COLORADO
Air Quality Control Commission
Department of Public Health & Environment

NOTICE OF RULEMAKING HEARING

Regarding establishing new regulation:

Regulation Number 28
5 CCR 1001-32

SUBJECT:
The Air Quality Control Commission will hold a rulemaking hearing to consider establishing a new Regulation Number 28 to address greenhouse gas emissions attributable to buildings to include building performance standards for covered buildings, waivers and extensions, and data benchmarking and reporting requirements, in response to House Bills 19-1261 and House Bill 21-1286.

The hearing in this matter was originally set for May 16-19, 2023 as set forth in the Notice of Rulemaking Hearing published on February 10, 2023. On April 20, 2023, the Commission voted to continue the hearing to its August 2023 meeting. The Commission is issuing this amended notice to confirm the updated schedule for this proceeding.

All required documents for this rulemaking can be found on the Commission website at: https://cdphe.colorado.gov/aqcc

PUBLIC COMMENT SESSION
DATE: August 15, 2023
TIME: 4:30 p.m. to 7:30 p.m.
PLACE: The session will be held online only; there will be no in-person participation. Details related to participation and registration can be found at: https://cdphe.colorado.gov/aqcc

NOTE: The public comment session may end early if all commenters that are registered and in attendance before 6:30 have had an opportunity to speak prior to 7:30.

PARTY TESTIMONY & DELIBERATIONS
DATE: August 16-17, 2023
TIME: To begin at or after 9:00 a.m.
PLACE: The hearing will be held in a hybrid fashion both in-person and via Zoom. Parties to rulemaking hearings are encouraged to participate in-person. Details related to participation and registration can be found at: https://cdphe.colorado.gov/aqcc

IMPORTANT: As Colorado begins to re-open from COVID-19, the Commission may reestablish conducting meetings at the Colorado Department of Public Health and Environment in its entirety or structured as a hybrid meeting. Any such changes will be noticed on the Commission's website at: https://cdphe.colorado.gov/aqcc

The hearing may be continued at such places and time as the Commission may announce. Any such changes will be noticed on the Commission's website. Interested parties may contact the Commission Office at cdphe.aqcc-comments@state.co.us to confirm meeting details.

PUBLIC COMMENT:

The Commission encourages input from the public, either orally during the public comment session or in writing prior to the hearing. However, oral public comment will generally not be permitted by persons who offer comment on behalf of an entity that is a party. Those persons may, however, submit written public comment.

Instructions for registering to provide oral public comment will be posted in the agenda on the Commission's website at https://cdphe.colorado.gov/aqcc on August 4, 2023.

Written comments should be submitted no later than **August 1, 2023** by emailing cdphe.aqcc-comments@state.co.us or mailing to:

> Colorado Air Quality Control Commission
> Colorado Department of Public Health and Environment
> 4300 Cherry Creek Drive South, EDO-AQCC-A5
> Denver, Colorado 80246

IMPORTANT DATES AND DEADLINES:

PROCESS DESCRIPTION	DUE DATE & TIME
Request for Party Status	May 15, 2023 by 5:00 p.m.
Alternate Proposal	June 5, 2023 by 5:00 p.m.
Prehearing Statement	June 5, 2023 by 5:00 p.m.
Second Prehearing Conference	June 12, 2023 at 8:00 a.m.
Rebuttal Statement	July 24, 2023 by 5:00 p.m.
Written Public Comments	August 1, 2023 by 5:00 p.m.

Submittals for this hearing should be emailed to cdphe.aqcc-comments@state.co.us unless an exception is granted pursuant to Subsection III.I.3. of the Commissions Procedural Rules.

REQUEST FOR PARTY STATUS:

Parties who already submitted a request for party status in this proceeding and had the request for party status accepted by the Hearing Officer, and who did not subsequently withdraw that party status, are not required to submit an additional request for party status.

A request for party status must:

1) identify the applicant (this could be a company and/or contact name);
2) provide the name, address, telephone and email address of the applicant's representative or counsel; and

3) briefly summarize what, if any, policy, factual, and legal issues the applicant has with the proposal(s) as of the time of filing the application.

In addition, requests for party status should indicate whether the applicant intends to file an alternate proposal and, if so, briefly describe the scope and nature of the alternate proposal.

The request for party status must be electronically mailed to:

- Air Quality Control Commission staff: theresa.martin@state.co.us
- Air Quality Control Commission attorney: robyn.wille@coag.gov
- Air Pollution Control Division staff: leah.martland@state.co.us
- Air Pollution Control Division attorney: david.beckstrom@coag.gov

Requests received beyond the stated deadline shall only be considered upon a written motion for good cause shown. The Commission reserves the right to deny party status to anyone that does not comply with the Commission's Procedural Rules.

ALTERNATE PROPOSAL:
Parties who already submitted an alternate proposal in this proceeding are not required to resubmit the alternate proposal and all supporting materials unless those parties are making material or substantial edits to the alternate proposal previously submitted.

Alternate proposals will be considered by the Commission "only if the subject matter of the alternative proposal is consistent with and fits within the scope of the notice." 5 CCR 1001-1, Section (V)(E)(4)(b). The submission of redlined language is not automatically considered an alternate proposal. Whether specific redlines rise to the level of an alternate proposal is determined on a case-by-case basis, taking into consideration many factors, including the impact of those redlines on the Division's proposal. Parties submitting redlines that they do not believe should be considered alternate proposals are encouraged to provide information demonstrating that the redlines simply delete, clarify, or elaborate on the Division's proposal.

The submittal of an alternate proposal must be accompanied by a separate electronic copy of the alternate proposed rule and statement of basis and purpose language and all other associated documents as required by the Commission's Procedural Rules, including an economic impact analysis. Alternate proposals and associated exhibits must be emailed to all persons listed on the party status list or otherwise provided through an approved method of electronic transmission. Objections to the submission of redlines that are not identified as alternate proposals and accompanied by the required information for alternate proposals under the Commission's Procedural Rules must be made by motion in writing prior to the Prehearing Conference.

PREHEARING STATEMENTS:
The Division and each party may submit a new or updated prehearing statement, but may rely instead on the prehearing statement submitted by the original March 30, 2023 deadline. Parties who did not previously submit a prehearing statement must file a prehearing statement by the June 5 deadline.

Exhibits to a prehearing statement must be submitted in a separate electronic transmission. Prehearing statements and associated exhibits must be emailed to all persons listed on the party status list or otherwise provided through an approved method of electronic transmission. Prehearing statements must contain all the necessary elements described in subsection V.E.6.c of the Commission's Procedural Rules (5 CCR 1001-1).

SECOND PREHEARING CONFERENCE:
Attendance at the second prehearing conference on June 12 is mandatory for all parties to this hearing, though each party need only have one representative present. The prehearing conference will be held virtually, and registration information will be provided by the Commission's office prior to the prehearing conference.

REBUTTAL STATEMENTS:
Rebuttal statements may be submitted by the Division and any party to the hearing to respond to issues and arguments identified in prehearing statements. Rebuttal statements may not raise any issues, or be accompanied by alternate proposals, that could have been raised in the party's prehearing statement. Rebuttal statements and associated exhibits must be emailed to all persons listed on the party status list or otherwise provided through an approved method of electronic transmission. The filing of rebuttal statements is optional.

DELIBERATION AND FINAL ACTION:
The Commission intends to deliberate and take final action on the proposed changes to these Regulations at the conclusion of the testimony.

STATUTORY AUTHORITY FOR THE COMMISSION'S ACTIONS:
The Colorado Air Pollution Prevention and Control Act § 25-7-142(7) authorizes the Commission to promulgate rules to implement the benchmarking program established in HB 21-1286. § 25-7-142(8)(c) directs the Commission to adopt rules to establish building performance standards on or before September 1, 2023, "that will achieve a reduction in greenhouse gas emissions of [7%] by 2026 as compared to 2021 levels" and "a reduction in greenhouse gas emissions of [20%] by 2030 as compared to 2021 levels," as set forth in § 25-7-142(8). § 25-7-105(1)(e) authorizes the Commission to promulgate implementing rules and regulations to abate greenhouse gas (GHG) emissions consistent with the statewide GHG pollution reduction goals in § 25-7-102(2)(g). In adopting GHG abatement strategies and implementing rules, the Commission is authorized to take into account other relevant laws and rules to enhance efficiency and cost-effectiveness and solicit input from other state agencies and stakeholders on the advantages of different statewide GHG pollution mitigation measures, see § 25-7-105(1)(e)(II) and (IV). Implementing rules may include regulatory strategies that incentivize development of renewable resources and "enhance cost-effectiveness, compliance flexibility, and transparency around compliance costs," see § 25-7-105(1)(e)(V). Further, in promulgating such implementing rules, the Commission is to consider many factors, including, but not limited to, health, environmental, and air quality benefits and costs; the relative contribution of each source or source category to statewide GHG pollution; equitable distribution of the benefits of compliance; issues related to the beneficial use of electricity to reduce GHG emissions; and whether greater or more cost-effective emission reductions are available through program design, see § 25-7-105(1)(e)(VI).

§ 25-7-109(1) authorizes the Commission to adopt and promulgate emission control regulations that require the use of effective practical air pollution controls for each type of facility, process, or activity which produces or might produce significant emissions of air pollutants. An “emission control regulation” may include “any regulation which by its terms is applicable to a specified type of facility, process, or activity for the purpose of controlling the extent, degree, or nature of pollution emitted from such type of facility, process, or activity. . . .”, see § 25-7-103(11). Emission control regulations may pertain to any chemical compound including GHG pollution, see § 25-7-109(2)(c).

The rulemaking hearing will be conducted in accordance with Sections 24-4-103 and 25-7-110, 25-7-110.5 and 25-7-110.8 C.R.S., as applicable and amended, the Commission’s Procedural Rules, all other applicable rules and regulations, and as otherwise stated in this notice. This list of statutory authority is not intended as an exhaustive list of the Commission’s statutory authority to act in this matter.

Dated this 28th day of April 2023 at Denver, Colorado

Colorado Air Quality Control Commission

Jojo La, Interim Administrator

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Air Quality Control Commission

REGULATION NUMBER 28

Building Benchmarking and Performance Standards

5 CCR 1001-32

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

Outline of Regulation

Part A	Applicability and General Provisions
Part B	Benchmarking and Reporting Requirements
Part C	Building Performance Standards and Compliance Pathways
Part D	Recordkeeping
Part E	Penalties
Part F	Statement of Basis, Specific Statutory Authority, and Purpose

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Pursuant to Colorado Revised Statutes § 24-4-103 (12.5), materials incorporated by reference are available for public inspection during normal business hours, or copies may be obtained at a reasonable cost from the Air Quality Control Commission (the Commission), 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530. Some material incorporated by reference is also available through the United States Government Printing Office, online at www.govinfo.gov. Materials incorporated by reference are those editions in existence as of the date indicated and do not include any later amendments.

Part A Applicability and General Provisions

I. Purpose

I.A. This regulation establishes energy-use benchmarking data reporting and building performance requirements for owners of existing and new covered buildings in order to meet greenhouse-gas emission reductions goals for such buildings under 25-7-142(8)(a)(II)(A)-(B), C.R.S. (2022).

