MODERNIZE BUILDING ENERGY CODES:
FREQUENTLY ASKED QUESTIONS

Q: What does this legislation do?

- The bill directs cities and counties with building codes to adopt and start enforcing at least the 2021 International Energy Conservation Code (IECC), along with electric and solar-ready provisions, no later than January 1, 2025.
- The bill directs cities and counties with building codes to adopt and start enforcing a low energy and carbon code no later than January 1, 2030. This code will be based on either the 2021 or 2024 IECC along with any appendices chosen by the Colorado Energy Office (CEO).
- The bill directs CEO to also promote a Green Code that local governments in Colorado may adopt if they so choose, in addition to the energy code requirements.
- The bill includes $25 million in funding for energy code training, financial assistance to local governments to support code adoption and compliance work, and incentives for building decarbonization measures with a focus on lower income households and measures installed in historically underserved communities.

Q: Does the legislation impose a mandatory statewide energy code? No, the legislation sets minimum requirements for energy codes adopted by cities and counties with building codes, as did energy codes legislation passed in 2019 and 2007.

Q: What other states have statewide energy code requirements based on the 2021 IECC? States that have either adopted or are in the process of adopting the 2021 IECC include CT, FL, IL, MA, MD, MI, MN, MT, NJ, NV, NY, PA, TX, UT, VT, VA, WA, WI, along with Washington DC.

Q: What type of buildings does the legislation apply to? Through minimum energy code requirements for local energy codes, the legislation applies to newly constructed homes and commercial buildings, and home or commercial building renovations that require a building permit. The legislation does not require retrofit of existing homes or commercial buildings.

Q: What does a homeowner or commercial building owner need to do in terms of complying with the energy codes called for in the bill…

- **If making a home or commercial building wheelchair accessible?** Nothing extra, including when adding accessible walkways and entrances, relocating appliances, or adding a lift.
- **If renovating a kitchen?** Include a 240 volt line to the area near the stove if a gas stove is installed.
- **If putting an addition onto an existing home or commercial building?** Comply with energy code requirements for the addition, but not for the rest of the home or building.

- **If replacing windows in an existing house or commercial building?** Comply with energy code requirements for the windows, but not for the rest of the home or building.
- **If replacing an appliance, water heater, air conditioner or furnace in an existing home?** Nothing; appliance manufacturers need to comply with federal minimum efficiency standards, not homeowners.
- **If undertaking a major renovation/upgrade/expansion of an existing home?** Comply with applicable local energy code requirements. Typically, this entails complying with the energy code provisions for the components that are replaced, but not for the rest of the home or building.
- **If undertaking a major renovation of one floor or a portion of a floor in a high-rise commercial building?** Comply with energy code requirements for the floor or portion of a floor being renovated, but not for the rest of the building.
- **If renovating one or more apartment units in an apartment building?** Comply with energy code requirements for the units being renovated, but not for the entire building.

Q: Does the legislation impose requirements on cities and counties without building codes? No it does not.

Q: Will the code requirements take into account climate zone? Yes, per provisions in the IECC.

Q: Do the requirements in the legislation apply to new buildings? Yes, it applies to those that are constructed under the authority of the State Architect, the Department of Local Affairs and the Department of Public Safety.

Q: Can cities and counties adopt codes that are equivalent to or more stringent than the specific codes called for in the legislation? Yes, local governments can adopt codes that differ from the 2021 IECC and the low energy and carbon code to be issued by CEO as long as the code is equivalent to or more stringent than the codes specified in the legislation in terms of energy or carbon performance.

Q: Can cities and counties adopt the required codes sooner than the deadlines in the legislation? Yes.

Q: How does the voluntary Green Code differ from the 2021 IECC and the low energy and carbon code to be developed by CEO? The voluntary Green Code addresses issues other than energy efficiency and carbon performance, issues such as indoor air quality, materials use and recycling, and water efficiency.

Q: What options will CEO consider when developing the model low energy and carbon code? CEO will make use of either the 2021 or 2024 IECC along with Appendices to these consensus industry codes as deemed appropriate. CEO will seek input from local governments, builders, and other stakeholders as it develops the low energy and carbon code. And CEO may relax specific requirements in the code it selects if it believes that doing so is necessary and appropriate for Colorado.

Q: Is there a deadline for CEO issuing the model low energy and carbon code? Yes, CEO must issue the model code by January 1, 2025.

Q: Will the low energy and carbon code require construction of all-electric homes and commercial buildings? No, the legislation specifies that the low energy and carbon code shall include pathways for both all-electric and mixed fuel use homes and buildings.

Q: What will a builder need to do after a low energy and carbon code takes effect? Heating and cooling equipment along with appliances will need to meet federal minimum energy efficiency requirements. For the building envelope, the builder will need to meet minimum energy efficiency requirements included in the code. And any renewable energy requirements will depend on whether or not CEO selects IECC appendices that include renewable requirements for the model low energy and carbon code.

Q: Starting in 2030, if a homeowner's older gas furnace or boiler fails, does the homeowner need to replace it with an electric heat pump? No. The bill allows an existing furnace or boiler to be replaced with another gas furnace or boiler. The same is the case for a gas water heater.

Q: Will CEO provide assistance to support the adoption and implementation of the energy and carbon codes called for in the legislation? Yes, the bill includes $3 million in funding so that CEO can provide training to assist local governments, builders, and other entities adopt and implement the codes called for in the legislation. At least $1 million of this is directed towards financial assistance to help local governments adopt and implement the energy codes called for in the bill. As noted above, the bill includes an additional $22 million for building decarbonization efforts. CEO will use a competitive RFP process for distributing these funds.

Q: In what way does the funding provided in the bill for building decarbonization efforts focus on lower income households and historically underserved communities? The bill requires that at least 25% of the $22 million provided for this purpose support measures and projects in lower income households, historically underserved communities and communities in transition.

Q: Will the legislation lead to an increase in the cost and price of new homes? Not necessarily. Studies show that there is no correlation between the price of new homes and energy code adoption. Home prices are determined by many other factors including location, the cost of materials and the cost of labor.

Q: Is there any quantitative data on the impact on home cost from achieving low energy and carbon performance? Constructing an all-electric home or commercial building with high efficiency heat pumps is one way to achieve low energy and carbon performance. Analysis by SWEEP estimates that an all-electric home constructed in the metro Denver area today will have a first cost that is about $2,000-3,000 less than the same home with gas heating and appliances. The

all-electric house will provide an even greater reduction in total cost (first cost and energy costs) over a 15-year period. The cost savings are expected to increase over time as the price for cold-climate heat pumps and heat pump water heaters drops.

Q: What if the low energy and carbon code selected by CEO includes some solar PV or other renewable energy requirements? Solar PV systems can be financed or leased so that they do not increase first cost of the home while providing a positive cash flow (i.e., a reduction in total costs) for the homeowner.

Q: Does the legislation explicitly address home affordability? Yes, the legislation directs CEO to consider home affordability as it develops the model low energy and carbon code.

Q: How does the bill impact homebuyers or renters? The bill ensures that buyers and renters of new homes or apartments will live in energy-efficient dwellings that have lower utility bills than less efficient homes or apartments.

Q: What impact will the bill have on climate emissions? The bill ensures that the vast majority of new homes and commercial buildings constructed in Colorado starting in 2030 will have very low carbon emissions, thereby helping the state meet its climate emissions targets.