



COLORADO
Energy Office

FY2020-21 Department Performance Plan

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Our Mission

Reduce greenhouse gas emissions and consumer energy costs by advancing clean energy, energy efficiency and zero emission vehicles to benefit all Coloradans.

Our Vision

A prosperous, clean energy future for Colorado.

Overview

Reducing greenhouse gas pollution and enabling a statewide transition to clean energy are essential to preserving and protecting Colorado's way of life. These actions defend the health of our communities and natural environment, provide access to lower cost clean energy resources for rural and urban areas, increase investment and economic growth opportunities, and expand clean energy jobs. To address Colorado's sources of emissions and respond to the legislative direction to reduce greenhouse gas emissions established by HB 19-1261, CEO is working to transition to 100 percent clean electricity generation by 2040, rapidly expanding the adoption of zero emission vehicles and increasing consumer access to energy improvements for Colorado's homes and businesses. The transition to cleaner electricity creates an opportunity for reductions in emissions from transportation and building fuel use.

Zero emission vehicles (ZEV) including electrifying cars, buses and trucks will reduce pollution from one of our top emitting sectors — transportation. To meet the state's goal of 940,000 EVs on the road by 2030, CEO is working to remove market barriers to EV adoption, including increasing the number of accessible charging stations. This will reduce Coloradans' concerns about driving distances from one station to another and increase the likelihood of EV purchases. CEO complements these efforts by working with utilities and intervening at the Public Utility Commission to increase utility investment in EV charging; providing education and technical assistance to fleets and the public to highlight benefits associated with zero emission vehicles and increase adoption rates; and conducting research on strategies to further reduce emissions.

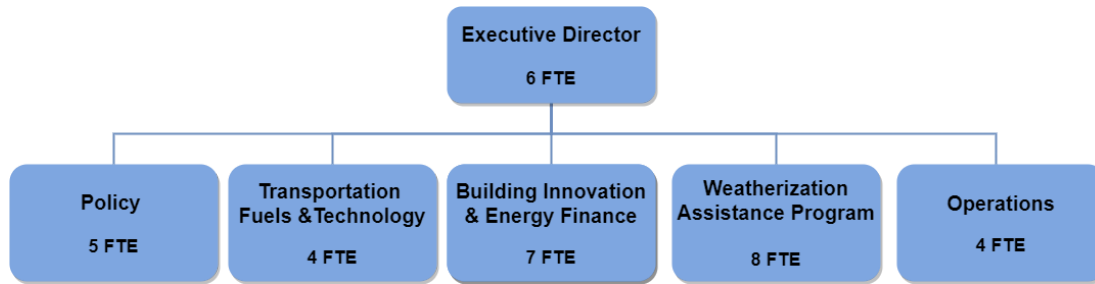
In the buildings sector, CEO develops programs to help residential, commercial and industrial customers access energy efficiency and renewable energy improvements to reduce energy use and associated costs. CEO is also exploring ways to increase building and industrial electrification. These programs include services such as energy audits for agricultural producers, technical and engineering assistance for public jurisdictions, financing products for commercial building owners, low income home weatherization, and strategic energy management programs for industrial entities. These programs are important because energy efficiency is the least expensive source of power and the best way to reduce the cost of operating buildings and facilities while also reducing emissions.



Statutory Authority

24-38.5-101 C.R.S.

Organizational Structure



The Policy team conducts research to identify opportunities and market barriers, intervenes in proceedings at the Public Utilities Commission and Air Quality Control Commission, and represents the office at the General Assembly.

The Transportation Fuels & Technology team works to reduce transportation-related emissions by accelerating the use of market-ready and emerging zero emission vehicles that can meet the needs of today's fleets and the public but for which barriers exist. CEO works to increase the number of electric vehicles and other emerging zero emission transportation technologies through policy and planning, infrastructure grant funding and education and outreach to consumers.

The Building Innovation & Energy Finance team provides energy services aimed at reducing energy consumption and lowering energy costs for buildings and facilities across Colorado, including residences, agricultural operations, industrial facilities, schools and public buildings. They also work to increase access to energy efficiency and renewable energy through financing public-private-partnerships.