II. Applicability

II.A. This regulation applies to owners of covered buildings, as defined in Section III.O.

II.B. The owner of a public building must only comply with the building performance standards in Part C for that covered building upon completion of any construction or renovation project that has an estimated cost of at least $500,000 and impacts at least twenty-five percent (25%) of the covered building's square footage, excluding upgrades such as painting, flooring, or tenant finishes that do not impact energy use.

III. Definitions

III.A. “Affordable housing” means (I) for a household residing in housing on a rental basis, annual income of the household is at or below eighty percent of the area median income of households of that size in the county in which the housing is located; (II) for a household residing in housing on a home ownership basis, annual income of the household is at or below one hundred forty percent of the area median income of households of that size in the county in which the housing is located; or (III) housing that incorporates mixed-income development.

III.B. “Aggregated data” means electric or gas utility customer data, alone or in combination with non-customer data, resulting from processing (e.g., average of a group of customers) and/or the compilation of customer data of one or more customers from which all unique identifiers and personal information has been removed.

III.C. “Aggregation threshold” means, for each qualifying utility, the minimum number of customer accounts associated with a covered building for which the qualifying utility may provide the owner of the covered building with aggregated data upon request without requiring each customer's consent to have the customer's energy-use data accessed or shared.

III.D. “Agricultural purpose” means a building or structure used to house farm implements, hay, unprocessed grain, poultry, livestock, or other agricultural products. For the purpose of this definition, this structure must not contain habitable space or a place of employment where agricultural products are processed or treated or packaged; nor is it a place used by the public.

III.E. “Agricultural product” means any agricultural, horticultural, viticultural, or vegetable products or poultry or poultry products grown or produced in Colorado. Agricultural products do not include “regulated marijuana” as defined by Colorado’s Marijuana Enforcement Division in 1 CCR 212-3 (2022).

III.F. “Benchmarking” means to input benchmarking data into a benchmarking tool to measure and assess the energy performance and greenhouse gas pollution for a covered building for the reporting year.

III.G. “Benchmarking data” means the information related to a covered building that is input into or calculated by a benchmarking tool.

III.H. “Benchmarking tool” means the ENERGY STAR® Portfolio Manager or a successor online resource used to track and assess the performance of certain properties relative to similar properties.

III.I. “Beneficial electrification” means converting the energy source of a customer’s end use from a nonelectric fuel source to a high-efficiency electric source, or avoiding the use of nonelectric fuel sources in new construction or industrial applications, if the result of the conversion or avoidance is to

III.I.1. Reduce net greenhouse gas emissions over the lifetime of the conversion or avoidance; and

III.I.2. Reduce societal costs or provide for more efficient utilization of grid resources.

III.I.3. Beneficial electrification does not include

III.I.3.a. Retail distributed generation, as defined in 40-2-124(1)(a)(VIII) (2022); or

III.I.3.b. An energy storage system, as defined in 40-2-130 (2)(a) (2022).

III.J. “Biomedical research laboratory” means a scientific laboratory used to conduct research relating to both biology and medicine.

III.K. “Building owner” means a person possessing title to a building or property or the person’s designated agent.

III.L. “Building performance standards” (BPS) means standards a covered building must meet to achieve the greenhouse gas reduction requirements under 25-7-142(8)(a)(II), C.R.S. (2022).

III.M. "Campus" means a collection of two or more buildings that are owned and operated by the same person and that have a shared purpose and function as a single property. Campus includes two or more of the buildings that comprise the capitol complex.

III.N. “CEO” means the Colorado Energy Office.

III.O. “Covered building” means a building comprising a gross floor area of fifty thousand (50,000) square feet or more that is occupied by a single occupant or a group of tenants. Covered building does not include

III.O.1. Covered buildings that are a storage facility, stand-alone parking garage, or hangar that lacks heating and cooling;

III.O.2. A building in which more than half of the gross floor area is used for manufacturing, industrial, or agricultural purposes as defined in Section III.; or

III.O.3. A single-family home, duplex, or triplex.

III.P. “Customer-owned distributed renewable electric generation” means

III.P.1. A renewable energy resource or renewable energy storage that provides electric energy to serve the customer's loads.

III.P.2. Is located on any property owned or leased by the customer within the service territory of the qualifying retail utility.

III.P.2.a. Off-site means located on noncontiguous property owned or leased by a customer of a qualifying retail utility.

III.P.2.b. Off-site renewable generation or storage must come from systems owned or leased by the building owner.

III.P.3. Is interconnected on the customer's side of the utility meter.

III.P.4. Must be sized to supply no more than two hundred percent of the reasonably expected average annual total consumption of electricity at all properties owned or leased by the customer within the utility's service territory.

III.Q. "Data center" means buildings specifically designed and equipped to meet the needs of high density computing equipment, such as server racks, used for data storage and processing. Gross floor area of data centers should include all space within the building(s) including raised floor computing space, server rack aisles, storage silos, control console areas, battery rooms, mechanical rooms for cooling equipment, administrative office areas, elevator shafts, stairways, break rooms and restrooms. When a data center is located within a larger building, gross floor area should include only the spaces that are uniquely associated with the data center in the gross floor area (e.g., not include spaces shared by the data center and other tenants, such as break rooms or hallways).

III.R. "Demand flexibility" means the use of communication and control technology to shift electricity use across hours of the day while delivering end-use services (e.g., air conditioning, domestic hot water, electric vehicle charging) at the same or better quality but lower cost. It does this by applying automatic control to reshape a customer's demand profile continuously in ways that either are invisible to or minimally affect the customer, and by leveraging more-granular rate structures that monetize demand flexibility's capability to reduce costs for both customers and the grid.

III.S. "Duplex" means a multi-family dwelling that has two separate residential units within one standalone building with the two units sharing a common wall or ceiling/floor and each having its own entrance.

III.T. "ENERGY STAR" means the federal program authorized by 42 U.S.C. § 6294a (2007), as amended, to help customers, businesses, and industry save money and protect the environment through the adoption of energy-efficient products and practices.

III.U. "ENERGY STAR score" means the one-to-one-hundred numeric rating generated by the ENERGY STAR Portfolio Manager as a measurement of a building's energy efficiency.

III.V. "ENERGY STAR Portfolio Manager" means the resource management tool that enables building owners to track and benchmark energy in a building, or across multiple buildings, through an online platform used to measure their performance.

III.W. "Energy-use intensity" (EUI) means a building's energy use, expressed as total site energy use per square foot per year.

III.X. "Financial hardship" means a property is experiencing at least one of the following conditions.

III.X.1. The property has been included on a city's, county's, or city and county's annual tax lien sale list within the previous two years.

III.X.2. The property is an asset subject to a court-appointed receiver that controls the asset due to financial stress.

III.X.3. The property is owned by a financial institution as a result of a default by a borrower.

III.X.4. The property has been acquired by a deed in lieu of foreclosure.

III.X.5. The property is the subject of a senior mortgage subject to a notice of default.

III.X.6. Due to the governor declaring a disaster emergency pursuant to §24-33.5-704 (4), C.R.S. (2022), the property, in at least two of the previous five years, generated annual rental income or revenue that totals sixty percent or less of the five-year average immediately preceding the disaster.

III.Y. “Greenhouse gas” (GHG) means carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3).

III.Z. “Gross floor area” (GFA) means the total building area, as measured from the outside surface of each exterior wall of the building, including above-grade and below-grade space.

III.AA. “High-efficiency electric equipment” means electrical equipment that is, for example, certified according to ENERGY STAR, or meets the minimum efficiency requirements of the current version of American Society of Heating, Refrigerating and Air-Conditioning Engineers’ (ASHRAE) Standard 90.1, 2021 International Energy Conservation Code (IECC), the Federal Energy Management Program (FEMP) efficiency requirements, or newer requirements where applicable.

III.BB. “Industrial purpose” means a building or structure used for industrial operations including, but not limited to, factories, mills, shops, processing plants, assembly plants, fabricating plants, research or development facilities, operations by energy producers, electric generation unit, refineries, meat packing plants, dairies, steel mills, cement plants, mining operations, airline operations, wastewater treatment plants, landfills, and abandoned coal mines. The gross floor area should include all space within the building(s) at the building or structure including production areas, offices, conference rooms, employee break rooms, storage areas, mechanical rooms, stairways, and elevator shafts.

III.CC. “Manufacturing purpose” means a building or structure that includes a main production area containing machinery and equipment used for producing products. The gross floor area should include all space within the building(s) at the building or structure, including production areas, offices, conference rooms, employee break rooms, storage areas, mechanical rooms, stairways, and elevator shafts.

III.DD. “Mixed use building” means a building that contains multiple property types, including parking gross floor area.

III.EE. “Multifamily housing” means any property used or intended to be used as a residence and that contains four or more dwelling units. Multifamily housing includes a condominium or cooperative.

III.FF. “Parking” means buildings and lots used for parking vehicles. This includes open parking lots, partially enclosed parking structures, and completely enclosed (or underground) parking structures. Parking garages may be free standing or physically connected to the property.

III.GG. “Property type” means the primary use of a building. Each property type will have a different set of property use details, which refer to the business activity at the property, such as weekly operating hours, number of workers, and number of computers. If a building or property has multiple uses, the property type is based on the use that accounts for more than 50% of a building’s or property’s gross floor area. If there is not one single use type that represents 50% or more of the building or property’s gross floor area, the property type will be classified as "mixed use."

III.HH. "Public building" means a covered building owned by: the state; a local government; a district or special district regulated under title 32; a state institution of higher education; a private institution of higher education as defined in § 23-18-102 (9), C.R.S. (2022); a school district created pursuant to article 30 of title 22; and a charter school authorized pursuant to Part 1 of Article 30.5 of Title 22 of the C.R.S. (2022).

III.II. "Qualifying utility" means an electric or gas utility with five thousand or more active commercial and industrial service connections, accounts, or customers in Colorado, including: an investor-owned electric or gas utility; a cooperative electric association; or a municipally owned electric or gas utility. Qualifying utility also means a natural gas supplier with five or more active commercial or industrial connections, accounts, or customers in Colorado.

III.JJ. "Renewable energy credit" (REC) means a contractual right to the full set of non-energy attributes, including any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, directly attributable to a specific amount of electric energy generated from a renewable energy resource. One REC results from one megawatt hour (MWh) of electric energy generated from a renewable energy resource. The MWh of distributed generation in avoided GHG emission value must be based on the relevant electricity provider's reported annual system emissions, calculated in a manner consistent with the Air Quality Control Commission-approved Clean Energy Plan guidance, and adjusted annually to account for the changing emissions profile of the generation fleet of the source's electricity supplier.

III.KK. "Renewable energy" means useful electrical, thermal, or mechanical energy converted directly or indirectly from resources of continuous energy flow or that are perpetually replenished and whose utilization is sustainable indefinitely. The term includes, without limitation, sunlight, the wind, geothermal energy, hydrodynamic forces, and organic matter available on a renewable basis such as forest residues, agricultural crops and wastes, wood and wood wastes, animal wastes, livestock operation residue, aquatic plants, and municipal wastes.

