



COLORADO

Energy Office

Department Performance Plan - FY 16-17

Mission Statement

The Colorado Energy Office'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 technical guidance, financial support, policy advocacy and public communications.

Department Vision

The Colorado Energy Office'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.

According to industry and governmental market reports, Colorado is a leading state in electricity production from wind and solar technologies. At the same time, Colorado continues to be a leading state in the production of natural gas and coal. Colorado has established itself as a diverse energy economy. Fostering and maintaining a diverse energy portfolio contributes to Colorado's economic health by stimulating business development and keeping long-term consumer costs low.

Energy efficiency is also an integral part of the state's economic health. Inefficient energy usage is a drain on business and household resources, diminishing profitability and quality of life, particularly for the economically disadvantaged.

As lower-emission energy resource options enter the market, the air quality of the state improves, directly benefitting the health of Colorado's residents. For example, replacing petroleum-based vehicles with compressed natural gas or electric vehicles can yield significant environmental and economic benefits for the state.

As Colorado's population grows from 5 million to an expected 8.1 million by 2040, demand and consumption of energy will continue to grow. Preparing for such growth accentuates the need for continued innovation in energy production and efficiency in energy consumption in order to maintain and improve Colorado's economic and environmental health.



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Department Description

In 2012, the Colorado Energy Office was restructured under HB 12-1315 to enable the state's energy office to build on Colorado's national reputation as a leader in clean energy and energy innovation and to enhance the office's ability to support innovative energy production, not only in the renewable energy sector, but also in the state's traditional sectors like natural gas. The legislation changed the office name to the Colorado Energy Office (CEO), secured funding for five years, required CEO to report to the legislature annually via the SMART Act, and established two funds:

The Innovative Energy Fund is funded from severance tax dollars and can be used for promotion, research, development, commercialization and education — attracting innovative industry investments to the state; providing market incentives for efficient innovative energy products; assisting in the implementation of innovative efficiency projects; and aiding government agencies in innovative energy efficiency initiatives, and innovative energy policy development. Innovative energy is defined as “existing, new, or emerging technology that enables the use of a local fuel source, establishes a more efficient or environmentally beneficial use of energy and helps to create energy independence and security for the state.”

The Clean & Renewable Energy Fund is funded from general fund dollars and can be used for attracting renewable energy industry investment to the state — assisting technology transfer into the market place for newly developed energy efficiency and renewable energy technologies; providing market incentives for the purchase and distribution of energy efficient and renewable energy products; assisting in implementation of energy efficiency projects throughout the state; aiding government agencies in energy efficiency initiatives; implementing of renewable energy technologies; and advancing of energy efficiency and renewable energy throughout the state.

The office also receives state (Severance Tax), federal and utility funds dedicated to delivering residential energy efficiency services to income-qualified households, as well as an annual State Energy Programs award from the U.S. Department of Energy that is dedicated to specific energy efficiency initiatives.



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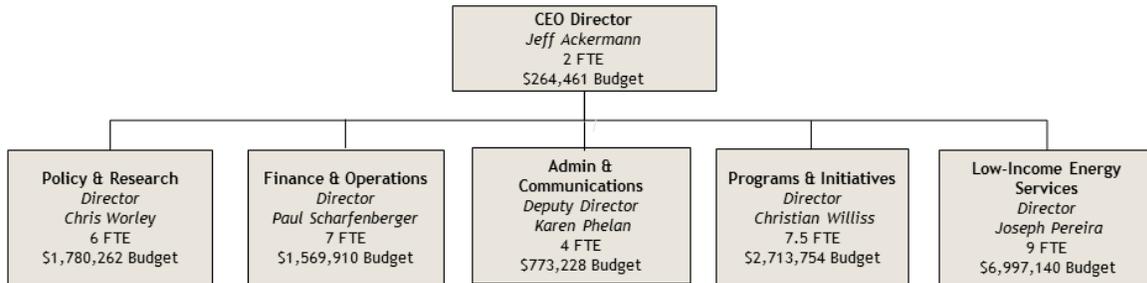
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The Colorado Energy Office is structured into the following program areas and functions. The chart provides a snapshot of FTE and budget breakdown based on this fiscal year.

