



COLORADO
Energy Office

Department Performance Plan - FY17-18

Mission Statement

The Colorado Energy Office's mission is to deliver cost effective energy services and advance innovative energy solutions for the benefit of all Coloradans.

This performance plan is under review until the Colorado Energy Office receives funding confirmation for fiscal year 2017-2018.

According to industry and governmental market reports, Colorado is a leading state in multiple energy industries. Colorado is ranked third for the least expensive states in cumulative energy costs, fourth for cleantech industry employment concentration, sixth for natural gas production, seventh for oil production, ninth in installed solar capacity, and tenth for installed wind capacity. 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 innovative energy solutions and cost effective energy services. By capitalizing on Colorado's diverse energy resources, innovative technology, and long-standing energy efficiency programs, the Colorado Energy Office provides a valuable role by delivering cost effective energy services and advancing innovative energy solutions for all Coloradans.

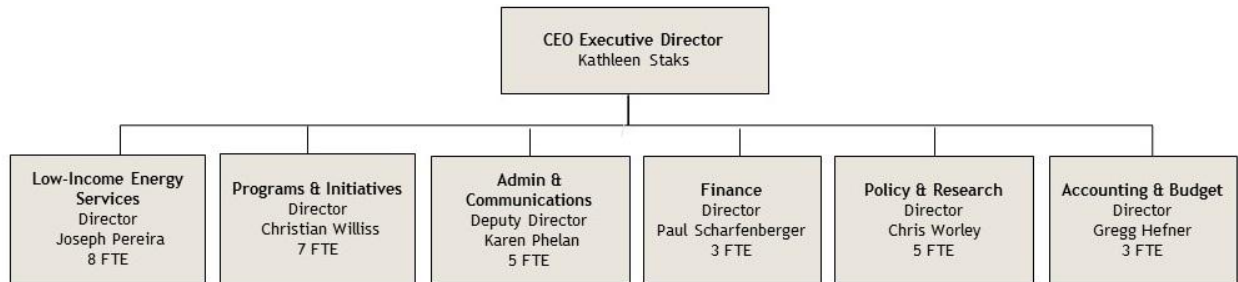


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The Colorado Energy Office is structured into the following program areas and functions. The chart provides a snapshot of FTE for fiscal year 2017-2018.



The Low Income Energy Services Program holistically addresses household energy burden (the amount of household income spent on energy costs) for low-income residents in all 64 counties of Colorado. The program provides comprehensive energy services 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 six regional and one statewide service providers. CEO coordinates the funding sources, establishes the performance standards, conducts technical and administrative training, and performs compliance reviews of the service provider agencies.

The Programs and Initiatives unit develops and manages programs in support of CEO's mission that improve the efficient consumption of energy in Colorado's economic sectors (i.e. residential, commercial, agricultural, and governmental), and reduce market barriers to energy investment and the deployment of effective and innovative energy technologies.



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The Administrative and Communications unit supports two distinct functions. The administrative function provides structure and support for office efficiency and effective management. The communications function supports CEO's mission and its programs through strategic communications planning and messaging to help Coloradans make informed energy-related decisions.

The Finance unit provides the state with a portfolio of energy-related financing tools that give businesses and consumers access to investment dollars for energy capital improvements.

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

The Accounting and Budget unit is responsible for the management of CEO accounting functions, budget and fiscal policies and procedures to ensure the responsible management of dollars.

Strategic Policy Initiatives

The Colorado Energy Office's strategic policy initiatives form the overarching goals of the office to deliver cost effective energy services and advance innovative energy solutions 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

With Colorado's rich abundance of natural gas and excellent alternative fuel vehicle tax credits, Colorado is well-positioned to increase the adoption of alternative fuel vehicles. CEO's main strategy to remove market barriers to alternative fuel adoption is to increase the number of publicly accessible alternative fueling stations. 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:



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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 5,815,863 GGEs in 2015 to 8,221,186 GGEs in 2016. New data will be available in July 2017. (Data source: DOR) Colorado has an estimated 8,138 EVs in the state for 2016, increasing new light duty vehicles sold in Colorado from 0.9% in 2015 to 1.2% in 2016. (Data source: DOR and Polk)

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 three stations by June 30, 2018.