III.LL. "Renovation" means the repair, remodeling, restoration, and preservation of a covered building and any associated fixtures or improvements.

III.MM. "Single-family home" means a standalone residential building designed to be used as a single-dwelling unit with one owner and no shared walls with another residence.

III.NN. "Site energy-use intensity" or "Site EUI" means the annual amount of all the energy the building consumes on-site, regardless of the source. A building's site EUI is calculated by dividing the total energy consumed by the building in one year (measured in kBtu) by the total gross floor area of the building.

III.OO. "Source energy-use intensity" or "Source EUI" means EUI calculations that consider the total amount of energy required for the building, including the energy used to produce and transmit any energy that comes from offsite.

III.PP. "State institution of higher education" means an institution as defined in § 23-1-108(7)(g)(II), CRS, (2022) and the Auraria Higher Education Center, governed pursuant to Article 70 of Title 23 of C.R.S. (2022). State institution of higher education does not include biomedical research laboratories.

III.QQ. "Triplex" means a multi-family dwelling that has three separate residential units within one standalone building with the units sharing one or two common walls or ceiling/floors and each having its own entrance.

III.RR. "Under-resourced building" means a building with limited access to resources, including revenues, funding, grants, or gifts that can help with building operations or to comply with the requirements of this rule, then other buildings within the same building type in the same utility service territory. Under-resourced buildings include, but are not limited to

III.RR.1. Buildings owned by organizations that qualify at tax exempt under Section 501(c) of the Internal Review Code.

III.RR.2. Affordable housing.

III.RR.3. Buildings that are owned by an organization that provides human services that are regulated by the Colorado Department of Human Services, if those services are also provided in the building.

III.RR.4. Restricted income providers.

III.SS. "Unoccupied" means a building without occupants or tenants other than security or maintenance staff.

III.TT. "Weather-normalized" means a method for modifying the measured building energy use in a specific weather year to energy use under normal weather conditions.

IV. Annual fee

IV.A. Except as provided in Section IV.B., covered building owners must pay an annual fee, by June 1 of every reporting year, to CEO of $100 per covered building.

IV.B. Owners of public covered buildings are exempt from the payment of the annual fee.

V. Severability

If any section, clause, phrase, or standard contained in these regulations is for any reason held to be inoperative, unconstitutional, void, or invalid, the validity of the remaining portions thereof will not be affected and the Commission declares that it severally passed and adopted these provisions separately and apart.

Part B Benchmarking and Reporting Requirements

I. By June 1, 2023, and by June 1 of each year thereafter, covered building owners must report benchmarking data for the previous calendar year and additional information as specified below to CEO on a CEO approved form. Owners of newly constructed buildings (i.e., buildings that were not built or occupied such that they had 2021 benchmarking data to submit by the initial reporting deadline of December 1, 2022) must start collecting benchmarking data once the owner has received a certificate of occupancy for the building and submit their first annual benchmarking data report the subsequent year (e.g., for a building with a certificate of occupancy starting March 1, 2023, submit by June 1, 2024, the building data from March 1, 2023, through December 31, 2023). Before submitting a benchmarking report, the covered building owner must run any automated data-checking function of the benchmarking tool and correct any errors discovered. The benchmarking data reported to CEO must include the following.

I.A. Compliance pathway selection.

I.A.1. In the June 1, 2024, report, covered building owners must specify which compliance pathway in Part C, Section I. the covered building owner will follow to reduce the building greenhouse gas emissions in order to achieve the 2026 targets. If a covered building owner does not specify their chosen compliance pathway, the covered building owner must reduce building greenhouse gas emissions in accordance with the energy efficiency pathway in Part C, Section I.A.1.

I.A.2. In the June 1, 2028, report, covered building owners must specify which compliance pathway in Part C, Section I. the covered building owner will follow to reduce the building's greenhouse gas emissions in order to achieve the 2030 targets. If a covered building owner does not specify their chosen compliance pathway, the covered building owner must reduce building greenhouse gas emissions in accordance with the energy efficiency pathway in Part C, Section I.A.1.

I.A.3. Covered building owners who specify the standard percent reduction pathway in Part C, Sections I.A.3. or I.B.2. must submit each year of benchmarking data from 2021 up to the notification year (e.g., for a June 1, 2024, notification submit 2021-2023 data). New covered buildings for which a 2021 baseline does not exist must provide each year of benchmarking data starting with and following the year the owner receives a certificate of occupancy for the building up to the notification year.

I.A.4. Covered building owners who received a waiver for the 2021 benchmarking requirement or building owners who did not submit benchmarking data must reduce their building greenhouse gas emissions in accordance with the energy efficiency pathway in Part C, Section I.A.1.

I.A.5. Covered building owners who are assigned the energy efficiency pathway in Part C, Section I.A.1. pursuant to Part B, Section I.A.4. may still select a percent reduction pathway in either Part C, Sections I.A.3. or I.B.2. if the covered building owner submits their benchmarking data for each year from 2021 up to the current reporting year (e.g., for a June 1, 2024, report submit 2021-2023 data). New covered buildings for which a 2021 baseline does not exist must provide each year of benchmarking data starting with and following the year the owner receives a certificate of occupancy for the building.

I.B. A physical description of the covered building and descriptions of its operational characteristics, including

I.B.1. The name of the covered building, if any.

I.B.2. The physical street address of the covered building, or, if no street address is assigned, then the latitude and longitude of the building or buildings.

I.B.3. The primary use(s) of the covered building.

I.B.4. The covered building's gross floor area.

I.B.5. The years in which the covered building has been certified by ENERGY STAR and the most recent date of certification, if applicable.

I.B.6. The data generated by the benchmarking tool, including

I.B.6.a. The ENERGY STAR score, if applicable.

I.B.6.b. Monthly energy uses by fuel type.

I.B.6.c. Annual use of customer-owned distributed renewable electric generation, if applicable.

I.B.6.d. Site energy-use intensity and source energy-use intensity.

I.B.6.e. Weather-normalized site energy-use intensity and source energy-use intensity.

I.B.6.f. Confirmation from the benchmarking tool that data quality has been checked and no errors were identified by the benchmarking tool.

I.B.6.g. Annual maximum electricity consumption, in kilowatt-hours (kWh), if applicable.

I.B.6.h. Annual maximum gas consumption, in British Thermal Units (Btu), if applicable.

I.B.6.i. Monthly peak electricity demand, if available for reporting through the benchmarking tool, if applicable.

I.B.7. Greenhouse gas emissions, including total, indirect, and direct emissions.

I.B.8. The name of the gas and/or electric utility provider(s) for the covered building.

I.B.9. The type and number of electric vehicle (EV) charging stations associated with the building and all relevant meter information.

I.C. In addition to the data generated by the benchmarking tool, covered building owners must report to CEO the following information, if applicable.

I.C.1. A change in property type for a covered building, if applicable, including the prior property type(s) and the new property type(s), as well as supporting documentation for the new property type(s) designation since the previous benchmarking report.

I.C.2. Any AIRS IDs associated with the covered building or covered buildings reported as a campus.

I.D. A demonstration of progress towards meeting the building performance standards in Part C. Such demonstration may include, but is not limited to, documentation of completed or planned energy efficiency measures or replacements of fossil fuel equipment with high-efficiency electric equipment, including dates completed and/or the timeframe for any planned measures or replacements, as well as results from the ENERGY STAR Portfolio Manager Building Emissions Calculator in a spreadsheet (.xlsx) file downloaded from the calculator.

I.E. Covered building owners who have on-site or off-site customer-owned renewable electric generation as specified in Part C, Section I.B.1. must submit documentation of the ownership and retirement of their renewable energy credits pursuant to Part C, Section I.B.1.a. to demonstrate compliance.

I.F. The following covered building owners may report benchmarking data at the campus-wide level.

I.F.1. The owner of multiple covered buildings that are part of a master metered group of buildings without sub-metering.

I.F.2. The owner of a correctional facility, local jail, or private-contract prison, as defined in 17-1-102, CRS (2022); 31-15-401(1)(j), CRS (2022); municipal jail, as authorized in 31-15401(1)(j), CRS (2022); or juvenile detention facility governed by Part 15 of Article 2.5 of Title 19 of Colorado Revised Statutes (2022).

I.F.3. The owner of a public building.

I.G. Covered building owners reporting benchmarking data at the campus-wide level must also submit documentation of the number of covered buildings that are part of the campus; the property type of each of the covered buildings; the meter information for each building; and the gross floor area, including parking, of each of the covered buildings.

I.H. Covered building owners must include in the 2027 through 2030 benchmarking data report a demonstration that the covered building met the 2026 site EUI, greenhouse gas emission reduction target, data center target, or building specific target as provided in Part C.

I.H.1. Building owners demonstrating compliance under Part C, Section I.A., must include the 2026, or subsequent year through 2029 (e.g., in the 2028 report include the data reflecting 2027) results from the ENERGY STAR Portfolio Manager, specifically the weather-normalized site EUI. In meeting the site EUI targets in Part C, Section I.A., individual building site EUIs must be normalized for weather and, if and when available in ENERGY STAR Portfolio Manager, normalized for occupancy.

I.H.2. Building owners demonstrating compliance under Part C, Section I.B., must include the 2026, or subsequent year through 2029 (e.g., in the 2028 report include the data reflecting 2027) results from the ENERGY STAR Portfolio Manager Building Emissions Calculator in a spreadsheet (.xlsx) file downloaded from the calculator. Building owners must also include, if applicable, documentation of the building's high-efficiency electric equipment, including, but not limited to, the equipment's ENERGY STAR certification, compliance with FEMP efficiency requirements, compliance with ASHRAE Standard 90.1 or IECC 2021, or newer requirements if applicable.

I.H.3. Building owners demonstrating compliance under Part C, Section I.C., must demonstrate that the covered building has met its applicable building specific target for 2026, or subsequent year through 2029 (e.g., in the 2028 report include the data reflecting 2027).

I.H.4. Building owners demonstrating compliance through an adjustment under Part C, Section II. must include the specific adjusted timeline or target as approved by CEO and documentation demonstrating the building owner's progress on the submitted plan to achieve an adjusted timeline, if applicable.

I.I. Covered building owners must include in the 2031 benchmarking data report, and each year thereafter, a demonstration that the covered building met the 2030 site EUI, greenhouse gas emission reduction target, data center target, or building specific target as provided in Part C.

I.I.1. Building owners demonstrating compliance under Part C, Section I.A., must include the 2030, or subsequent year (e.g., in the 2032 report include the data reflecting 2031) results from the ENERGY STAR Portfolio Manager, specifically the weather normalized site EUI. In meeting the site EUI targets in Part C, Section I.A., individual building site EUIs must be normalized for weather and, if and when available in ENERGY STAR Portfolio Manager, normalized for occupancy.

