

# Energy Efficient Building Codes

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#### **Background- Statewide Code System**

- Oregon has a statewide building code, made up of the various specialty codes (electrical, plumbing, residential, commercial, mechanical, etc.)
  - Codes are promulgated in partnership with seven governor appointed, senate confirmed boards made up of experts
  - Codes are coordinated to work together, avoiding conflicts between specialty codes
- Oregon has a statewide inspection system, where city, county, or state building inspection programs enforce the code across the state
  - Skilled building officials, plans examiners, and inspectors are all trained to the same code, allowing government partnerships and a mobile workforce to meet demand

## Background- Energy Efficiency

- The state code promotes energy efficiency, our climate goals, and climate resiliency
  - Currently executing two executive orders (EO 17-20 and EO 20-04) using the code to advance climate goals by promoting energy efficiency, transportation electrification, water conservation, and use of solar technology
  - Continually recognized as a national leader in energy efficient building codes
  - Nothing prohibits builders from building "above code" or more efficient buildings than the code requires
  - Energy efficiency in the codes must be balanced against our affordable housing needs

## **Background- Principles of Code Adoption**

#### • Take a Long View

- Using executive orders, model codes, to create predictability while we continue to progress the codes over time
- Coordinated Approach
  - Builders, labor, contractors, stakeholders, and board members all assist in ensuring our code is not just adopted, but carried out

#### • Focus on Performance and Choice

- The code should ensure safe and efficient construction practices across the state, and should not be used to promote specific products or industries
- Evidence Based
  - Changes to the code should be based on reliable research and evidence
- Independent Verification
  - The division uses the University of Oregon to verify residential energy efficiency progress
- Consistency across the state
  - It is not enough to adopt the codes, but there must be sufficient training for industry and local government to ensure consistent code application across the state

### **Background- Reach Code**

- The Reach Code is found in ORS 455.500
- It is an aspirational efficiency code- builders can choose to use it, and local government must accept projects built to the reach code
- It is to be based on "generally accepted codes and standards that achieve greater energy efficiency" than the state building code
- There is both a residential reach code, and a commercial reach code, each "reaching" from their respective base codes (e.g. residential reach code is a more efficient version of the residential code)

### The Reach Code Today

- **EO 20-04** says the following about the reach code:
  - BCD, through its advisory boards and committees, and in cooperation with ODOE, is directed to evaluate and report on Oregon's current progress toward achieving the goal for new residential and commercial buildings, pursuant to paragraph 6(A) of this Executive Order, and options for achieving steady progress toward the goal over the next three code cycles (2023, 2026, and 2029). Pursuant to its authority under ORS 455.500, BCD also is directed to update the Reach Code on the same timeline.
  - The goal referenced is a 60 percent reduction in new building annual site consumption of energy, excluding electricity used for transportation appliances, from the 2006 Oregon residential and commercial codes.

### The Residential Reach Code Today

- BCD adopted the 2021 Oregon Residential Specialty Code in April, 2021 (delayed 6 months due to COVID), and adopted the Residential Reach Code in August, 2021
- The division used a process for developing the residential reach code that included some aspects of the normal code adoption process, but was less formal and less time consuming

### **The Commercial Reach Code Today**

- Oregon adopted the latest, most efficient national model commercial energy code in April, 2021
- The proposal period for commercial reach code proposals is currently underway
- When the proposal period closes, we will work with stakeholders to review proposals and bring a proposed commercial reach code to the Construction Industry Energy Board for consideration

## **Looking Forward**

- We intend to continue to improve efficiency in the codes, and believe we can achieve the goals laid out in the Governor's executive order (20-04), while maintaining adherence to our principles of code adoption
- Energy efficiency improvements in the codes are becoming more complex and more costly (low hanging fruit has already been picked)
  - Requires more time and expertise to develop the code and to sufficiently train to the code
  - More challenging to balance efficiency with affordability
- The division will continue to update the reach code on a 3 year cycle, consistent with EO 20-04
- EO 17-20 and 20-04 include a framework of future efficiency improvements, some of which can be previewed and refined through the reach code process

### Conclusion

#### Questions?

#### More information about energy efficient building codes and the reach code is available at Oregon.gov/bcd

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The Oregon Reach Code is a statewide optional energy construction standard approved by the Building Codes Division

The Oregon Reach Code is separate from the state building code and applicable at the designer's and contractor's discretion. This code does not limit the authority of the building official to consider other proposed alternate methods encompassing the same subject matter

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**Oregon Reach Code** 

#### **Residential Reach Code**

The Oregon Residential Reach Code provides an additional choice for builders, consumers and contractors to increase energy efficiency for the construction of structures regulated by the Oregon Residential Specialty Code (ORSC).

2021 Oregon Residential Reach Code (ORRC) Effective Aug. 6, 2021

#### **Commercial Reach Code**

The Oregon Commercial Reach Code provides an additional choice for builders, consumers and contractors to increase energy efficiency for the construction of structures regulated by the Oregon Structural Specialty Code (OSSC).

The Oregon Commercial Reach Code (ORCC) is currently in the process of being adopted.