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Total Department FTE & budget breakdown (based on FY 2016-17 appropriations)	
	Total FTEs 35.5
\$14,098,755	Total funds
\$0	General funds
\$10,510,837	Cash funds
\$0	Re-appropriated funds
\$3,587,918	Federal funds





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The Programs and Initiatives area initiates and manages programs in support of CEO's mission – improves the efficient consumption of energy in Colorado's economic sectors (i.e. residential, commercial, agricultural, and governmental), and reduces market barriers to energy investment and the deployment of effective and innovative energy technologies.

The Weatherization Assistance Program provides comprehensive energy efficiency retrofits aimed at reducing energy consumption and lowering energy costs for low-income households throughout all 64 counties of Colorado. The program utilizes a combination of federal, state and utility funding to provide no-cost retrofit services to households meeting an annual income requirement of 200% or less of the federal poverty level. CEO delivers the program services through contracts with nine regional weatherization service providers that conduct the energy retrofits. CEO coordinates the funding sources, establishes the performance standards, conducts technical and administrative training, and performs compliance reviews of the service provider agencies.

The Policy and Research area conducts legislative analysis, facilitates regulatory reform, and engages in research initiatives in support of CEO's mission. The Policy and Research area works closely with CEO's Programs and Initiatives' area by providing research and analysis to assess market impacts and barriers to Colorado's energy markets, continually balancing economic and environmental objectives.

The Finance and Operations area is responsible for the management of CEO accounting functions, budget and fiscal responsibilities. The operations function focuses on continual process improvement and the responsible management of taxpayer dollars in order to maintain the fiduciary integrity of CEO. The finance area provides the state with a portfolio of energy-related financing tools that enable businesses and consumers access to investment dollars for capital improvements.

The Communications area supports CEO's mission and its programs through strategic messaging by providing accurate and timely energy information to specific audiences through communication channels. Through public communication, CEO educates consumers and stakeholders that will yield more informed energy-related decisions.



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Strategic Policy Initiatives

The Colorado Energy Office's strategic policy initiatives form the overarching goals of the office to improve the effective use of Colorado's energy resources while benefiting the economic and environmental health of the state. The following outlines CEO's long-term strategic policy initiatives and one-year outcome goals.

Transportation Sector: Alternative-Fuel Vehicles

Colorado is well-positioned to increase the adoption of alternative fuel vehicles, including compressed natural gas and electric. With Colorado's rich abundance of natural gas and citizens who value the preservation of the environment, Coloradans want the opportunity to make choices that can benefit both the economic and environmental health of the state. CEO's strategy to remove market barriers to alternative fuel adoption is to increase the number of publicly accessible alternative fueling stations along Colorado's major transportation corridors. This will reduce Coloradans' concerns about the driving distance from one station to another and increase the likelihood of alternative fuel vehicle purchases. Through two grant programs, Colorado is incentivizing the market with infrastructure grants. CEO's strategic policy initiative in the transportation sector is the following:

Strategic Policy Initiative 1:

Increase the sales of CNG fuel by 500% from 2.5 million gasoline gallon equivalents (GGEs) per year in 2013 to 13 million GGEs per year by June 30, 2018, and increase the electric vehicle (EV) market share for new light duty vehicles sold in Colorado from 0.62% in 2013 to 2.3% by June 30, 2018, diversifying transportation fuel use for all Coloradans.

Progress Outcome: CNG fuel sales in Colorado increased from 2,583,243 GGEs to 5,648,589 GGEs in 2014, and declined slightly to 5,627,307 GGEs in 2015. This was due in part to the market response to lower gasoline prices. The Colorado Department of Revenue has a three-month delay in releasing excise tax data; therefore, CEO will not have FY 2016 results until late October 2016.

As of December 2015, Colorado had 6,341 EVs in the state, increasing light duty vehicles sold in Colorado from 0.62% in 2013 to 0.9% in 2015. CEO will have an updated EV percentage of the first quarter of 2016 by August 2016. With new legislation that will give EV consumers point of purchase tax

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credit savings, CEO anticipates a surge in EV sales when the new legislation goes into effect January 2017.