I.I.2. Building owners demonstrating compliance under Part C, Section I.B., must include the 2030, or subsequent year (e.g., in the 2032 report include the data reflecting 2031) results from the ENERGY STAR Portfolio Manager Building Emissions Calculator in a spreadsheet (.xlsx) file downloaded from the calculator. Building owners must also include, if applicable, documentation of the building's high-efficiency electric equipment, including, but not limited to, the equipment's ENERGY STAR certification, compliance with FEMP efficiency requirements, compliance with ASHRAE Standard 90.1 or IECC 2021, or newer requirements if applicable.

I.I.3. Building owners demonstrating compliance under Part C, Section I.C., must demonstrate that the covered building has met its applicable building specific target for 2030, or subsequent year (e.g., in the 2032 report include the data reflecting 2031).

I.I.4. Building owners demonstrating compliance through an adjustment under Part C, Section II. must include the specific adjusted timeline or target as approved by CEO and documentation demonstrating the building owner's progress on the submitted plan to achieve an adjusted timeline, if applicable.

II. Waivers, extensions, and exemptions

II.A. Waivers

II.A.1. A covered building owner may seek a waiver from the annual requirement to report benchmarking data in Part B, Section I. The waiver request must be submitted on a CEO approved form. To seek a waiver, the covered building owner must submit waiver documentation to and receive approval from CEO. The covered building owner must submit a new waiver request for each year the owner is seeking a waiver. Covered building owners applying for a report waiver for the calendar year to be benchmarked must submit a waiver application to CEO any time after June 1 of the calendar year to be benchmarked and on or before May 1 of the reporting year (e.g., for calendar year 2023 data, the waiver request must be submitted between June 1, 2023, and May 1, 2024). CEO may approve an alternate timeline for submitting a waiver request on a case by case basis. A benchmarking waiver request must establish that the covered building has met one or more of the following conditions for the calendar year to be benchmarked.

II.A.1.a. The covered building was unoccupied for at least thirty consecutive days of the year.

II.A.1.b. A demolition permit was issued for the entire covered building. Submission of a copy of the demolition permit is required.

II.A.1.c. The covered building met one or more of the conditions for financial hardship.

II.A.1.d. The covered building does not meet a qualifying utility's aggregation threshold and one or more of the utility customers refused to provide the owner with permission to access the utility customer's relevant energy-use data. The covered building owner must provide proof to CEO that it requested permission from the utility customer or utility customers withholding consent at least thirty days before the benchmarking report was due, and the owner must submit a plan to CEO to include an energy-use data sharing permission provision in the next lease renewal for the building's tenants.

II.A.1.e. The covered building has four or more utility customers, is not located within a qualifying utility's service territory, and the owner is unable to obtain aggregated data from the utility that serves the covered building.

II.A.2. A covered building owner who is not listed in Part B, Section I.F., may seek a waiver from the annual requirements to report benchmarking data on a per building basis and request to instead submit benchmarking data as a campus if there is a compelling state or national security interest for the covered building owner to do so. The covered building owner must provide information to CEO documenting why they are requesting to submit benchmarking data as a campus. CEO may work with the covered building owner to permit the owner to submit benchmarking data in a format other than through the benchmarking tool in order to address state or national security interests related to data reporting.

II.B. Extensions

II.B.1. A covered building owner may request a time extension from CEO to submit a benchmarking report if the owner submits documentation to CEO demonstrating that, despite the owner's good-faith effort, the owner was unable to complete the benchmarking report for the calendar year to be benchmarked in a timely manner because of the failure or refusal of a qualifying utility or a utility customer to provide the necessary information or permission, as applicable.

II.B.2. Covered building owners that request a benchmarking report time extension must submit the extension application to CEO by May 15 of the reporting year (e.g., by May 15, 2024, for calendar year 2023 data) on a CEO-approved form.

II.C. Exemptions

II.C.1. The owner of a building with a gross floor area of 50,000 square feet or more that is occupied by a single occupant or group of tenants may, in the interest of regulatory certainty, request from CEO an affirmative exemption from the annual requirement to report benchmarking data in Part B, Section I. if their building does not meet the definition of a covered building in Part A, Section III.O.

II.C.1.a. Any exemption request must be submitted on a CEO approved form and include all required information to be considered.

II.C.1.b. Building owners may apply for an exemption that will be in place until June 1, 2026. After June 1, 2026, building owners that have been approved for an exemption must reapply.

II.C.1.c. After June 1, 2026, building owners applying for an exemption for the calendar year to be benchmarked must submit an exemption application to CEO any time after June 1 of the calendar year to be benchmarked and on or before May 1 of the reporting year (e.g., for calendar year 2027 data, the exemption request must be submitted between June 1, 2027, and May 1, 2028). CEO may approve an alternate timeline for submitting an exemption request on a case by case basis.

II.C.2. Owners of single-family homes, duplexes, or triplexes are not required to file an annual exemption request but must report their benchmarking data annually if the property type changes such that the building meets the definition of and applicability for a covered building.

II.D. If a covered building owner's waiver or exemption request is denied by CEO, the building owner may request the CEO executive director (or their designee) to review the determination. The building owner must request the review within sixty (60) days of the initial denial. The executive director (or their designee) will make a recommendation on the waiver or exemption request within ninety (90) days of the review request.

Part C Building Performance Standards and Compliance Pathways

I. Compliance pathways

Owners of covered buildings must reduce building greenhouse gas emissions through one of the following building performance standards compliance pathways. Owners of covered buildings must comply with the performance standard in the selected compliance pathway on an annual basis beginning in 2026. Owners of covered buildings must meet and maintain the 2026 standard for the calendar years 2026 through 2029 and the 2030 standard for calendar years 2030 through 2050, unless otherwise extended by subsequent rules of the Commission.

I.A. Energy efficiency

I.A.1. The covered building owner must reduce the energy consumption of the building through the implementation of energy efficiency measures and/or technologies to meet the applicable property type weather-normalized site EUI target in Table 1 by the end of the calendar year specified in Table 1.

I.A.2. Building owners who received a waiver for the 2021 benchmarking requirement or building owners who did not submit benchmarking data will automatically be assigned a weather-normalized site EUI target based on the data submitted for the other buildings of the same property type.

I.A.3. Standard percent reduction

I.A.3.a. Covered building owners unable to achieve the site EUI target in Table 1 may comply by achieving and maintaining improvements in their site EUI relative to their 2021 benchmarked baseline. Under this pathway, the covered building must

I.A.3.a.(i) In 2026, achieve a standard percent reduction of 20% in comparison to the covered building's 2021 benchmarked baseline.

I.A.3.a.(ii) In 2030, achieve a standard percent reduction of 38% in comparison to the covered building's 2021 benchmarked baseline.

I.B. Greenhouse gas intensity reductions

Covered building owners unable to achieve the building performance standards in Part C, Section I.A. may demonstrate compliance through reduction of greenhouse gas emissions attributable to the building's energy use through energy efficiency, replacing fossil fuel equipment with high-efficiency electric equipment, or employing customer-owned distributed renewable electric generation. A covered building owner must demonstrate that the covered building has met the applicable greenhouse gas emissions intensity target in Table 1 by the end of the calendar year specified in the table using the ENERGY STAR Portfolio Manager Building Emissions Calculator. A covered building owner must import or upload the data for the covered building from ENERGY STAR Portfolio Manager to the ENERGY STAR Portfolio Manager Building Emissions Calculator; apply the Colorado-specific emission factor for electricity to the results to obtain total greenhouse gas emissions; and divide total greenhouse gas emissions by the square footage of the building to determine the building's greenhouse gas intensity value for comparison to the targets in Table 1.

I.B.1. Customer-owned distributed renewable electric generation

A covered building may only use RECs from the covered building owner's customer-owned distributed renewable electric generation for no more than the amount of electricity consumed by the building. RECs can only be used if the following conditions are met

I.B.1.a. The covered building owner retains the RECs for a system it owns or the RECs are retired by the utility on behalf of the customer's owned system in the year generated;

I.B.1.b. The distributed renewable energy is located in Colorado, either onsite or offsite; and

I.B.1.c. The value of the avoided emissions for a compliance credit for a REC must reflect the carbon intensity of the energy from the utility providing service to the building for the year in which the REC was generated.

I.B.2. Standard percent reduction

I.B.2.a. Covered building owners unable to achieve the site GHG-intensity target in Table 1 may comply by achieving and maintaining improvements in greenhouse gas emissions relative to their 2021 benchmarked baseline. Under this pathway, the covered building must

I.B.2.a.(i) In 2026, achieve a standard percent reduction of 20% in comparison to the covered building's 2021 benchmarked baseline.

I.B.2.a.(ii) In 2030, achieve a standard percent reduction of 38% in comparison to the covered building's 2021 benchmarked baseline.

Table 1 – Property Type Targets

Property Type	2026-2029 Site EUI (kBtu/SF)	2030-2050 Site EUI (kBtu/SF)	2026-2029 GHG Intensity (kg CO2e/SF)	2030-2050 GHG Intensity (kg CO2e/SF)
Adult Education	47.9	40.7	3.0	2.5
Ambulatory Surgical Center	71.4	60.7	4.5	3.8
Aquarium	88.6	75.3	5.5	4.7
Automobile Dealership	50.3	42.8	3.1	2.7
Bank Branch	74.8	63.6	4.7	4.0
Bar/Nightclub	101.9	86.6	6.4	5.4
Barracks	48.4	38.9	3.0	2.4
Bowling Alley	94.6	68.5	5.9	4.3
Casino	71.0	55.0	4.4	3.4
College/University	64.5	54.6	4.0	3.4
Convenience Store with Gas Station	185.6	157.8	11.6	9.9
Convenience Store without Gas Station	214.2	182.0	13.4	11.4
Convention Center	38.8	33.0	2.4	2.1
Courthouse	60.2	51.2	3.8	3.2
Distribution Center	34.9	24.5	2.2	1.5
Enclosed Mall	53.6	45.6	3.4	2.9
Energy/Power Station	62.2	47.8	3.9	3.0
Fast Food Restaurant	366.2	311.3	22.9	19.5
Financial Office	52.4	44.2	3.3	2.8
Fire Station	53.7	45.6	3.4	2.9
Fitness Center/Health Club/Gym	94.6	68.5	5.9	4.3
Food Sales	182.7	155.3	11.4	9.7
Food Service	220.3	187.2	13.8	11.7
Hospital (General Medical & Surgical)	191.3	152.2	12.0	9.5
Hotel	58.8	51.6	3.7	3.2
Ice/Curling Rink	94.6	68.5	5.9	4.3
Indoor Arena	71.0	55.0	4.4	3.4
K-12 School	53.3	46.2	3.3	2.9
Laboratory	181.0	153.9	11.3	9.6
Library	62.2	52.9	3.9	3.3
Lifestyle Center	48.9	31.9	3.1	2.0
Mailing Center/Post Office	54.7	46.5	3.4	2.9
Medical Office	70.2	60.7	4.4	3.8
Movie Theater	71.0	55.0	4.4	3.4

