



D 2022 016

EXECUTIVE ORDER

Amending and Restating Executive Order D 2019 016 Concerning the Greening of State Government

Pursuant to the authority vested in the Governor of the State of Colorado and, in particular, Article IV, Section 2 of the Colorado Constitution, I, Jared Polis, Governor of the State of Colorado, issue this Executive Order amending and restating Executive Order D 2019 016 to establish new goals to reflect the State's continued commitment to efficient and sustainable government operations and to meet and surpass the State's goals for reducing greenhouse gas emissions, improving indoor air quality, and reducing local pollution across Colorado.

I. Background and Purpose

For almost two decades, and most recently through Executive Order D 2019 016, the State of Colorado has committed itself to efficient and sustainable operations. This Executive Order builds on the State's prior greening government efforts by establishing new goals and directives that go above and beyond the Greenhouse Gas Pollution Reduction Roadmap's (Roadmap) objectives released on January 14, 2021. By continuing to deploy greening government measures, the State will lead by example, save taxpayer money, and reduce the impact of State operations on our environment and public health.

The Greening Government Leadership Council (GGLC) reports yearly on our State's progress towards meeting GGLC's goals. GGLC's 2020 report found that the State was on track to reduce its fixed and mobile assets' greenhouse gas emissions and increase renewable energy used in State facilities. The State has additional work to do to meet GGLC's goals to further reduce energy use and greenhouse gas emissions from State fleet vehicles.

Fiscal Year (FY) 2022-23 presents an opportunity to improve the efficiency and sustainability of government buildings and operations because of recent, one-time capital investments at the federal and state levels for capital projects and infrastructure. It is imperative that these dollars be used to further the State's goals towards renewable energy and reduction of greenhouse gasses and other air pollution wherever feasible.

This Executive Order amends and restates Executive Order D 2019 016 to further our State's greening government progress. The goals and directives in this Executive Order supersede previous Greening Government Executive Orders D 2015 013, D 2018 026, and D 2019 016. To accomplish these new goals and directives, each agency and department managed

by governor-appointed executives (Agency and/or Department) shall develop and implement plans, programs, and policies that incorporate the sustainability practices outlined in this Executive Order within existing budgets and authorities.

II. Greening Government Goals

A. I direct Agencies and/or Departments to:

1. Reduce greenhouse gas emissions resulting from State operations by at least 26% by the end of FY 2024-25 over the FY 2014-15 baseline.
2. Reduce energy use per square foot in State facilities by at least 15% by the end of FY 2024-25 (normalized for weather) over the FY 2014-15 baseline.
3. Ensure that at least 7% of total electricity consumed by State facilities is renewable by the end of FY 2024-25. Such increase in renewable electricity shall be in addition to the renewable electricity provided by the local utility as part of the overall power mix.
 - i. Acceptable sources of renewable electricity to be used or purchased to meet this Executive Order's goals include:
 - a. State renewable energy systems;
 - b. Renewable energy purchased through a power purchase agreement;
 - c. Renewable energy procured through a solar garden subscription;
 - d. Utility renewable energy purchase programs;
 - e. Other renewable energy installations developed in cooperation with a utility for which there is an agreement in place; and
 - f. Solar, including leased rooftop solar.
4. Reduce greenhouse gas emissions from State vehicles by at least 15% by the end of FY 2024-25 over the FY 2014-15 baseline.
5. Reduce greenhouse gas emissions from State vehicles categorized as special use by at least 7.5% by the end of FY 2024-25 over the FY 2014-15 baseline.
6. Reduce potable water consumption by at least 2% by the end of FY 2024-25 over the FY 2014-15 baseline.