Lead Goal: Through the ALT Fuels Colorado program, administered by the Colorado Energy Office in partnership with the Regional Air Quality Council and the Colorado Department of Transportation, Colorado will make awards to increase the number of publicly accessible compressed natural gas (CNG) fueling stations along Colorado's major transportation corridors by 6 stations by June 30, 2017.

Lead Goal: Through the Charge Ahead Colorado program administered in partnership by the Colorado Energy Office and the Regional Air Quality Council, Colorado will increase the number of electric vehicle (EV) charging stations located outside of the Denver Metro Area by funding 18 stations by June 30, 2017.

By contracting fleet coach experts to work with local government, fleet managers, fuel providers and auto dealerships, CEO will build the pipeline of qualified applicants for the grant programs. With specified federal and state dollars, CEO will award selected applicants to install new CNG and EV stations and monitor and evaluate progress through the state's contract standards. CEO will educate Colorado consumers and employers about the benefits of electric vehicles and Colorado's high tax credits through targeted outreach. CEO will conduct outreach to work places and hold events to acknowledge workplaces that provide charging stations for employees.

Buildings/Facilities Sector: Energy Efficiency and On-Site Clean Generation

Energy efficiency is an integral part of the state's economic and environmental health. Inefficient energy usage affects overhead costs for businesses and consumers. It also has an impact on the quality of the air. Using less energy reduces carbon emissions. When businesses and consumers invest dollars to save on energy usage, they not only see immediate utility savings, they can increase the comfort of their homes and the value of their properties. Colorado is focusing efforts in four distinct segments: 1) economically disadvantaged residents to give them access to cost-effective improvements that will reduce their energy usage and improve the comfort of their homes; 2) new and existing homeowners and the real estate industry to give them access to energy information and resources to compare the value of energy efficiency in each home; 3) public building administrators, including schools, to provide energy management information, energy audits and technical assistance to achieve measurable savings; and 4)

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agriculture dairy and irrigation producers to provide energy audits and technical support that will reduce energy use.

CEO's strategic policy initiatives in the buildings and facilities sector are the following:

Strategic Policy Initiative 2:

Increase energy savings resulting from CEO's direct energy efficiency projects by 12.6% from 273,253 MMBtu in FY16 to at least 307,878 MMBtu by June 30, 2018.

Progress Outcome: CEO will report on annual energy savings for its four CEO programs, (weatherization, EPC, ESS and Dairy and Irrigation Energy Efficiency) by mid-July 2016.

Lead Goal: Through Colorado's Weatherization Assistance Program, install energy efficiency measures in 2,000 homes, yielding, on average, at least \$208 in annual savings per low-income household (1.2% of income, on average) by June 30, 2017.

Through contracts with seven regional and one statewide weatherization service providers, CEO will perform energy retrofits, deliver technical and administrative training, conduct quality assurance, and implement compliance reviews of the service provider agencies.

Lead Goal: Through Colorado's Energy Performance Contracting and Energy Savings for Schools programs, execute Memorandum of Understandings (MOU) with 30 public jurisdictions and school districts (12/EPC, 18/schools) by June 30, 2017.

Both the Energy Performance Contracting and Energy Savings for Schools programs use outreach strategies and presentations to establish agreements with jurisdictions and districts. An introductory presentation to identified stakeholders is often the first step in securing an MOU. A signed MOU is a key indicator that an energy audit will take place and energy efficiency improvements will be implemented.

Lead Goal: Through the Colorado Dairy and Irrigation Efficiency Program, complete energy audits for 60 Colorado producers by June 30, 2017.



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Through outreach strategies to identified stakeholders, CEO will build a pipeline of qualified applicants for the grant program. CEO will review and select applicants based on criteria and quality standards and monitor and evaluate progress through the state's contract standards.

Strategic Policy Initiative 3:

Decrease Colorado's average annual residential energy use by 5% from 91 MMBTU in 2012 to 86 MMBTU by June 30, 2018.

Progress Outcome: According to data from the U.S. Energy Information Administration, Colorado's average annual residential energy use was 91 MMBtu in 2012 and increased to 102 MMBtu in 2013. The reason for the increase is unclear. Data for 2014 will be published in July 2016. At that time, CEO will assess whether the increase was a one-time occurrence, or determine what factor is driving the increase.