Table 1 – Property Type Targets				
Property Type	**2026-2029 Site EUI (kBtu/SF)**	**2030-2050 Site EUI (kBtu/SF)**	**2026-2029 GHG Intensity (kg CO2e/SF)**	**2030-2050 GHG Intensity (kg CO2e/SF)**
Multifamily Housing	46.8	39.5	2.9	2.5
Museum	71.0	55.0	4.4	3.4
Non-Refrigerated Warehouse	32.3	25.5	2.0	1.6
Office	52.4	44.2	3.3	2.8
Other	62.2	47.8	3.9	3.0
Other - Education	47.9	40.7	3.0	2.5
Other - Entertainment/Public Assembly	88.6	75.3	5.5	4.7
Other - Lodging/Residential	60.4	51.3	3.8	3.2
Other - Mall	71.0	60.3	4.4	3.8
Other - Public Services	40.7	34.6	2.5	2.2
Other - Recreation	94.6	68.5	5.9	4.3
Other - Restaurant/Bar	228.3	194.1	14.3	12.1
Other - Services	40.7	34.6	2.5	2.2
Other - Specialty Hospital	191.3	152.2	12.0	9.5
Other - Stadium	71.0	55.0	4.4	3.4
Other - Technology/Science	62.2	47.8	3.9	3.0
Other - Utility	62.2	47.8	3.9	3.0
Outpatient Rehabilitation/Physical Therapy	71.4	60.7	4.5	3.8
Parking	75.3	64.1	4.7	4.0
Performing Arts	71.0	55.0	4.4	3.4
Personal Services (Health/Beauty, Dry Cleaning, etc.)	40.7	34.6	2.5	2.2
Police Station	53.7	45.6	3.4	2.9
Pre-school/Daycare	45.8	38.9	2.9	2.4
Prison/Incarceration	97.7	83.0	6.1	5.2
Race Track	71.0	55.0	4.4	3.4
Refrigerated Warehouse	75.1	63.9	4.7	4.0
Repair Services (Vehicle, Shoe, Locksmith, etc.)	40.7	34.6	2.5	2.2
Residence Hall/Dormitory	48.4	38.9	3.0	2.4
Residential Care Facility	63.3	55.4	4.0	3.5
Restaurant	228.3	194.1	14.3	12.1
Retail Store	50.0	34.9	3.1	2.2
Roller Rink	94.6	68.5	5.9	4.3
Self-Storage Facility	9.7	6.7	0.6	0.4
Senior Living Community	63.3	55.4	4.0	3.5
Social/Meeting Hall	38.8	33.0	2.4	2.1
Stadium (Closed)	71.0	55.0	4.4	3.4

Table 1 – Property Type Targets				
Property Type	**2026-2029 Site EUI (kBtu/SF)**	**2030-2050 Site EUI (kBtu/SF)**	**2026-2029 GHG Intensity (kg CO2e/SF)**	**2030-2050 GHG Intensity (kg CO2e/SF)**
Stadium (Open)	71.0	55.0	4.4	3.4
Strip Mall	48.9	31.9	3.1	2.0
Supermarket/Grocery Store	149.4	117.2	9.3	7.3
Swimming Pool	94.6	68.5	5.9	4.3
Transportation Terminal/Station	88.6	75.3	5.5	4.7
Urgent Care/Clinic/Other Outpatient	70.2	60.7	4.4	3.8
Veterinary Office	70.2	60.7	4.4	3.8
Vocational School	47.9	40.7	3.0	2.5
Wholesale Club/Supercenter	50.0	34.9	3.1	2.2
Worship Facility	39.8	35.7	2.5	2.2
Zoo	88.6	75.3	5.5	4.7

I.C. Upon a complete submission of the information described in Section I.C.4., CEO will assign individualized targets for the following categories of covered buildings

I.C.1. Mixed use buildings will be assigned a blended target based on the percentage of gross floor area assigned to each property type for that building.

I.C.2. Data centers will be assigned a power usage effectiveness (PUE) target based on

I.C.2.a. The data center’s total facility energy usage, including all data center hardware, power delivery components, cooling systems, and lighting systems;

I.C.2.b. Information technology (IT) equipment energy usage for the data center, including the energy used to power the storage and networking equipment and control equipment such as monitors and workstations; and

I.C.2.c. An energy audit of the data center conducted by a qualified energy auditor demonstrating feasible options to reduce the data center’s PUE including, but not limited to, improving cooling systems, replacing inefficient hardware, using energy efficient lighting, optimizing redundant power supplies, using virtualization techniques (e.g., virtual servers), and installing battery storage instead of emergency generators for short term power outages.

I.C.2.a.(i) The energy audit may be created using the U.S. Department of Energy’s Audit Template Tool or a similar CEO-approved program equivalent to an ASHRAE Level 2 energy audit and must include a report describing the results and recommendations of the audit.

I.C.2.a.(ii) Energy auditors must have an in-depth knowledge of data center operations and energy efficiency measures and may be certified by the Association of Energy Engineers (AEE), ASHRAE, the Energy Management Association, the Building Performance Institute, or similar CEO-approved certifying entity.

I.C.2.a.(iii) Energy auditors must certify that the results of the energy audit are accurate and complete.

I.C.3. Covered buildings with installed electric vehicle (EV) charging stations that are not able to be sub-metered will be assigned a target based on the energy usage of the covered building excluding the installed EV charging station(s) energy usage.

I.C.4. To establish a building specific target, the owner of the covered building must submit to CEO on a CEO-approved form by no later than 12 months before the required building performance standard deadline

I.C.4.a. Covered buildings with EV charging stations that are not sub-metered must submit documentation of the specific energy usage of the EV charging stations.

I.C.4.b. For data centers, the information specified in Section I.C.2.

I.C.4.c. The covered building's 2021 and each subsequent year benchmarking data. New covered building for which a 2021 baseline does not exist must provide the benchmarking data submitted for the first full calendar year of building data.

II. Compliance pathway adjustments

II.A. Adjusted Timeline

Covered building owners may request an adjustment to the timeline to achieve the 2026 and/or 2030 building performance standards pursuant to Part C, Section I. The request must be submitted on a CEO approved form. To apply for a timeline adjustment a covered building owner must

II.A.1. Submit an application to CEO requesting an adjusted timeline, including

II.A.1.a. The specific adjusted timeline needed.

II.A.1.b. Documentation of the need for the adjusted timeline.

II.A.1.c. The covered building owner's plan to achieve the performance targets within the adjusted timeline.

II.A.1.d. An inventory of the natural gas equipment in the building including the age of the equipment and the energy savings associated with electrification of the equipment.

II.A.1.e. Purchase orders for necessary equipment demonstrating delivery dates inhibiting compliance.

II.A.1.f. Documentation demonstrating collaboration with the building's utility(ies) related to updating the electrical distribution infrastructure, if applicable.

II.A.2. Covered building owners applying for an adjusted timeline must submit their application to CEO no later than 12 months before the required building performance standard deadline.

II.A.3. Covered building owners that may apply for this type of adjustment include, but are not limited to

II.A.3.a. Affordable housing and under-resourced buildings.

II.A.3.a.(i) Owners of covered buildings that do not fall into one of the categories in the definition of under-resourced buildings in Part A, Section III.RR. may petition CEO for status as an under-resourced building by submitting on a CEO-approved form a description of the building; an explanation of why the building should be considered under-resourced; and evidence that the building has less access to resources than other similarly situated buildings in the relevant utility service territory.

II.A.3.b. Buildings undergoing a major renovation that does not align with the target dates but that will achieve the site EUI or greenhouse gas target.

II.A.3.c. Building owners experiencing significant supply chain or workforce delays.

II.A.3.d. Building owners who can demonstrate a plan to replace building heating and cooling systems at end of life where the system end of life occurs after the compliance period.

II.A.3.e. Building owners experiencing financial hardship, as defined in Part A, Section III.X.

II.A.3.f. Inherent and unique characteristics of the physical building that prohibit them from reaching the timeline.

II.A.3.g. Buildings that require updates to the electrical distribution infrastructure that cannot be timely completed to meet the performance standard deadline.

II.A.3.h. Building owners that purchase a covered building within the 12-month period before a required building performance standard deadline.

II.B. Adjusted Performance Target

Covered building owners may request an adjusted 2026 and/or 2030 performance target. The request must be submitted on a CEO approved form. To apply for an adjusted target a covered building owner must

II.B.1. Submit an application to CEO requesting an adjusted target, including

II.B.1.a. Each year of the benchmarking data from 2021 up to the request year (e.g., for a January 1, 2025, request submit 2021-2024 data). New covered buildings for which a 2021 baseline does not exist must provide each year of benchmarking data starting with and following the year the owner receives a certificate of occupancy for the building. The covered building must also submit a third-party data verification checklist for each year of benchmarking data.

II.B.1.b. Narrative detailing the building characteristics (e.g., year of construction, state or federal historical status, etc.) or functional variations that qualify for an adjustment.

II.B.1.c. If requesting an adjusted target through the compliance pathway in Part C, Section I.A., an evaluation of the use of the other compliance pathway in Part C, Section I.B.

II.B.1.d. An inventory of the natural gas equipment in the building including the age of the equipment and the electrification feasibility of the equipment.

II.B.1.e. Documentation of operation and maintenance improvements including how the building owner will implement long-term payback measures in the building.

II.B.1.f. Documentation demonstrating collaboration with the building's utility or utilities to determine the feasibility of gas and electric beneficial electrification and/or gas or electric demand side management programs.

II.B.1.g. Documentation demonstrating the building owner's building retrofit plan including an outline of proposed improvements, the timeframe in which improvements will be made, and how the improvements will result in the building reaching the applicable target of the chosen compliance pathway. The retrofit plan must include at least two contractor project cost estimates.II.B.2. Covered building owners applying for an adjusted target must submit their application to CEO no later than 12 months before the required building performance standard deadline.

II.B.3. Covered building owners that may apply for this type of adjustment include, but are not limited to

II.B.3.a. Covered buildings with inherent and unique characteristics of the physical building that make the weather normalized site EUI target unachievable or cost prohibitive.

II.B.3.b. Covered buildings with significant variations in operations from a standard building in that building type category and located in the same utility service territory.

II.B.3.c. Covered building owners experiencing financial hardship, as defined in Part A, Section III.X.

II.B.3.d. Affordable housing and under-resourced buildings.

II.B.3.d.(i) Owners of covered buildings that do not fall into one of the categories in the definition of under-resourced buildings in Part A, Section III.RR. may petition CEO for status as an under-resourced building by submitting on a CEO-approved form a description of the building; an explanation of why the building should be considered under-resourced; and evidence that the building has less access to resources than other similarly situated buildings in the relevant utility service territory.

II.B.3.e. Covered buildings with installed integrated grid technologies that connect space and/or water heating equipment to the electric or natural gas grid.

II.C. Owners of covered buildings applying for a compliance adjustment to a building's target or timeline pursuant to Part C, Sections II.A. or II.B. must also submit to CEO an energy audit for the building completed by an approved energy auditor.

II.C.1. The building owner must submit an energy audit created using the U.S. Department of Energy's Audit Template Tool or similar CEO-approved program, equivalent to an ASHRAE Level 2 energy audit, and a report describing the results and recommendations of the audit.