III. Energy Management Directives

A. I direct Agencies and/or Departments to:

1. Procure energy performance contracting (EPC) feasibility studies for State facilities by the end of FY 2023-24 unless the utilization of EPC for a particular facility is prohibited by State law.
2. Identify and pursue energy efficiency improvements for State buildings that are cost effective when comparing the net-present value energy costs and the costs of greenhouse gas emissions using a social cost of carbon and methane formula consistent with § 40-3.2-106(4), C.R.S. The Colorado Energy Office (CEO) may provide guidance to help calculate cost-effective energy efficiency improvements.
3. Identify and evaluate options that maximize cost-effective energy efficient Heating, Ventilation, and Air Conditioning (HVAC) systems, including use of geothermal (i.e., passive geothermal or ground-source heat pump) systems for any major capital investment. Agencies and/or Departments shall prioritize the use of geothermal heating and cooling systems; however, the Executive Director of the Department of Personnel & Administration (DPA) may grant a waiver for Agencies and/or Departments to install high efficiency electric equipment (e.g., air source heat pumps) if the relevant Agency and/or Department evaluates geothermal systems and establishes that geothermal will not work. Evaluation of HVAC technology shall include consideration of the social costs of carbon and methane consistent with § 40-3.2-106(4), C.R.S. “Major capital investments” includes projects: over \$500,000; or projects that have a capital construction, capital renewal, or controlled maintenance funding request.
4. Complete comprehensive light-emitting diode (LED) lighting or equivalent retrofit projects for State facilities using EPC or other funding sources by June 30, 2024, unless the use-case indicates that LEDs or equivalent are not practicable and a waiver is granted by the Agency and/or Department executive and such waiver is approved by the Executive Directors of DPA and CEO.
5. Track water (potable and non-potable) and energy used in covered State facilities (as defined by GGLC operational boundaries) through a database as determined and supported by the CEO. The database will document accurate utility use and cost information. CEO will administer the database and shall fund the development and maintenance of the database. CEO will help coordinate and identify support services to enable Agency and/or Department use of the database.
6. Identify and pursue water efficiency improvements for State buildings that are cost effective. The cost should include the analysis of any applicable and associated energy cost from heating or cooling the water. The improvements should meet the EPA’s WaterSense criteria.

7. Identify and pursue water heating system changes to electric instant hot water heaters for State buildings that are cost effective. The cost should include the analysis of any applicable and associated energy cost from heating water.
8. On or before June 1, 2023, and on or before June 1 of each subsequent year, report their building energy use for the previous calendar year in the format set by CEO to comply with annual building energy and emissions benchmarking requirements established in § 25-7-142, C.R.S.
9. Ensure accurate tracking and reporting of State fleet fuel use on the Colorado Automotive Reporting System (CARS), or successor system, as administered by State Fleet Management (SFM). The Colorado Department of Transportation (CDOT) shall use established reporting for all on-road and off-road vehicles that are not reported in CARS.
10. Include the following in capital construction or capital renewal requests submitted to OSA and Governor's Office of State Planning and Budgeting (OSPB) for new construction or substantial renovations to existing projects, and consultation between OSA and OSPB may be necessary for such requests:
 - i. Analysis of how requested projects conform with the State's High Performance Certification Program;
 - ii. Analysis of onsite renewable energy generation or renewable clean energy purchases;
 - iii. Documentation of Agency and/or Department plans to meet requirements under § 24-30-1305.5, C.R.S., for reporting building utility performance data to OSA through either a nationally recognized building certification program, a CEO-approved utility tracking database, or another OSA accepted procedure;
 - iv. If parking is part of the proposed project, provide documentation or plans showing that at least 20% of parking spaces will be pre-wired (conduit and wiring) or EV-capable (conduit only) for Level 2 charging, and that at least 5% will have Level 2 chargers installed, increasing to 10% for proposed projects initiated in or after FY 2025-26. An Agency and/or Department may substitute one direct current fast charger (DCFC) for every five Level 2 ports for the installation and pre-wire or EV-capable requirement where the technology is appropriate for the use case;
 - v. Provide documentation that the Agency and/or Department reviewed options for the full electrification of building systems, including consideration of geothermal heating and cooling, and such review shall

include a full life-cycle cost analysis of the impact of electrification including social cost of carbon and methane consistent with § 40-3.2-106(4), C.R.S.; and

vi. For new construction, document that the building is built to net zero or near net zero greenhouse gas emissions standards, or is all electric, unless the project receives a waiver from the Governor.

11. Explore, as part of any renewable energy system procurement, whether the installation of energy storage systems is feasible and cost effective. If found to be feasible and cost effective, renewable energy systems shall include energy storage. Evaluation of cost effectiveness shall include the value of resilience during power outages or natural disasters utilizing the value of lost load or a similar calculation and shall take into account the benefits of continuity of government services during power outages.

12. Explore the possibility of legislation or administrative action to utilize unused budget authority in utility line items to complete energy efficiency and renewable energy projects in subsequent years.

13. In all years subsequent to FY 2023-24, make best efforts to include EPC for energy-related controlled maintenance and capital renewal budget requests wherever possible. Where it is not possible, Agencies and/or Departments shall explain why EPC is not suitable and why additional funding cannot be secured to support such budget requests. Institutions of Higher Education are encouraged to comply with this directive. OSPB will take this information into consideration while developing the Governor's budget.