Lead Goal: Through Colorado's Residential Energy Efficiency program, complete 6,000 Home Energy Scores (HES) by June 30, 2017 to help home buyers take advantage of immediate and long-term energy savings.

Through outreach and training, CEO will secure agreements with real estate industry stakeholders to use and promote the Home Energy Score rating tool. CEO will coordinate with the weatherization assistance program to include a portion of scores for weatherized homes. CEO will continue to educate Colorado consumers about the value of increasing home energy efficiency and how to assist homebuyers with low-cost finance tools.

Lead Goal: Through Colorado's Residential Energy Efficiency program, increase the percentage of new homes in targeted areas (Colorado Springs and Grand Junction) with a Home Energy Rating System (HERS) Index from 14% in 2015 to 17% by June 30, 2017 to give the real estate industry and potential home buyers the ability to compare energy efficient homes. (The targeted areas were chosen because both have the greatest need for assistance and the highest opportunity to leverage other existing resources.)

Through outreach, training and technical assistance, CEO will work with jurisdictions to adopt 2015 International Energy Conservation Code. A house built under the 2015 code is nearly 40% more efficient than one built under 2006.



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Strategic Policy Initiative 4:

Reduce the amount of household income expended by low-income households on energy from a baseline reduction in 2013 of 1.0%, on average, to a reduction of 1.5% by June 30, 2018.

Progress Outcome: CEO will report on annual energy savings for low-income household in its weatherization assistance program by mid-July 2016.

Lead Goal: Through Colorado's Weatherization Assistance Program, install energy efficiency measures in 2,000 homes, yielding, on average, at least \$208 in annual savings per household (1.2% of income, on average), by June 30, 2017.

Through contracts with seven regional and one statewide weatherization service providers, CEO will perform energy retrofits, deliver technical and administrative training, conduct quality assurance, and implement compliance reviews of the service provider agencies.

Innovative Energy Production: Commercialization and Market Transformation of Emerging Energy Technologies

Colorado's diverse portfolio of electricity generation includes both traditional fossil fuel and a wide range of renewable energy resources. Through the Renewable Energy Standard, the state is a leader in the cost-effective transition to an electric generating portfolio, relying less on carbon-emitting resources. Over the past decade, Colorado has experienced the economic benefits of fostering clean energy technologies, as reflected by increased employment and capital investment, and other local economic benefits. CEO is focusing on the continued advancement of clean energy electric generation in the state, aiding in the commercialization of near-market-ready emerging technologies.



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Strategic Policy Initiative 5:

Assist clean technology developers to increase annual generation of emerging technologies by 100% from 130,000 MWh in 2013 to 260,000 MWh by 2018, and to increase the capacity of hydropower by 16% from 209 MW in 2010 to 242 MW by 2018.

Progress Outcome: In 2013, electricity from emerging energy technologies totaled 135,377 MWh, and increased by 45% to 196,318 MWh in 2014. Small generators report to the U.S. Energy Information Administration (EIA) on an annual basis, and EIA has a 10-month delay in releasing generation data from small generators. Data for 2015 will not be available until October 2016.

Lead Goal: Conduct two pressure-reducing valve (PRV) hydropower workshops for water utility stakeholders by January 31, 2017.

Through targeted outreach to water utility stakeholders, CEO will secure key influencers to attend PRV workshops.

Lead Goal: Work with Colorado geothermal stakeholders to complete and release a statewide geothermal strategy report by November 1, 2016.

Through targeted outreach to Colorado geothermal stakeholders, CEO will convene a geothermal working group to identify key strategies to update statewide report.

Lead Goal: Work with local government stakeholders to design and deploy a database of Colorado distributed energy systems by March 31, 2017.

Through a contracted party, CEO will conduct targeted outreach to local jurisdictions to create a comprehensive database.

Lead Goal: Update the Colorado Recycled Energy Market Overview and secure a customer/developer commitment for a recycled energy project by June 30, 2017.

Through targeted outreach to Colorado recycled energy stakeholders, CEO will work with stakeholders to conduct preliminary recycled energy assessments.

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Lead Goal: Partner with an electric cooperative on a feasibility analysis of a shared renewable energy project by June 30, 2017.

Through targeted outreach to electric cooperatives, CEO will develop a partnership with one group to conduct an analysis.