

CITY COUNCIL COMMUNICATION



MEETING DATE: February 11, 2025

ITEM NUMBER: 12.A

SECOND READING:

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TYPE OF ITEM: General Business

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SUBJECT/AGENDA TITLE:

Update on Building and Electrification Code Adoption

EXECUTIVE SUMMARY:

Council provided direction to have staff prepare an ordinance requiring an all-electric building requirement to be effective January 1, 2025. The Building Division is requesting additional time to comply with this direction and to present additional options for Council due to the following:

- The State Energy Office promulgated model electric and solar ready requirements that municipalities are required to adopt when they update their building codes or by July 1, 2026, whichever is earlier. However, the Energy Office is expected to release a model low energy and carbon code in May 2025 that will replace the model electric and solar ready requirements.
- The City has retained a consulting group to model the cost and greenhouse gas emissions impacts associated with adopting the various model code provisions and recommendations, but this modeling requires the model low energy and carbon code to be finalized.
- The City of Longmont is collaborating with Northwest Metropolitan Regional Energy Code Cohort to review model code provisions and establish a regional roadmap to achieve net zero codes by 2030. The Code Cohort is awaiting the model low energy and carbon code to be finalized before it can adopt recommendations towards this goal.
- The legal landscape around building electrification is shifting and staff needs time to ensure that proposed building code requirements are protected against litigation.

Due to the above constraints, staff is seeking adequate time to review the following:

- The new model low energy and carbon code that will be completed in May 2025.
- Results from the modeling study by the consulting group to determine impacts and cost of code adoption options.
- Model codes currently under development by the Northwest Metropolitan Regional Energy Code



COUNCIL OPTIONS:

1. Delay adoption of 2024 building codes and consideration of an all-electric building requirement to wait for the State Energy Board to complete the model low energy and carbon code, consulting group modeling results, and recommendations of the Code Cohort.
2. Proceed with 2024 building code adoption, which includes the to-be-replaced model electric and solar ready codes, and delay consideration of an all-electric building requirement.

RECOMMENDED OPTIONS:

Staff recommends option 1.

FISCAL IMPACT & FUND SOURCE FOR RECOMMENDED ACTION:

The development of codes does not carry a fiscal impact.

BACKGROUND AND ISSUE ANALYSIS:

In November 2016, City Council adopted the City's Sustainability Plan, which provides a road map for Longmont to achieve the vision of becoming an engaged community that promotes environmental stewardship, economic vitality and social equity. This plan set the City's greenhouse gas reduction targets of reducing emissions 66% by 2030 and 69% by 2050 from a 2016 baseline.

In December 2020, City Council approved the Climate Action Recommendations Report which expanded on the strategies in the Sustainability Plan that support climate action and included equity-based recommendations. One of the strategies identified was the development of a Beneficial Building Electrification Plan, which was completed and approved in 2022. Beneficial building electrification codes were identified as a critical action in meeting our greenhouse gas reduction targets. Staff have been awaiting the release of the 2024 IECC to consider incorporation of beneficial building electrification codes to maintain a consistent code adoption cadence for our community.

ICC was late to publish the Energy Code

The publication date for the 2024 IECC (International Energy Conservation Code) was delayed requiring more time for staff to review and prepare amendments before adopting the 2024 building codes. The ICC (International Code Council) published the IECC late due to a significant number of appeals filed against proposed energy efficiency provisions in the code. The ICC Board of Directors determined that the scope and intent governing the 2024 IECC do not support the inclusion of measures in the main body of the code if the measures did not directly affect building energy conservation.

Based on this interpretation, the Board resolved that several challenged provisions viewed as concerning greenhouse gas reduction and not building energy conservation be removed from within the base of the 2021 IECC codes and 2024 placed in appendices and resources to accompany the codes.

The affected provisions moved to an appendix include:

- Electric vehicle charging infrastructure in both residential and commercial buildings (Sections C405.14, R404.7, and N1104.7)
- Solar readiness provisions in residential buildings (Sections R404.6 and N1104.6)
- Electric readiness provisions for electric cooking, clothes drying and water heating (Sections R404.5 and N1104.5)
- Penalty for using natural gas for space or water heating in commercial buildings (Sections C406.1.1.1 and C502.3.7.1)
- Electrical energy storage system readiness in commercial buildings (Section C405.16)

(Note: Multifamily buildings four stories and higher are regulated by the commercial energy code provisions; all other residential buildings are regulated by the residential energy code provisions.)

By moving the provisions to appendices and resources, jurisdictions can still adopt them if they choose, but the provisions will not be a part of the base code and will need a separate adoption decision to be added.