II.C.2. The audit report must include the achievable weather-normalized site EUI for the building, based on the results and recommendations of the audit.

II.C.3. Energy auditors must be certified by the Association of Energy Engineers (AEE), ASHRAE, the Energy Management Association, the Building Performance Institute, or similar CEO-approved certifying entity.

II.C.4. Energy auditors must certify that the results of the energy audit are accurate and complete.

II.D. Owners of covered buildings that will demonstrate compliance with the building performance standards through a pathway other than the selected pathway, as specified pursuant to Part B, Section I.A., may request an adjustment from CEO. The covered building owner must provide the materials required in Part B, Sections II.B. and II.C. and demonstrate that the building owner has achieved compliance through the other compliance pathway. The request must be submitted to CEO on a CEO-approved form by January 31, 2027 (for the 2026 target) and January 31, 2031 (for the 2030 target).

III. A covered building owner that fails to meet the building performance standards through one of the compliance pathways in Section I. in the timeframe(s) specified or under an approved adjustment pursuant to Section II. must meet the building performance standards as expeditiously as practicable.

III.A. Failure to timely comply with a performance standard under Part C will constitute a violation of these rules.

III.B. Until compliance is achieved, on the last day of every month after a covered building owner fails to meet the building performance standards by the date(s) specified in Section I., the building owner must either demonstrate compliance with the building performance standards or demonstrate progress towards meeting the building performance standards.

III.B.1. Initial reporting under Section III.A. must include documentation demonstrating the building owner's retrofit plan including an outline of proposed improvements, the timeframe in which improvements will be made, and how the improvements will result in the building reaching the applicable target of the chosen compliance pathway. The retrofit plan must include at least two contractor project cost estimates.

III.B.2. Subsequent monthly reports must include a description of any work completed under the retrofit plan and documentation that plan milestones have been met.

III.B.3. This demonstration must be provided to CEO until the covered building owner demonstrates compliance with the building performance standards or until a new building performance standard becomes applicable, at which time the covered building owner must meet the new building performance standard.

III.C. Each month that a covered building owner fails to demonstrate compliance with the building performance standards or demonstrate progress towards meeting the building performance standards, as set forth in Section III.A., constitutes an independent violation and may subject the covered building owner to additional civil penalties under 25-7-122, C.R.S. (2022), beyond the penalties specified in Part E. and, in addition to civil penalties, a requirement to perform one or more projects to mitigate violations related to excess emissions of greenhouse gas emissions. Covered building owners in violation of this Section III. may also be subject to injunctive relief under § 25-7-121, C.R.S. (2022).

Part D Recordkeeping

I. Covered building owners must maintain the following records for a period of seven (7) years and make records available to the Division or CEO upon request.

I.A. ENERGY STAR Portfolio Manager account data in Part B, Section I.

I.B. Evidence of requests the covered building owner has made to obtain tenant energy use data from any separately metered spaces in Part B, Section II.

I.C. Any additional information pertaining to the building's energy data and space use entered into ENERGY STAR Portfolio Manager in Part B, Section I.

I.D. Demonstration of compliance with the chosen compliance pathway(s) in Part C, Section I. for a covered building, including results from the ENERGY STAR Portfolio Manager Building Emissions Calculator, if applicable, in spreadsheet (.xlsx) files downloaded from the calculator.

I.E. Any waiver or adjustment submissions in regard to compliance or non-compliance in Part B, Section II. and Part C, Section II.

I.F. Records of any upgrades made to comply with the building performance standards requirements (e.g., receipts, invoices).

I.G. Any other information included in the building performance standards requirements.

II. Change of ownership

II.A. The owner of a covered building must disclose to a prospective buyer prior to the sale of the building the covered building's compliance status, including compliance with performance targets; any approved waivers, exemptions, extensions, or adjustments; and any penalties assessed.

II.B. The owner of a covered building must provide all records specified in Part D, Section I. to the new building owner upon closing.

Part E Penalties

I. Beginning January 1, 2024, a covered building owner who does not submit a benchmarking report in accordance with Part B, Section I. or meet the building sale or lease requirements in 25-7-142(6), C.R.S. (2022), is subject to a civil penalty of up to $500 for a first violation and up to $2,000 for each subsequent violation.

II. Beginning January 1, 2024, a covered building owner whose building fails to meet the building performance standards in Part C is subject to a civil penalty of up to $2,000 for a first violation and up to $5,000 for each subsequent violation.

III. Public building owners are not subject to civil penalties under this Part E or under 25-7-122.

Part F Statement of Basis, Specific Statutory Authority, and Purpose

I. Adopted: [DATE], 2023

This Statement of Basis, Specific Statutory Authority, and Purpose complies with the requirements of the Colorado Administrative Procedure Act 24-4-103, the Colorado Air Pollution Prevention and Control Act 25-7-110 and 25-7-110.5, and the Air Quality Control Commission's (Commission) Procedural Rules.

Basis

The Commission adopted a new Regulation Number 28, Building Benchmarking and Performance Standards, to satisfy the requirements the General Assembly in House Bill 21-1286 (Concerning Measures to Improve Energy Efficiency) (HB 21-1286), set forth in § 25-7-142, C.R.S., directing the Commission's adoption of building benchmarking and performance standards for covered buildings by June 1, 2023.

Specific Statutory Authority

The Colorado Air Pollution Prevention and Control Act § 25-7-142(7) authorizes the Commission to promulgate rules to implement the benchmarking program established in HB 21-1286. § 25-7-142(8)(c) directs the Commission to adopt rules to establish building performance standards on or before June 1, 2023, "that will achieve a reduction in greenhouse gas emissions of [7%] by 2026 as compared to 2021 levels" and "a reduction in greenhouse gas emissions of [20%] by 2030 as compared to 2021 levels," as set forth in § 25-7-142(8). § 25-7-105(1)(e) authorizes the Commission to promulgate implementing rules and regulations to abate greenhouse gas (GHG) emissions consistent with the statewide GHG pollution reduction goals in § 25-7-102(2)(g). In adopting GHG abatement strategies and implementing rules, the Commission is authorized to take into account other relevant laws and rules to enhance efficiency and cost-effectiveness and solicit input from other state agencies and stakeholders on the advantages of different statewide GHG pollution mitigation measures, see §§ 25-7-105(1)(e)(II) and (IV). Implementing rules may include regulatory strategies that incentivize development of renewable resources and "enhance cost-effectiveness, compliance flexibility, and transparency around compliance costs," see § 25-7-105(1)(e)(V).

Further, in promulgating such implementing rules, the Commission is to consider many factors, including, but not limited to, health, environmental, and air quality benefits and costs; the relative contribution of each source or source category to statewide GHG pollution; equitable distribution of the benefits of compliance; issues related to the beneficial use of electricity to reduce GHG emissions; and whether greater or more cost-effective emission reductions are available through program design, see § 25-7-105(1)(e)(VI).

§ 25-7-109(1) authorizes the Commission to adopt and promulgate emission control regulations that require the use of effective practical air pollution controls for each type of facility, process, or activity which produces or might produce significant emissions of air pollutants. An "emission control regulation" may include "any regulation which by its terms is applicable to a specified type of facility, process, or activity for the purpose of controlling the extent, degree, or nature of pollution emitted from such type of facility, process, or activity. . . .", see § 25-7-103(11). Emission control regulations may pertain to any chemical compound including GHG pollution, see § 25-7-109(2)(c).

§§ 24-38.5-112(1) and 24-38.5-112(1)(a) require the Colorado Energy Office (CEO) to implement a building performance program and to use "county assessor records and other available sources of information" to administer the building performance program. § 24-38.5-112(1)(a)(I)-(IV) requires CEO to create a database of covered buildings and of owners required to comply with the building performance program; track compliance with the building performance program; maintain a list of noncompliant owners; and provide the Division a list of noncompliant owners for the Division's enforcement of the building performance program pursuant to § 25-7-122(1)(i). The building benchmarking and performance standards rule was collaboratively drafted by the Division and CEO before it was brought before the Commission. CEO is responsible for the implementation and continuation of the building benchmarking and performance standards requirements while the Division is responsible for enforcement of the rule.

Purpose

The Commission established building benchmarking and building performance standards (BPS) as one means to track and reduce greenhouse gas (GHG) emissions in the built environment from a 2021 baseline. Buildings constructed after 2021 that would be considered covered buildings under this regulation will also be required to meet the building benchmarking and performance standards. To demonstrate compliance with the BPS, the Commission adopted a flexible, compliance pathway based approach to reducing emissions through improvements in energy efficiency, electrification of space heating and cooling and water heating, or a combined approach that may also include the installation of customer-owned distributed renewable generation resources. In adopting the BPS, the Commission considered the recommendations of the Building Energy Performance Task Force (BPS Task Force) convened by the Colorado Energy Office (CEO), as directed by HB 21-1286. Pursuant to § 25-7-142(8)(c)(II), the Commission is, by rule, adopting performance standards that meet the requisite GHG emission reductions.

Applicability

New Buildings

Buildings constructed after 2021 that would be considered covered buildings under this regulation will also be required to meet the building benchmarking and performance standards. Buildings constructed after 2021 must start collecting benchmarking data once the owner has received a certificate of occupancy for the building. A new building must comply with its applicable building performance target by the specified target date.

Public Buildings

Public buildings become subject to the building performance standards of this regulation only after undertaking a construction or renovation project that has an estimated cost of at least $500,000 and impacts at least twenty-five percent of the covered building's square footage. A construction or renovation project that either impacts a physical area of twenty-five percent or greater or impacts an area of that size or greater through changes to heating and cooling systems, insulative measures, changes to the building envelope, or other such measures will trigger compliance with the building performance standards. For purposes of this rule, the "project" shall be the aggregation of any construction or renovation work on a public building that is part of the same bidding process, happens contemporaneously or sequentially within an eighteen-month period, or that would otherwise be reasonably considered to be part of or substantially related to the same project.

Public buildings constructed after 2021 that would be considered covered buildings under this regulation will also be required to meet the building benchmarking and performance standards. Public buildings constructed after 2021 must start collecting benchmarking data once the owner has received a certificate of occupancy for the building. Public buildings constructed after 2021 must comply with the building performance standards requirements if the construction has an estimated cost of at least $500,000.

In situations where a public entity shares its building space with other non-public entities, the owner of the covered building, whether the public entity or not, is still required to report benchmarking data. In multi-owner situations, the party responsible for compliance will be the owner listed in the tax assessor's records for that building and must comply with building performance standards if the covered building has a shared, centralized heating and/or cooling system, regardless of whether the responsible owner is the public entity or not. If a public entity leases a covered building or a portion of a covered building, the building owner is responsible for compliance with the benchmarking and building performance standards. Whether the public entity may also have some responsibility related to compliance will depend on the lease arrangement between the public entity and the building owner, as with any other owner-tenant situation.

