Local Code Adoptions and Electrification

Alignment with New Colorado State Law (HB22-1362)

- Local jurisdictions must adopt at least 2021
 IECC + EV-ready, PV-ready, and electric ready when updating other codes (Jul 1, 2023 Jul 1, 2026).
- Local jurisdictions must adopt at least lowenergy and carbon code when updating other codes (after Jul 1, 2026)
- Energy Code Advisory Board will select model code language.
- Code Cohort amendments complies



HOUSE BILL 22-1362

BY REPRESENTATIVE(S) Bernett and Valdez A., Amabile, Bacon, Benavidez, Boesenecker, Cutter, Froelich, Hooton, Jodeh, Kennedy, Kipp, Lindsay, Lontine, McCormick, Michaelson Jenet, Sirota, Titone, Woodrow; also SENATOR(S) Hansen and Winter, Jaquez Lewis, Moreno, Priola.

ONCERNING THE REDUCTION OF BUILDING GREENHOUSE GAS BUSISIONS, AND, NO CONNECTION TRESS EVENT. REQUIREM THE DIRECTOR OF THE DIR

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, add part 4 to article 38.5 of title 24 as follows:

Final State Model Electric Ready and Solar Ready Code Package:

https://energyoffice.colorado.gov/climate-energy/energy-policy/building-energy-codes/energy-code-board

Eagle County Climate Action Collaborative



An example of codes in action to meet state requirements...

Participating Cohort Communities

- Town of Avon
- Town of Basalt (observing)
- Town of Eagle
- Eagle County
- Town of Gypsum (observing)
- Town of Minturn
- Town of Red Cliff (newly joined)
- Town of Vail

Facilitation and Code Expert Team







Funded by:



Eagle County Climate Action Plan





BUILDINGS

IMMEDIATE PRIORITY ACTIONS



Beneficial Electrification for 5% of existing residential and commercial buildings each year.



For new and remodeled residential and commercial buildings, adopt 'above building code' standards and incentives, and implement net-zero or all-electric construction requirements by 2030. Work toward consistency across jurisdictional boundaries in Eagle County.



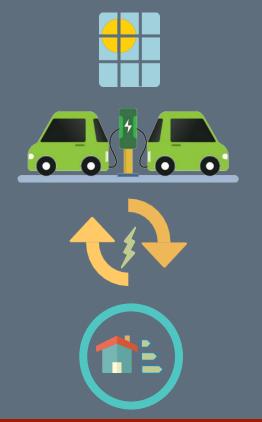
Implement a benchmarking ordinance in Eagle County for all commercial buildings 10,000 square feet or larger.



What's the process for considering electrification?

- Jurisdiction goals
- Knowledge and ability to enforce requirements
- Looking at cost/benefit analysis
- Working with local utilities to make sure they are on board
- Designers and contractors who can implement it
- Volume of other code changes at play/timing
- Legality of the wording used
- Comparing to state language to make sure you're equal or exceeding
- Stakeholder involvement
- •

2021 IECC Supporting Amendments



Why Solar-Ready, EV-Ready, and Electric-Ready?

- 1. Many times cheaper than retrofitting.
- 2. Meet resident and customer needs.
- 3. Future-proof homes and buildings.
- 4. Overcome critical barriers to adoption.
- 5. Equity impacts / renter benefits.
- 6. Climate goals.



Electrical system retrofits

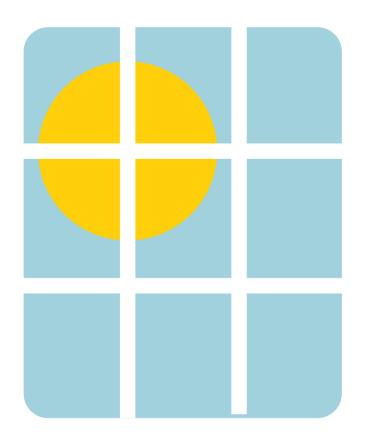


Breakage and repair of hardscapes



Soft Costs: permitting, inspection, HOA or landlord approvals, etc.

Expanded Solar-Ready



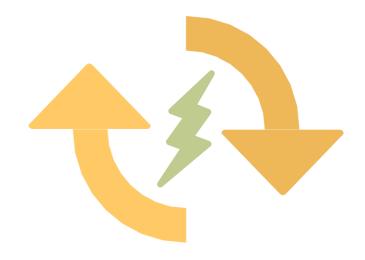


EV-Ready





Electricification



What is Electrification?



Electrification means upgrading appliances, equipment, or vehicles that would otherwise run on natural gas, propane, or gasoline—such as furnaces, water heating, stoves, clothes dryers, and cars—to clean and efficient electric versions.

Electrification Options



Electric-Ready: Pre-wiring and panel capacity for future electric systems (required by state law)



Electric-Preferred: Extra efficiency or renewable requirements for new construction with natural gas

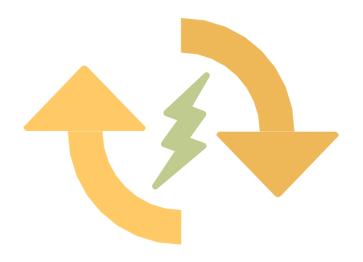


Electric-Only Space and Water Heating: Allows gas stoves



Electric-Only with Exceptions: No fossil fuels allowed in new construction except commercial kitchens, labs, emergency loads, etc.

Electric Preferred



Electric-Ready / Electric-Preferred Amendment Specifics

Pathway	All-Electric	Mixed Fuel
Residential Prescriptive	As written: 1 add'l efficiency package	3 additional efficiency packages; electric-ready
Residential Total Building Performance	As written: 1 add'l efficiency package or <95% standard reference design	3 additional efficiency packages or 80% std ref design; electric-ready
Residential ERI (using HERS)	As written: 55 before 5% reduction	52 before 5% reduction; electric-ready
Commercial Prescriptive	As written: 10 points	20 points; electric-ready
Commercial Total Building Performance	As written	10 extra points; electric- ready
Commercial ASHRAE 90.1	As written	10 extra points; electric- ready

Electric-Preferred Ranking

Mild

 Just electric ready (wiring and panel capacity) as required by state law.

Medium



Aggressive

 All-electric heating and water heating for most residential, multifamily, and commercial buildings.

Who Has Electrification Amendments?

In Cohort:

- AVON (partial electric-ready: 200 amp panel)
- Basalt: electric-ready
- Vail: electric-ready
- Eagle County and Eagle in process of electric-preferred likely
- Minturn electric preferred

Others statewide:

- Boulder: electric-preferred
- Boulder County: electric-preferred
- Crested Butte: all-electric
- Denver: electric-preferred*
- Erie: electric-preferred
- Fort Collins: electric-ready
- Lafayette: all-electric*
- Louisville: all-electric space and water heating (commercial)
- Northglenn: electric-preferred*
- Superior: electric-preferred

^{*}in process at time of cohort work

More jurisdictions adopting...

- Edgewater- Electric Ready, including existing
- Aspen-Electric Preferred w/taskforce for all electric
- Gunnison County electric-ready
- Westminster- electric preferred
- Broomfield- electric-ready
- Longmont electric-ready
- ... the list is growing. A report will be ready soon!
- After July 1, 2023 anyone changing codes will be going with a minimum of electric-ready provisions as written by the state, or equivalent

Q&A

Thank you!

Shaunna Mozingo

President

The Mozingo Code Group LLC

<u>sdmozingo@mozingocodegroup.com</u>

