

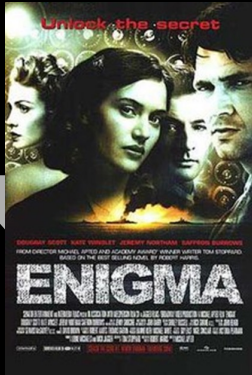
Advanced Building Energy Codes: Overlays and Alternatives

NASEO Annual Conference

New York City

September 30, 2024





Oregon Executive Orders on Codes

EO 17-20 (2017)

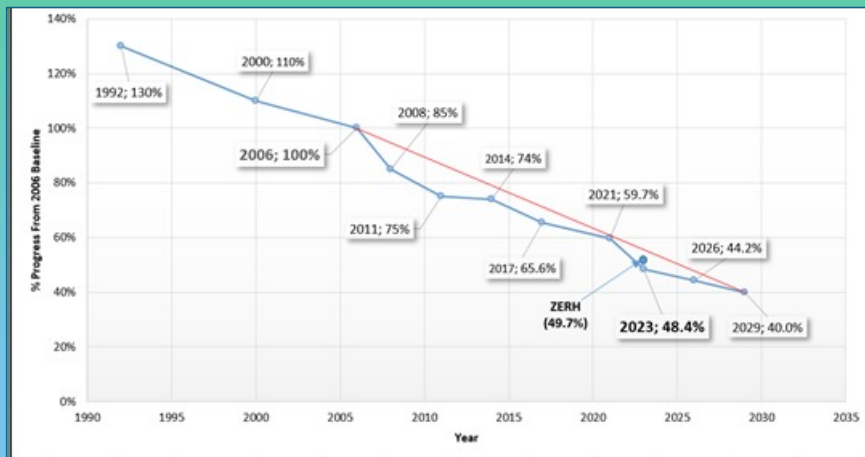
- C. Zero-Energy Ready Homes. The appropriate advisory board(s) and BCD are directed to conduct code amendment of the state building code to require newly constructed residential buildings to achieve at least equivalent performance levels with the 2017 U.S. Department of Energy Zero Energy Ready Standard by October 1, 2023.
- D. Increasing Energy Efficiency in Commercial Construction. The appropriate advisory board(s) and BCD are directed to conduct code amendment of the state building code to require, by October 1, 2022, that newly constructed commercial buildings, averaged across building types, will exceed International Energy Conservation Code and ASHRAE 90.1 by achieving at least equivalent performance levels with the measurable prescriptive energy efficiency portions of the most current version of ASHRAE 189.1 that are construction-related.

EO 20-04 (2020)

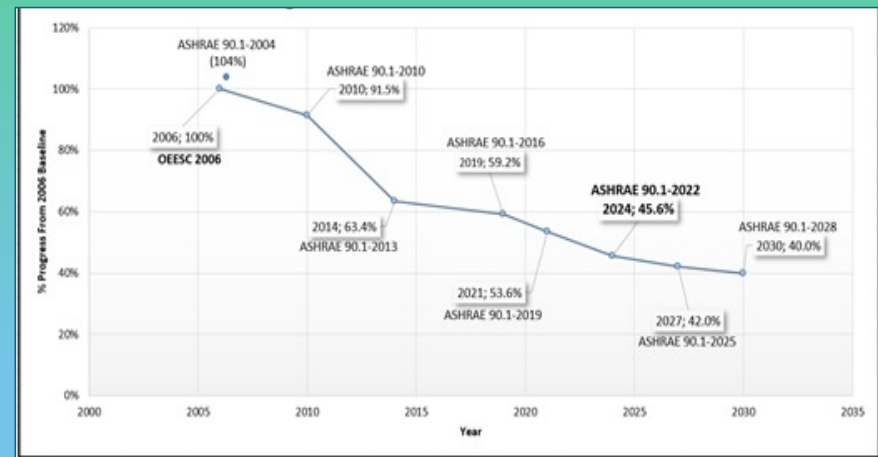
- A. Energy Efficiency Goal for New Construction. BCD, through its advisory boards and committees, and in cooperation with ODOE, is directed to adopt building energy efficiency goals for 2030 for new residential and commercial construction. That goal shall represent at least a 60 percent reduction in new building annual site consumption of energy, excluding electricity used for transportation or appliances, from the 2006 Oregon residential and commercial codes.

Meeting the EO Goals

Residential Code



Commercial Code



Reach Codes

- 10% above current Residential and Commercial Codes
- Residential code references as pathways
 - Energy Star v3.2
 - US DOE ZERH v2
 - Passive House 2021

(<https://www.oregon.gov/bcd/codes-stand/pages/reach.aspx>)

Moving Forward

- **Resilient and Efficient Codes Implementation (RECI) with NEEA & Earth Advantage** - *will provide training and business support services to over 300 new and existing building construction, inspection, and energy services professionals in the Northwest with the goal of establishing a network of Energy Rating Index rater to support energy code compliance in rural communities. (Award amount: \$3.5 million)*
- **Resilient and Efficient Codes Implementation (RECI) with ACEEE** - *will develop and deploy education and training resources targeted to energy code officials in this nationwide multi-year project. (Award amount: \$2.9 million)*
- **Zero Model Energy Code** - *ODOE and BCD are working together currently to apply for the IRA Latest and Zero model energy code.*
- **Building Performance Standard Program** - *most existing commercial buildings must bring energy performance up to the average for their building type.*

Presenters

- **Kim Cheslak**, Senior Technical Advisor, Building Energy Codes Program, Pacific Northwest National Laboratory
- **Chris Corcoran**, Assistant Director, Team Lead for Codes, Products, and Standards, New York State Energy Research and Development Authority
- **David Epley**, Associate Director, Data and Benchmarking Division, Energy Administration, District of Columbia Department of Energy and Environment



For the CHOCLATE!

- Wholeshebang or Everything Bagel
- Buzz
- Collaboration or Teamwork

Bonus Points:

- ❖ Imitation
- ❖ Enigma
- ❖ DaVinci