Condominiums and Townhomes

§ 25-7-142(2)(j)(II)(C) states that "a single-family home, duplex, or triplex" is not a covered building under the building benchmarking and performance standards. Properties such as townhomes and condominiums are similar to single-family homes, duplexes, or triplexes in that the condominium or townhome units within the envelope of a building are individually owned units and may have their own heating and cooling systems. However, condominium or townhome buildings differ from a single-family home in both the energy usage and, thus, the potential opportunity to reduce energy use and associated building greenhouse gas emissions when the condominiums or townhomes share a centralized heating and/or cooling system. Therefore, the Commission determined that condominiums or townhomes that share a building or together comprise a building, are covered under the building benchmarking and performance standards if they have shared centralized heating and cooling systems for water or air conditioning throughout the units of the building. The party responsible for compliance for covered buildings composed of condominiums or townhomes, or any covered building with split ownership, will be the owner listed in the tax assessor's records for that building whether it be a person, group, organization, or business.

<u>Benchmarking</u>

In Part B, the Commission adopted requirements for owners of covered buildings to submit energy-use benchmarking data. Using benchmarking data to create baseline energy usage allows building owners to track and measure their energy usage in relation to prior years and progress towards performance standard targets established in Part C.

Annual Reporting

§ 25-7-142(3) requires owners of covered buildings to annually submit, starting June 1, 2023, and by June 1 of each year thereafter, benchmarking data for the previous calendar year to CEO. Buildings constructed after 2021 will be required to submit benchmarking reports starting with the first full year of data after the building has started operating. This data must include all of the applicable building data required by the rule and data quality checks to ensure that the data is correct and accurate. Building owners must also include any change in building information in the annual reporting such as changes to property type or building ownership. Certain building owners may be allowed to benchmark their buildings as a campus if they meet the requirements for campus reporting in Part B. Covered building owners must include in the 2027 benchmarking data report a demonstration that the covered building met the 2026 building performance standard requirements as provided in Part C; the same applies to 2031 reporting with respect to the 2030 building performance standard requirements.

Waivers, Extensions, and Exemptions

§ 25-7-142(5) allows covered building owners to seek a waiver or time extension from the annual benchmarking requirement for a given year if the owner submits waiver documentation to, and receives approval from, CEO. Building owners eligible for the 2021 benchmarking waiver will automatically be assigned an energy-use intensity (EUI) target. A covered building owner may also request a benchmarking time extension from CEO if the owner submits documentation to CEO demonstrating that, despite the owner's good-faith efforts, the owner was unable to complete the benchmarking report for the relevant year. This allows the building owner more time to aggregate their building's benchmarking data so they can submit at a later date. Covered building owners must submit a waiver application to CEO any time after June 1 of the calendar year to be benchmarked and on or before May 1 of the reporting year, unless CEO adopts an alternate timeline for submitting a waiver application.

The Commission also adopted provisions for building owners to seek an exemption from CEO if the building does not meet the definition in § 25-7-142(2)(j) of a covered building (i.e., storage facilities, stand-alone parking garages, or airplane hangars that lack heating and cooling; buildings with more than half of the gross floor area used for manufacturing, industrial, or agricultural purposes). The adoption of these exemption provisions recognize that building uses may change over time and that building owners may want documented clarity of whether or not the building is subject to the benchmarking requirements.

Building Performance Standards (BPS)

Building performance standards create energy performance targets, such as a specific level of energy usage or reduction for buildings to meet after a set amount of time. These standards help drive energy efficiency improvements and reduce energy use and resulting GHG emissions over the course of implementation.

BPS Task Force Recommendations

Pursuant to § 25-7-142(8)(a), CEO convened the BPS Task Force to develop recommendations for the Commission to consider when adopting rules for building performance. CEO timely delivered the BPS Task Force recommendations to the Governor's Office, General Assembly, and CDPHE by October 1, 2022, consistent with § 25-7-142(8). The recommendations made by the BPS Task Force, and included in the report, were approved by two-thirds of the BPS Task Force members. These recommendations are available on the State of Colorado's Building Performance Standards website under the Task Force Recommendations.

In developing the recommendations, the BPS Task Force solicited feedback from a broad range of industries and building owners; examined building types of unique energy needs including aviation facilities, nursing homes, and hospitals; and evaluated calculating greenhouse gas reductions without including savings from statewide decarbonization of electricity or natural gas utility grids but including savings from utilities' or local governments' energy efficiency programs.

The BPS Task Force also considered making recommendations related to workforce availability and development related to building energy performance; financial and nonfinancial costs and benefits of upgraded building energy performance; availability of programs, technical assistance, and incentives to support building owners, utilities, and local governments; opportunities to improve commercial building energy use in Colorado; how regulations and agency support could help ensure building owners avoid fines through compliance with performance standards.

Rule Design and GHG Emissions Reductions

Enacting a building performance regulation to reduce GHG emissions ensures that large building owners participate in the reduction of emissions from the built environment. Building energy usage and GHG emissions are correlative, which allows for building performance standards to influence consumer decisions and therefore induce reductions of statewide building emissions. The Commission adopted building performance standards that will require covered buildings to implement measures that, taken together, are expected to achieve GHG emission reductions from this segment of covered buildings in the building sector of 7% by 2026 and 20% by 2030, as compared to 2021 levels. Based on benchmarking data reporting 2021 data in 2022, covered buildings subject to these rules were responsible for approximately 10,741,000 metric tons of carbon dioxide equivalent emissions resulting from the energy consumption of those buildings.

Pursuant to § 25-7-142(8)(c)(II), the Commission adopted performance standards to meet the requisite GHG emission reductions. In calculating the statewide GHG emission reductions anticipated to result from these regulations, the changes in emissions are not separate from those realized by the utilities as part of the statewide GHG inventory. This overlap in emissions impacts is recognized in § 25-7-142(8)(a)(IV), which directs that "[i]n calculating greenhouse gas reductions pursuant to § 25-7-42(8), the calculation must not include savings from statewide decarbonization of electricity or natural gas utility grids, but may include savings from utilities' or local governments' energy efficiency programs." Thus, while these rules are anticipated to drive GHG emission reductions to meet the targets, it is important to note that these reductions will not be independently reflected in the statewide GHG inventory but rather as one means of reducing emissions attributable to energy consumption by driving down demand and consumption of carbon-intense energy sources. It is also important to note that the greenhouse gas targets from § 25-7-142(8)(a)(II)(A) and § 25-7-142(8)(a)(II)(B) must be adjusted to account for the addition of future building stock. Factoring the increase of new building stock into the greenhouse gas emissions targets means that the initial targets would need to be increased from 7% by 2026 and 20% by 2030 to 10.9% by 2026 and 22% by 2030.

Accordingly, the compliance pathways provided for in Part C are designed to provide owners of covered buildings flexibility for individual compliance while also ensuring that overall compliance will accomplish the GHG emissions reduction targets in § 25-7-142(8)(a)(II)(A) and § 25-7-142(8)(a)(II)(B). The building performance standard requirements adopted by the Commission allow for different metrics to be measured against a 2021 baseline so that progress can be tracked and compared to the GHG emission reduction targets. Owners of covered buildings must meet and maintain compliance with the 2026 targets each year from 2026 through 2029 until the covered buildings must meet and maintain the 2030 targets. Owners of covered buildings must meet and maintain compliance with the 2030 targets each year from 2030 on until future targets are established for beyond 2030.

Compliance Pathways

In Part C, Sections I.A. and I.B., the Commission adopted two pathways for covered building owners to comply with performance standards: energy efficiency and greenhouse gas reductions. Improving energy efficiency is the preferred compliance pathway. This pathway requires building owners to implement energy efficient changes or upgrades to their buildings to reduce the building's EUI to meet the building's assigned weather normalized site EUI target. Improving site EUI reduces GHG emissions by reducing demand for gas and electric service and, therefore, reducing the emissions from the generation or consumption of that energy. In Part C, Table 1, the Commission established weather normalized site EUI by property type that covered buildings are to achieve by 2026 as an interim performance standard, pursuant to § 25-7-142(8)(a)(II). The 2026 weather normalized site EUI targets in Table 1 were determined to represent a 7% reduction in GHG emissions as compared to the baseline, after accounting for growth, established through the 2021 benchmarking data collected and analyzed by CEO. The 2030 weather normalized site EUI targets in Table 1 were determined to represent a 20% reduction in GHG emissions as compared to the baseline, after accounting for growth, established through the 2021 benchmarking data collected and analyzed by CEO.

For existing buildings that did not submit a 2021 benchmarking report, the building will be subject to the weather normalized EUI target for a property type that was established as the average of the data submitted by the similar building types. Where sufficient data for a particular building type was lacking, other national and local building energy data sets, such as ENERGY STAR and the Commercial Buildings Energy Consumption Survey (CBECS), were used to determine the EUI target for that property type. Under this compliance pathway, buildings constructed after 2021 must also comply with their property type EUI target. If a new building is unable to provide benchmarking data, the building will be assigned an EUI target based on similar property types that benchmarked their data or from the Commercial Buildings Energy Consumption Survey (CBECS).

The demonstration of compliance with the energy efficiency pathway will be completed through the ENERGY STAR® Portfolio Manager tool that will provide a building owner with a covered building's weather-normalized site EUI.

Under Part C, Section I.B., a covered building unable to achieve the required GHG emission reductions through the compliance pathway of energy efficiency may achieve the required GHG emission reductions and demonstrate compliance individually or through a combination of energy efficiency, electrification, and/or the use of customer-owned distributed renewable energy generation to offset grid-based electricity. Electrification requires covered building owners to replace or avoid fossil fuel-based space heating, water heating, or cooking equipment by using high efficiency electric equipment. High efficiency electric equipment means using electrical equipment with less required energy to perform the same function by eliminating energy waste. For example, high-efficiency electric equipment may be certified according to ENERGY STAR, meet Federal Energy Management Program (FEMP) efficiency requirements, meet the current version of American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) Standard 90.1 or IECC 2021 International Energy Conservation Code (IECC), or meet newer such requirements. Electrification also reduces emissions by shifting building end-uses to the electrical grid, which is a lower-emitting energy supply source that will achieve deeper emissions reduction as the grid is progressively supplied by greater amounts of renewable energy. The Commission encourages the building owner to coordinate and communicate with their utility provider if the building is planning on implementing full or significant electrification of the building.

Customer-owned distributed renewable electric generation allows a building to develop renewable resources to reduce use of grid-based energy and therefore reduce some portion of the building's emissions. A building owner using distributed renewable electric generation must demonstrate ownership of the resource and retain all Renewable Energy Credits (RECs) to count the emissions reductions. The value of RECs toward emissions reduction will reflect the emissions intensity of the utility grid mix supplying that building and will be updated annually, recognizing that a system megawatt hour (MWh) avoided today may be more emissions intensive than a system MWh avoided in the future. Distributed renewable electric generation credits should be the last route for compliance as they do not directly reduce a building's energy usage and as such, do not have an impact on a building's site EUI. Therefore, the benefit of distributed renewable electric generation can only be captured through the GHG emissions reduction pathway. Although building owners may only receive partial credit for implementing distributed renewable electric generation that does not mean that distributed renewable electric generation is the only form of renewable energy the building owner may implement to achieve GHG reductions. For example, using wastewater thermal energy recovery systems may result in a reduced energy usage for the building that would be reflected in the building's benchmarking data and GHG emissions but not as a REC. The building benchmarking and performance standards overall goal is to lower a building's greenhouse gas emissions and other forms of renewable generation or recovery can allow a building to do that by reducing reliance on other forms of emissions-generating sources for a building even if the renewable generation or recovery is not directly accounted for in the benchmarking tool.