B. I direct CEO and DPA, by January 31, 2023, to consult with OSPB to develop model contracts and expedite procurement of renewable energy (and associated renewable energy credits), including, where possible, aggregated procurement of projects for multiple facilities through:

1. Agency and/or Department-owned renewable energy installations;
2. Power purchase agreements; and
3. Community solar gardens.

C. I direct OSA's Real Estate and Energy Management Programs to review and revise the Green Lease Policy and Green Lease Scoring Matrix (Matrix) in accordance with this Executive Order and ensure that EV charging infrastructure is included as a scoring criteria for all leased space when applicable in the Matrix.

IV. Fleet Management Directives

A. I direct Agencies and/or Departments to:

1. Purchase battery electric vehicles (BEVs) in cases where BEVs meet the Agency's and/or Department's operational needs and infrastructure is in place or is planned to be in place prior to vehicles arriving. Agencies and/or Departments may continue to purchase plug-in hybrid electric vehicles (PHEV) in cases where PHEVs better match the operational needs or charging infrastructure is planned for installation after arrival of the vehicles.
2. Ensure that EVs (BEVs and PHEVs) are the default vehicle type for all light-duty vehicles for future vehicle purchases, and if an electric model is available to the State that is the same vehicle type approved for replacement, DPA, with input from CEO, shall select the EV. In cases where an Agency and/or Department believes that the selected EV will not meet the operational need, Agencies and/or Departments may request reconsideration of the selection by DPA. DPA should consider deferring purchases for such vehicles into future years where more mission appropriate EVs may be available. Agencies and/or Departments may appeal DPA's decision for final determination by the Governor.
3. Work in partnership with DPA when DPA selects medium and heavy-duty Zero Emission Vehicles for Agency and/or Department fleets where medium and heavy-duty Zero Emission Vehicles are cost-effective, meet operational needs, and available in the marketplace.
4. Ensure that any EV added to the fleet shall be used as an opportunity to provide education and outreach to the public and State employees. This can include vehicle wraps, bumper stickers, brochures, and other information within the vehicle, as well as training for vehicle users.
5. Work with CEO and DPA to install charging stations at State facilities using funding allocated through Senate Bill 21-230. Where additional infrastructure is needed, including at leased facilities, Agencies and/or Departments shall identify funding and pursue grants and rebates to install sufficient charging infrastructure. Explore, where cost-effective, the integration of bidirectional functionality for charging stations, including where vehicles can be utilized for vehicle-to-building services to reduce utility bills and utility demand charges. Where bidirectional functionality is considered, cost-effectiveness shall include the value of resilience during power outages or natural disasters.
6. Create a vehicle management team that includes the: (1) fleet coordinator or manager; (2) budget director; and (3) GGLC representative. Vehicle management teams shall pursue implementation of a telematics system for use on all State fleet vehicles. Agencies and/or Departments shall support the installation of telematics on all Agency and/or Department vehicles and utilize the telematics systems with

vehicle management teams for the deployment of future Alternative Fuel Vehicle (AFV) technologies.

B. I direct CEO and DPA to:

1. Create utilization goals to minimize the use of gasoline (or diesel) used by PHEVs by Agencies and/or Departments by January 31, 2023.
2. Implement the EV take home policy by replacing take home vehicles with EVs in each vehicle procurement cycle, with a goal of increasing the number of take home EVs ordered in each successive round.

C. I direct DPA to explore opportunities to increase green commuter opportunities and benefits for State employees and to set forth the same in a policy by January 31, 2023. This should include an analysis of opportunities for State workers to reduce total vehicle miles traveled due to use of flexible work arrangements and other operational changes.

D. I direct DPA and CDOT to establish policies and procedures to promote the cost-effective use of AFVs and other fleet efficiency improvements wherever feasible.

E. I established the State Fleet Sub-Council (Sub-Council) to help develop, implement, and improve programs, plans, and policies that save money, reduce emissions, promote domestic fuel use, and conserve natural resources. The Sub-Council, led by DPA, shall include, at minimum, fleet coordinators or one other representative from Colorado Department of Public Health and Environment (CDPHE), Colorado Department of Public Safety (CDPS), CEO, DPA, Colorado Department of Corrections (CDOC), CDOT, Colorado Department of Human Services (CDHS), Department of Natural Resources (DNR), and Department of Higher Education (DHE), and members from Institutions of Higher Education as appropriate. Sub-Council members shall be appointed by the executives of each Agency and/or Department. The Sub-Council shall:

1. Develop standard procedures and formulas to model and monitor the cost and cost savings of shifting State vehicles to AFVs and review other fuel reduction efforts in connection with acquisition and operations budgets;
2. Identify and evaluate other fuel-saving practices for State fleet vehicles; and
3. Evaluate alternative financing options for State fleet vehicles including leasing, EPC, and other options that may reduce State fleet vehicle costs.

