Energy Conservation Bonds:** Since 2012, CEO has had the responsibility for overseeing the state’s volume cap of Qualified Energy Conservation Bonds (QECBs). Some \$19.56 million of QECBs were issued to finance clean energy projects. To date, Colorado has the fourth highest utilization rate of QECBs in the country and is the only state to have allocated 100% of its state volume cap.