The Board also considered concerns voiced by industry stakeholders that provisions in the draft IECC codes were federally preempted by the Energy Policy and Conservation Act (EPCA). Where the Board determined there was a significant risk of preemption based on case law or the Board had concerns about the ability to comply with provisions using federal minimum efficiency equipment, the Board decided to move those provisions to a resource or add a cautionary note regarding the risk of preemption.

Affected provisions include:

- All-electric provisions for commercial buildings (Appendix CG) and all-electric provisions for residential building (Appendix RE) moved to a resource because of significant risk of preemption based on case law.
- Prescriptive glide path to net zero for commercial buildings (Appendix CD Section CD101.1 and Table CD101.1) moved to a resource because of significant risk of preemption based on an inability to comply with minimum efficiency equipment.
- Glide path to net zero for residential buildings (Appendix RG) retained as an appendix with a cautionary note regarding the limited compliance options for minimum efficiency equipment in specific climate zones.

The City of Longmont is participating in the Northwest Metropolitan Regional Energy Code Cohort to review the 2024 IECC and establish a regional roadmap to achieve net zero new construction codes by 2030.

The Code Cohort was initially funded by a Department of Local Affairs grant and created a framework in the state for regional collaboration on building codes to create consistency for the developer and contractor communities and support the achievement of local climate goals. The City of Longmont and other communities on the front range are collaborating to review and adopt the 2021 and 2024 code provisions. The initial Roadmap to Net Zero New Construction (Roadmap) encompassed five core elements of energy codes that address the operational carbon footprint of new buildings and phase out fossil fuels and laid out a stepped approach for communities to utilize during future energy code update cycles. The recently awarded Climate Pollution Reduction Grant (CPRG) awarded to DRCOG has allowed the expansion of the Cohort to include the entire DRCOG region. With the EPCA constraints, the Cohort has shifted electrification requirements to the electric-preferred pathway in place of the all-electric required pathway to avoid litigation. The Cohort is now updating the roadmap to develop model stretch codes to go above and beyond the State's Low Energy and Carbon Code that also align with EPCA.

Recent Legislation on Energy Efficiency

During the 2022 legislative session, the State passed House Bill 22-1362 Building Greenhouse Gas Emissions into law. This law required the Colorado Energy Office to promulgate model electric and solar ready codes that include requirements for solar energy readiness, electric vehicle infrastructure installation, and infrastructure to replace gas appliances with electric appliances. Municipalities are required to adopt these model electric and solar ready codes when they update any building code after July 1, 2023, or by July 1, 2026, whichever is earlier.

HB-22-1326 also included a requirement for the Colorado Energy Office to promulgate a model low energy and carbon code, which is intended to minimize carbon dioxide emissions associated with new and remodeled residential and commercial buildings, no later than July 1, 2025. The model low energy and carbon code is intended to replace the model electric and solar ready codes. Municipalities are required to adopt the model low energy and carbon code, or a code that achieves equivalent or better energy performance, when they update a building code after July 1, 2026.

Group 14 Impact Analysis for Code Adoption

The City has retained a consulting group to model the impacts of four energy code scenarios for both residential and commercial buildings:

1. Scenario 1 - Current Longmont energy code
2. Scenario 2 - 2024 IECC (unamended)



3. Scenario 3 - 2024 IECC with appendices
4. Scenario 4 - Northwest Metropolitan Regional Energy Code Cohort Recommended Codes.

- Modeling will include building types that most closely align with expected building types being constructed in Longmont, as well as cost data from local and regional builders/developers.
- Given the delay in the release of the 2024 IECC and the State-led efforts on the Low Energy and Carbon Code, no modeling has been done to date – modeling will begin after direction from council.
- Note: staff from the consulting group is active in the State’s Low Energy and Carbon Code development.
- Up to 3 months is needed to gather local cost data and conduct the modeling.

Legal Challenges to All-Electric Requirements

Several jurisdictions that have adopted all-electric building requirements have found themselves subject to lawsuits. A ban on natural gas piping by the City of Berkley, California was struck down by the United States Court of Appeals for the Ninth Circuit due to a federal law concerning regulation of energy use in residential and commercial appliances. The City and County of Denver and the State are subject to litigation over various ordinances and regulations imposing electrification requirements. Courts having jurisdiction over Colorado have yet to provide substantive guidance over the legality of all-electric building requirements.

ATTACHMENTS:

- Cohort Members
- Adoption Roadmap
- Cohort Adoption Timeline
- Code Cohort Development Timeline