

Future of Codes Discussion Topics and Questions



PNNL is operated by Battelle for the U.S. Department of Energy





Discussion Topics and Questions – NZE Roadmap & From Prescriptive to Performance

The current model codes—2021 IECC and 90.1-2019—should serve as the basis for future code advancement

Is this an appropriate baseline? How should future editions of the model codes be handled?

Future codes should orient around a goal of net-zero energy buildings by 2030

- Is this the appropriate target? Timeline? NZE vs. NZE-"Readiness"? What metrics?
- What should DOE's role be in supporting such a goal?

How should a target like NZE be applied?

NZE for all buildings and climates? Net positive? What balance of efficiency, renewables and demand flexibility?

Both prescriptive and performance-based compliance options should be included in future energy codes, but new formats are needed to enable advanced savings levels.

Role of prescriptive vs performance, new metrics? How should system performance be applied, does the role of prescriptive & performance pathways need to change in pursuit of advanced goals?



Discussion Topics and Questions – Cost Effectiveness and Diversity, Equity and Inclusion

A life-cycle cost perspective is the most effective means of balancing incremental costs of energy efficiency vs. longer-term savings

How does analysis better characterize environmental impacts? How to balance consumer benefits with societal benefits, does cost effectiveness need to change to meet advanced goals?

Building energy codes need to support increased diversity, equity, inclusion and social justice in housing and the built environment.

How do codes help ensure more positive outcomes in disadvantaged communities? Do current economic analysis methods represent LMI households? How do we increase diversity in building code activities? Other ideas?

Discussion Topics and Questions – Model Policies

Leveraging model policies in future energy codes

- •Do the model policy topics addressed in the workshop meet the needs of states and local governments?
- •What additional topics are needed?

Pacific

•What's the right relationship between model policies and model codes?

Building decarbonization and model energy codes

- •Should the IECC and 90.1 embrace carbon-based metrics?
- •What's the appropriate allocation of energy efficiency vs. renewables?
- •Should the IECC include prescriptive requirements for onsite PV?
- •How should the codes address (beneficial) building electrification?
- •What is the role of energy storage and grid-interactive technologies?

Relationship between building performance standards and building energy codes

- •How should they complement one another?
- •What types of support are needed to support their uptake and implementation?
- •What is the potential application of a BPS in the residential sector?



Discussion Topics and Questions – State and Local Jurisdictions

- How can states and local governments continue to have a strong voice in the code development process?
- What's the appropriate balance between advanced topics (e.g., stretch codes) and more traditional needs (e.g., cost analysis, workforce training)?
- What type of technical assistance can best support states and local governments?
- What are the priorities for states and local governments when it comes to future energy codes?

Please provide additional feedback through the Building Energy Codes Workshop Federal Docket. https://www.regulations.gov/docket/EERE-2021-BT-BC-0013