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 20 stations by June 30, 2018.

By contracting fleet coach experts to work with local governments, fleet managers, fuel providers and auto dealerships, CEO will build the pipeline of qualified applicants for the grant programs. With specified federal and electric vehicle state designated dollars, CEO will give awards to 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 support 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

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reduce their energy usage and improve the comfort of their homes; 2) school administrators to provide energy management information, energy audits and technical assistance to achieve measurable savings; 3) public jurisdictions to provide information about energy performance contracting; and 4) agricultural *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 14.6% from a goal of 151,265 MMBtu in FY16 to at least 173,378 MMBtu by June 30, 2018.

Progress Outcome: Progress data are captured annually.

CEO will report on annual energy savings for its four CEO programs: Low Income Energy Services, Energy Performance Contracting, Energy Savings for Schools and Agricultural Energy Efficiency by mid-July 2017.

Lead Goal: Through Colorado's Low Income Energy Services Program, install energy service measures in 1,750 homes, yielding, on average, at least \$300 in annual savings per low-income household (1.8% of income, on average) by June 30, 2018.

Through contracts with six regional and one statewide low income energy service provider, 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 Memoranda of Understanding (MOU) with 30 public jurisdictions and school districts (12/EPC, 18/schools) by June 30, 2018.

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 Agricultural Energy Efficiency Program, complete energy audits for 60 Colorado producers by June 30, 2018.



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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:

Increase average low-income household energy cost savings by 50% from \$200 in 2013 to \$300 by June 30, 2018.

Progress Outcome: Progress data are captured annually. CEO will report on annual energy savings for low-income households by mid-July 2017.

Lead Goal: Through Colorado's Low Income Energy Savings Program, install energy service measures in 1,750 homes, yielding, on average, at least \$300 in annual savings per household (1.8% of income, on average), by June 30, 2018.

Through contracts with six regional and one statewide service provider, 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: Advancement of Emerging Energy Technologies

Colorado's diverse portfolio of electricity generation includes both traditional fossil fuels 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.

Strategic Policy Initiative 4:

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: Progress data will be available in CEO's fourth quarter FY-16-17 report in mid July.



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Lead Goal: Conduct targeted outreach to three water providers that attended CEO's PRV workshops or webinars but did not submit a FERC application by June 30, 2018.

CEO will host a series of webinars for water providers/water managers on technical information to develop PRV hydropower projects. The webinars will be part of CEO's toolkit to assist water providers with developing hydropower projects.

Lead Goal: Conduct targeted outreach to two irrigation ditch companies by June 30, 2018.

A case study will document the Miller Creek project, a unique partnership between a utility and a ditch company, highlighting the project successes and identifying best practices for developing irrigation ditch hydropower projects. This will assist in outreach efforts.

Lead Goal: Gain commitment with customer/developer for one recycled energy project by June 30, 2018.

The outreach will include developing industry-specific resources to educate prospects about their opportunities, and engaging with industry associations to bring this information to their members through webinars, in-person presentations, articles in industry publications and other channels. This project will also include collaboration with industry partners.

Lead Goal: Gain commitment with customer/developer for one energy storage project by June, 30, 2018.

A report will develop case study examples and a cost-benefit analysis tool for energy users. These tools will be included in CEO's outreach strategy to gain commitment from a developer.

Lead Goal: Conduct a feasibility study of well pad electrification and conduct targeted outreach to two oil and gas companies by June 30, 2018.

CEO will conduct a study assessing the energy needs of oil and gas exploration, drilling, and pumping. The study will determine whether it is technically feasible to eliminate the use of diesel through the following technologies: Onsite solar PV or distributed wind with battery storage, geothermal heat recovery from produced water, fuel cell, and onsite generation from off gas. In addition, the study will assess the cost of all these technologies as well as the cost of extending utility distribution lines.