V. Recycling and Consumption Reduction Directives

A. I direct the State Purchasing and Contracting Office to establish environmentally preferred purchasing goals and standards for office paper, office supplies, janitorial supplies, facility maintenance supplies, repair supplies, and single-use supplies by

January 31, 2023. The State Purchasing and Contracting Office may choose to create environmentally preferred purchasing goals and standards for any other State supplies.

- B. I direct Agencies and/or Departments, in collaboration with DPA, to prepare plans to reduce the amount of water used by State properties including through the conversion of grass to xeriscape, where appropriate, to support the Colorado Water Plan by July 1, 2023.
- C. I direct Agency and/or Department facilities management units to prepare waste prevention and diversion plans, which shall include specifically identified recycling goals by January 31, 2023.
- D. I direct every employment site that has a locally supported recycling program to have recycling receptacles located next to all common area trash receptacles.

VI. Additional Sustainability Directives

- A. I direct each Agency and/or Department to review its daily operations to decrease the environmental impact of State government operations through green commuting opportunities, remote work, environmentally preferred purchasing practices, and waste diversion through waste reduction, recycling, reuse, or composting.
- B. I direct each Agency and/or Department, when purchasing or procuring a refrigeration appliance, HVAC equipment, or building insulation to prioritize products which utilize very low Global Warming Potential (GWP) chemicals and to ensure the safe disposal of retired refrigerants through a certified refrigerant recovery and recycling service.
- C. When procuring goods and raw materials that originate from forest ecosystems and contribute to regional and global deforestation and degradation (forest-risk commodities), which may include palm oil, soy, beef, coffee, cocoa, rubber, wood pulp, lumber, paper, and other food commodities, I encourage Agencies and/or Departments to consider vendors that source forest-risk commodities from U.S.-based, short supply chains and have instituted best management practices that reduce environmental impacts while maintaining or improving the productivity of land. For forest-risk commodities originating from outside the U.S., I encourage Agencies and/or Departments to prefer vendors that: do not contribute to tropical or boreal intact forest degradation or deforestation directly or through the supply chain; guarantee protection of Indigenous rights to free, prior, and informed consent through the disclosure of third party certifications or demonstration of best management practices; and prevent the poaching of endangered and threatened species in all operations and adjacent areas.
- D. I direct Agencies and/or Departments procuring lawn care and landscape services and contracts to prefer vendors who utilize solely or primarily electrified equipment.

VII. Agency and/or Department Staffing and Training Directives

- A. I direct Agencies and/or Departments to work with OSPB and DPA to identify staffing and training resources to meet the goals and directives in this Executive Order.

VIII. Other Directives

- A. I direct Agencies and/or Departments to implement these goals and directives within existing budgets and authorities. If necessary, Agencies and/or Departments shall engage with OSPB to identify resource requirements to be considered in the annual budget development process for any actions to be implemented in future fiscal years.
- B. I direct GGLC, beginning December 15, 2022 and on or before December 15 of each subsequent year, to prepare an annual report card that highlights Agency and/or Department progress toward the above goals and directives and to outline accomplishments from the prior FY. All Agencies and/or Departments shall provide GGLC with any necessary information to complete the report card.
- C. I direct Agencies and/or Departments, with the support of CEO, to cooperate with local governments that are developing or updating utility benchmarking and transparency ordinances for buildings by providing utility data and other relevant information concerning State buildings within the relevant jurisdiction. Agencies and/or Departments shall accomplish this directive within existing resources.

IX. Duration

Executive Order D 2019 016, as well as all previous Executive Orders relating to greening government and sustainability, including D 2015 013 and D 2018 026, are hereby amended and restated by this Executive Order. This Executive Order shall remain in effect unless modified by a future Executive Order of the Governor.



GIVEN under my hand and
the Executive Seal of the
State of Colorado, this
twenty-second day of April
2022.

A handwritten signature in blue ink that reads "Jared Polis".

Jared Polis
Governor