In order to demonstrate compliance with the GHG emissions reduction pathway, building owners must use the ENERGY STAR® Portfolio Manager's Building Emissions Calculator and report the results for a covered building from the calculator. The reporting must be accomplished by downloading the results from the calculator in a spreadsheet (.xlsx) file that is submitted to CEO. If utilizing electrification to demonstrate compliance through this pathway, the Colorado-specific emission factor for electricity must be used and will be specified in the calculator. The U.S. Environmental Protection Agency (EPA) operates both ENERGY STAR® Portfolio Manager and the Building Emissions Calculator, which are currently separate tools that are able to work together. However, EPA is planning to integrate the functionality of the Building Emissions Calculator directly into ENERGY STAR® Portfolio Manager at which point calculations of a covered building's GHG emissions for demonstrating compliance with the GHG emissions reduction pathway may be completed using the calculator functionality in ENERGY STAR® Portfolio Manager and its associated reporting function.

In Part C, Table 1, the Commission established greenhouse gas emission targets by property type for this compliance pathway that covered buildings must achieve by 2026 and 2030, pursuant to § 25-7-142(8)(c)(II). The 2026 greenhouse gas emission targets in Table 1 were determined to represent a 7% reduction in GHG emissions as compared to the baseline, accounting for growth, established through the 2021 benchmarking data collected and analyzed by CEO. The 2030 greenhouse gas emission targets in Table 1 were determined to represent a 20% reduction in GHG emissions as compared to the baseline, accounting for growth, established through the 2021 benchmarking data collected and analyzed by CEO.

The BPS Task Force recommendations suggested consideration of the possibility of demand response/flexibility as an additional compliance pathway to help achieve the GHG emission reductions because the technologies shift the building's energy demand to non-peak times. Grid-interactive efficient buildings are energy efficient buildings that use smart technologies, batteries, and on-site distributed energy resources to provide demand flexibility while co-optimizing for energy cost, grid services, and occupant needs and preferences in a continuous and integrated way. At the time these rules were adopted, there was insufficient infrastructure and no standardized industry methodology for measuring a building's demand response/flexibility capabilities to support demand response/flexibility as a compliance pathway. However, the Commission recognizes the value in demand response/flexibility integration in buildings to better control building energy use and encourages the continued investigation into potentially crediting covered buildings for the use of these programs in the future.

Compliance Adjustments

Under Part C, Section II., when a covered building cannot achieve compliance with the building performance standards through the compliance pathways, the Commission adopted a process by which the covered building owner may request timeline and/or performance target adjustments. Section II. provides examples of circumstances under which a covered building owner may apply for a compliance adjustment. The following provides some demonstrative context for those requirements.

- "Cost prohibitive" refers to the steps that a building owner would need to take to demonstrate the cost of compliance is higher than the benefit.

  If the equipment has a resale/salvage value, the cost of that equipment is the upfront cost minus the salvage value. If the buyer has obtained incentives (utility, local, state, or federal) for buying the equipment, then the cost of the equipment is further reduced by the amount of the incentive received. The cost of installing the equipment and the cost of its upkeep during its useful life are then added to that cost figure to determine the overall cost of the equipment.

  The benefits of installing the equipment include reduced energy use and reduced emissions. The dollar amount of that energy savings is determined by multiplying the amount of energy saved by the price of energy of the applicable fuel as forecasted by the U.S. Energy Information Administration for the target year of compliance plus anticipated demand response savings.

  The social cost of greenhouse gases is the most recent assessment of the social cost for those greenhouse gases for which the federal government has determined the cost. However, it cannot be below the figure set in 2016 using a two and one-half percent discount rate as established by the federal interagency working group on the social cost of carbon. The dollar value of emission reduction is determined by multiplying the amount of emission reduction in metric ton of carbon dioxide equivalent by the social cost of greenhouse gases. The total benefit associated with installing equipment is, thus, determined by adding the dollar amounts of energy savings and of emission reduction using the social cost of greenhouse gases.

  Whereas some of the costs and benefits are obtained in the year the equipment is installed, the rest occur over the useful life span of that equipment. Because benefits/costs that occur in the future are not valued the same way as benefits/costs that occur in the year of investment, those figures have to be discounted so that their present value equivalents can be determined.

  If the equipment has a two-year useful life, any benefit/cost that is incurred in the second year is discounted using the following formula:

  $$\text{Present Value} = \frac{\text{Future Value}}{(1+r)^2}$$

  In calculating present value, "r" is the discount rate (e.g., when using a 2.5% discount rate, use 0.025) and "2" is used in this example because the benefit/cost is occurring in the second year. This calculation provides the second year's benefits/costs in the present year's terms. Adding the first year's value and the present value version of the benefit/cost that occurred in the second year provides the equipment's benefit/cost over its useful lifetime of 2 years. For benefits/costs that are incurred/obtained in the third, fourth, and other years in the equipment's useful life, use 3, and 4, and others as applicable. Applying this procedure to each benefit and cost item results in the total net present value of cost and benefits associated with that equipment. If the total present value of the benefit is higher than the present value of cost, then this equipment is not cost prohibitive. If the present value of the cost is higher than the present value of benefit, then the equipment is cost prohibitive.

- “Inherent and unique characteristics” refer to qualities specific to an individual building that limits the building from complying with the building performance standards (e.g., age, design, distinct features, physical characteristics). These traits are not generalized between building types, are unique to the applicable building, and must be approved by CEO before receiving a compliance adjustment.

- “Significant variations in operations from a standard building in that building type category” refers to a building that belongs to a certain building type category that may not have the same building function, design, or construction as other buildings in the same category.

- “Under-resourced building” refers to a building with less access to resources, including revenues, funding, grants, or gifts that can help with building operations or to comply with the requirements of this rule, than other buildings within the same building type in the same utility service territory.

Buildings seeking a compliance adjustment under Part C, Section II., must have an energy audit performed on the building to demonstrate why the building was unable to reach compliance. The energy audit must follow the requirements in the United States Department of Energy’s Building Energy Audit Template, ASHRAE’s standard 211-2018 or more current level 2 audit, or an energy audit of similar requirements approved by CEO. All energy audits submitted for compliance adjustments must be performed by an accredited third-party auditor. Examples of acceptable energy auditor certifications are Certified Energy Auditor (Association of Energy Engineers), Certified Energy Manager (Association of Energy Engineers), Building Energy Assessment Professional (ASHRAE), Energy Management Professional (Energy Management Association), Multifamily Building Analyst (Building Performance Institute), or other energy auditor accreditations or certification recognized or deemed equivalent by the United States Department of Energy. The EUI target adjustment request must also include an inventory of all existing air and water heating and cooling equipment and an inventory of all required equipment needed to meet the building’s assigned EUI or emission target.

Penalties

Pursuant to § 25-7-122(1), the Commission adopted civil penalty provisions related to a covered building owner’s failure to comply with the benchmarking and building performance standards requirements. § 25-7-122(1) specifies values of $2,000 for a first violation of the performance standards and $5,000 for a second violation. In addition to these provisions, the Commission adopted additional reporting and compliance demonstration requirements for building owners that fail to comply with the building performance standards, clarifying that building owners must demonstrate progress until coming into compliance and that failure to do so may result in a finding of additional violations. The Commission expects that the potential for these additional penalty assessments will further incentivize covered building owner compliance.

Utility Data Reporting

§ 25-7-142(4) contains statutory requirements incumbent upon qualifying utilities concerning the collection and provision of energy-use data for its customers, including covered building owners and tenants. Both the definition of “qualifying utility” at § 25-7-142(2)(u) and the duties created under § 25-7-142(4) are explicit and clear. These provisions are enforceable as a provision of part 1 of the Act by the Commission and Division under § 25-7-115. Furthermore, qualifying utilities providing electric service are subject to extensive data gathering and provision requirements in the Colorado Public Utilities Commission's (PUC) Rules Regulating Electric Utilities at 4 CCR 723-3, Sections 3025-3035 concerning “Customer Data Access and Privacy.” Under these PUC rules, customers may request the release of this information through the Consent to Disclose Utility Customer Data form. Given these preexisting statutory and regulatory duties governing this conduct, the Commission did not adopt any additional rules in this regard.

Sale and Lease of Covered Buildings

§ 25-7-142(6) contains statutory requirements dependent on the sale or lease of buildings covered under the building performance standards. If a covered building or a portion of a covered building is for sale or lease, the covered building owner must provide an electronic copy of the building's reported benchmarking data to all prospective buyers or lessees, any brokers as defined in Section 12-10-201(6) C.R.S., any person making an inquiry about the property, or any major commercial real estate listing services on which the property is listed. The benchmarking data should be of the building's previous calendar year or from the most recent twelve-month period of continuous occupancy. If a covered building changes ownership, the former owner must make available to the new owner the energy-use data, utility customer consent documentation, and any other information about the property that is necessary to benchmark the covered building. The former owner must transfer to the new owner both the record representing the covered building's information in the benchmarking tool and the request to a qualified utility for aggregated data. The new owner may request and receive from a qualifying utility the aggregated data necessary to fulfill benchmarking reporting requirements. Given these preexisting statutory and regulatory duties governing this conduct, the Commission did not adopt any additional rules in this regard.

<u>Future Year Standards</u>

§ 25-7-142(8)(a)(II)(C) granted the BPS Task Force the opportunity to provide recommendations for "advising, soliciting public input on, and making recommendations to the commission on performance standards for 2030 to 2050" that will align with the State's 2050 GHG reduction targets. The Commission understands that CEO will continue to evaluate submitted benchmarking data as well as compliance demonstrations to evaluate implementation and performance under this regulation and encourages CEO to consider convening a new task force to evaluate potential future revisions to these standards as well as to evaluate additional building performance standards beyond 2030.

<u>Federal vs. State-Only Conditions (if applicable)</u>

The revisions to Regulation Number 28 do not exceed or differ from the requirements of the federal act or rules, therefore, 25-7-110.5(5)(a) does not apply.

<u>Findings of Fact</u>

(I) These rules are based upon reasonably available, validated, reviewed, and sound scientific methodologies, and the Commission has considered all information submitted by interested parties.

(II) Evidence in the record supports the finding that the rules shall result in a demonstrable reduction of greenhouse gasses related to building performance.

(III) Evidence in the record supports the finding that the rules shall bring about reductions in risks to human health and the environment that justify the costs to implement and comply with the rules.

(IV) The rules are the most cost-effective to achieve the necessary and desired results, provide the regulated community flexibility, and achieve the necessary reduction in air pollution.

(V) The rule will maximize the air quality benefits of regulation in the most cost-effective manner.