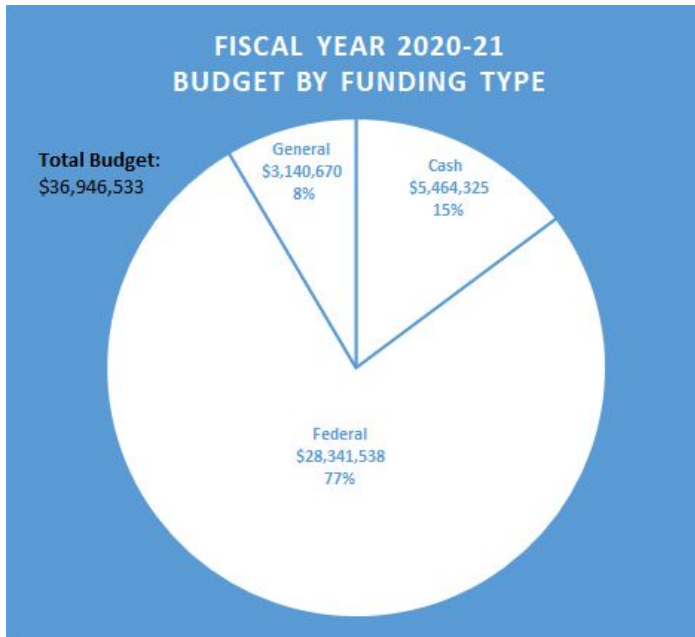
The Weatherization Assistance Program (WAP) provides direct energy retrofit services to households meeting an annual income requirement or 200% or less of the federal poverty level through contracts with statewide service providers. Nearly 30% of Colorado households experience energy burden, spending more than 4% of their household income on utility bills annually. This percentage increases dramatically for impoverished households. CEO establishes performance standards, conducts technical and administrative training, and performs compliance reviews of the service providers.

The Operations team is responsible for the fiduciary integrity of the office and creating internal processes that ensure efficient, effective, and elegant operations. This team is responsible for overseeing the office's accounting and budget functions in order to ensure that CEO continues to prudently manage taxpayer dollars. They are responsible for designing and facilitating CEO's data-driven strategic planning process and refining the office's policies and procedures. Current



process improvement initiatives include the development of an operations database, and surveying CEO's customers to inform program improvements.

FY 2019-20 Budget



Strategic Goals

Goals 1a and 1b: Greenhouse Gas Emissions and Renewables

- 1a: Create a roadmap to achieve 26% reductions in greenhouse gas (GHG) pollution below 2005 levels by 2025 and 50% reductions in GHG emissions below 2005 levels by 2030 by November 30, 2020.
- 1b: Support the growth of renewable energy by increasing the number of utility plans to increase renewable generation and achieve at least an 80% reduction in GHG pollution from 2005 levels by 2030, as measured by an increase from utilities responsible for 60% of 2019 in-state fossil fuel generation to 97% of 2019 in-state fossil fuel generation covered by a proposed plan by June 30, 2021.

CEO, in partnership with other state agencies, is developing a comprehensive Roadmap to meet the state's greenhouse gas emissions goals of 26% by 2025, 50% by 2030, and 90% by 2050 from a 2005 baseline and the climate objectives of the Governor and recently enacted legislation such as SB19-236, and SB19-096. The Roadmap expands on and updates Governor Polis' "Roadmap to 100% Renewable Energy By 2040 and Bold Climate Action" released on May 30, 2019 and will provide an action plan for state departments and agencies to achieve the State's greenhouse gas emissions reduction goals.



Key Strategies:

- Supporting the Environment & Renewable Cabinet Working Group
- Tracking the percentage of the GHG roadmap complete through November 2020
- New measures for roadmap implementation to be added to this plan once finalized
- Participate and provide input into 3 electric resource plan or clean energy plan processes by June 30, 2021.
- Multiple Roadmap strategies will require intervention at the PUC and AQCC and may require new legislation
- CEO will work with CDPHE to develop guidance to utilities on Clean Energy Plans and on the appropriate treatment of emissions from transportation and beneficial electrification

Goal 2: Electric Vehicle Registrations

Increase the number registration of new light duty electric vehicles (EVs) from 9,251 in FY2019-20 to 44,000 by June 30, 2023.

In 2020, the transportation sector is projected to account for a third of CO₂ emissions in Colorado, the largest percentage of any sector. Electrifying transportation is a core strategy in reducing transportation emissions. In support of this strategy, the Colorado Electric Vehicle Plan sets a goal of 940,000 light duty electric vehicles in the State by 2030.

Successful completion of this goal ensures Colorado is on track to increase the number of light-duty EVs to 940,000 by 2030, and continue the large-scale transition of the transportation system to zero emission vehicles. By achieving that 2030 goal, the state could see significant environmental benefits that include emission reductions, as well as long term cost savings to both drivers and electric utility customers. As noted in the 2018 Colorado Electric Vehicle Plan, Colorado could experience an annual reduction of ozone forming pollutants estimated at 800 tons of NO_x, 800 tons of volatile organic compounds (VOC), and up to 3 million tons of GHG.

Converting medium and heavy duty vehicles to zero emissions will also be critical, and during FY 20-21 the Energy Office will work with CDPHE, CDOT, and community and industry stakeholders to analyze and make a recommendation on whether to adopt an advanced clean truck rule, as well as developing an analysis of strategies to use hydrogen in transportation.

FY2020-21 Goal: Increase the annual number of Electric Vehicles (EVs) sold in Colorado from 9,251 in FY2019-20 to 14,434 by June 30, 2021.

Key Strategies:

- Provide grants for the installation of charging stations
- Intervene in regulatory proceedings including supporting the Public Utilities Commission approval of transportation electrification plans with at least \$100 million in utility investment in EV infrastructure and programs over 3 years.
- Ensure public access to accurate, reliable EV market data through a website dashboard.



- Create an eBike pilot program serving low income commuters.
- Conduct an EV equity study to assist in identifying which areas to prioritize policies, programs, and outreach.
- Complete an infrastructure gap analysis that identifies the types, locations and number of charging stations needed across the state to meet the state's vehicle electrification goals.
- Complete a Colorado Hydrogen Roadmap.
- Complete a feasibility study of Colorado adoption of Advanced Clean Truck standards.

Lead Measures:

- Install 75 community-based charging stations through the Charge Ahead Colorado program by June 30, 2021.
- Install high-speed charging stations at 34 sites along designated corridors by June 30, 2021
- Award grants for the installation of at least 7 high-speed charging hubs designed to provide service high-mileage fleets and users without regular access to home or workplace charging by June 30, 2021.
- Increase the number of EV friendly byways from 3 to 10 by June 30, 2021.
- Conduct 30 electric vehicle outreach events across the state through ReCharge Colorado by June 30, 2021.

Goal 3: Project Implementation

Increase the number of projects implemented from CEO and partnered programs from 2,035 in FY2017-18 to 2,750 by 2023.

Building fuel use accounts for approximately 20% of the greenhouse gas emissions in the state. The commercial building sector is the largest consumer of electricity in Colorado, accounting for nearly two-fifths of the state's total power use, followed by the residential sector at one-third of total consumption and the industrial sector at about one-fourth. CEO develops programs to help residential, commercial and industrial customers access energy efficiency, renewable energy improvements to reduce energy use and associated costs. CEO is also exploring ways to increase building and industrial electrification. Successful completion of this goal will reduce costs for clients and demonstrate how making energy improvements can reduce operational costs and emissions.

FY2020-21 Goal: Increase the number of energy retrofit projects implemented from CEO and partnered programs from 2,035 in FY2017-18 to 2,500 by June 30, 2021.

Key Strategies:

- Manage a comprehensive suite of energy improvement programming including the Weatherization Assistance Program, Residential Energy Upgrade (RENU) Loan Program, Agricultural Energy Efficiency Program, Energy Performance Contracting Program, Industrial Strategic Energy Management Program, ReNew Our Schools competition,



Commercial Property Assessed Clean Energy (C-PACE) program [*Partnered Program*] and the On-Bill Repayment (Fort Collins Utilities) [*Partnered Program*].

- Intervene in regulatory proceedings impacting utility programs for consumer energy improvements including utility demand side management plans and building electrification.
- Work to expand the number of communities with advanced building energy codes.
- Research and explore the development of a statewide voluntary building benchmarking program.

Lead Measures:

- Increase the amount of facilitated financing from CEO or CEO partnered energy improvement programs in the buildings sector from \$33.1M in FY 2019-20 to \$45M by June 30, 2021.
- Complete 2,700 energy audits, renewable energy assessments, feasibility studies or other facility assessments by June 30, 2021.
- Enter into 15 memorandum of understandings with public jurisdictions through the Energy Performance Contracting program.
- Assist jurisdictions with adopting the 2018 or new and advanced energy codes by conducting 30 trainings by June 30, 2021.
- Promote workforce training for building electrification including providing 8 trainings for beneficial electrification market development by June 30, 2021.

Goal 4: Customer Cost Savings from the Weatherization Assistance Program

Increase and maintain an average annual customer cost savings for Weatherization Assistance Program (WAP) clients from \$330 to \$385 by June 30, 2023.

In Colorado, approximately 20-25% of households experience severe energy burden. This burden means that these households are spending a disproportionate amount of their income on home heating and electricity compared to other Coloradans. The Weatherization Assistance Program offers services to income-qualified households to reduce energy burden and associated energy expenditures.

This goal is reported on annually by September of the following year.

Key Strategies:

- Through contracts with statewide low-income energy service providers, CEO will perform direct energy retrofits, deliver technical and administrative training, conduct quality assurance, and implement compliance reviews of the service provider agencies. All of these efforts lead to reducing home energy costs, creating greater comfort, and increasing safety for Colorado's most at-risk citizens.
- Target homes heating with high-priced propane and older, inefficient electric heating fuel sources to reduce energy costs. Target homes for installation of solar PV to reduce electricity costs.

Lead Measures:



- Increase the percentage of homes served with propane or electric heat from 11.8% in FY18 to 15.0% in FY2020-21.
- Increase the annual installation of rooftop solar on single family homes from 330kW in FY19 to 540kW in FY2020-21.
- Install 40 air source heat pumps in single family homes receiving weatherization services.