Date: 6/14/2024

City: Washington, DC

NAHB Resolution

Title: Cost-Effective Model Energy Codes and Standards for New

Construction

Sponsor: Construction, Codes & Standards Committee

Submitted by: Jon Sukonik

WHEREAS, the framework for developing energy codes has shifted towards reaching zero net energy goals, and many stakeholders are advocating for the inclusion of greenhouse gas emission reduction provisions within the energy codes;

WHEREAS, although the primary focus of energy codes is on new construction, 2020 data from the U.S. Census and the Energy Information Administration shows that more than 90 percent of U.S. homes (113 million out of 123 million housing units) were built prior to 2010 (before recent advances in energy codes) and therefore represent significant cumulative potential for reductions in energy use, peak energy demand, and greenhouse gas emissions;

WHEREAS, significant climatic differences, regional electric grid differences, and varying renewable energy generation opportunities across the country create a broad range of challenges for achieving the new goals;

WHEREAS, the goals of zero net energy buildings and greenhouse gas emission reductions cannot be reached by solely addressing energy use and resource use at the building and its site;

WHEREAS, addressing these new goals by focusing on updating model energy code requirements for new homes will add significant costs to new construction;

WHEREAS, the National Association of Home Builders' (NAHB) analysis of data from the 2020 Census and the 2021 American Community Survey estimates that 73 percent of households in the United States cannot afford a median-priced new home – and that a \$1,000 increase in the price of that home would prevent an additional 140,436 U.S. households from being able to qualify for a mortgage to purchase that home;

WHEREAS, codes and standards that are not explicitly based on costeffectiveness criteria may place an undue financial burden on home buyers and result in housing that is less attainable for the consumer;

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WHEREAS, the findings of consumer research conducted by NAHB and other organizations indicate that home buyers are willing to pay extra for energy efficiency features that reduce utility bills as long as installation of those features results in a reasonable payback timeline;

WHEREAS, a simple payback period, defined as the initial cost divided by the first-year savings, provides a method for evaluating the costs and benefits associated with energy features and offers a metric that is easy to apply in practice and easy for housing consumers to understand;

WHEREAS, in lieu of a simple payback, the cost-effectiveness metrics used during the development of new model energy codes are based on life-cycle analysis conducted in accordance with the established rules of the standard development organizations;

WHEREAS, a life-cycle analysis accounts for several factors that influence the economic viability of an investment over a specified period of time including first cost, energy cost savings, inflation, discount rate, taxes, financing costs, maintenance costs, replacement costs, residual costs, and other relevant costs;

WHEREAS, communities that review and adopt model codes and standards rely on the ability to amend them to adequately address local conditions, streamline compliance, and optimize costs; and

WHEREAS, builders need sufficient options to meet code compliance requirements and metrics for energy efficiency and greenhouse gas emissions reductions, as well as opportunities to learn how to do so,

NOW, THEREFORE, BE IT RESOLVED that the National Association of Home Builders (NAHB) urges lawmakers, regulators, and other policymakers to support or adopt cost-effective energy codes, standards, and legislation that contain provisions where the initial cost and annual savings to home buyers meet the following criteria:

- 1. Consider the needs of home buyers and renters with modest incomes and limited resources for down payment;
- 2. Are based on the final cost to the home buyer rather than the change in costs to construction trades or the builder;
- 3. Are estimated using methods and data that are recent and verifiable via published sources;
- 4. Are estimated to show positive life-cycle metrics; and
- 5. Are based on incremental evaluation of individual measures;

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BE IT FURTHER RESOLVED that NAHB supports model energy codes and standards that meet the following criteria:

- 1. Offer a comprehensive and cost-effective prescriptive compliance path for all types of residential buildings at any code-specified level of performance;
- 2. Offer design flexibility in reaching energy performance goals and shall not impose unnecessary restrictions (including unreasonable mandatory backstops) on design choices for achieving specified levels of energy performance;
- 3. Where energy codes pursue zero net energy goals or other highperformance goals, provide adopting jurisdictions and designers the flexibility for defining the right balance between building enclosure, heating and cooling systems, and renewable generation;
- 4. Where code requirements are increased via additional measures with assigned credits, ensure that such provisions offer a minimum of two (2) cost-effective compliance paths per climate zone with options that can be evaluated as a package of measures that achieves the required performance level; and
- 5. Offer alternative compliance paths via above-code programs (such as the National Green Building Standard);

BE IT FURTHER RESOLVED that NAHB recognizes that greenhouse gas emission reductions may be a consideration when evaluating proposed changes to energy codes;

BE IT FURTHER RESOLVED that NAHB supports renewable energy generation from all sources, sites (including onsite and offsite), and methods (including community- and utility-scale);

BE IT FURTHER RESOLVED that NAHB supports studies intended to:

- 1. Determine energy-efficient measures that are cost-effective;
- Confirm through field evaluations that the code-specified increases in energy efficiency consistently achieve the expected levels of energy savings in buildings; and
- 3. Confirm through evaluation that increases in energy efficiency pose no unintended consequences to health, safety, and welfare;

BE IT FURTHER RESOLVED that NAHB urges that any energy efficiency legislation or regulation related to housing shall be accompanied by an economic study of the impact on affordability, availability, and cost-effectiveness, and be conducted by an appropriate agency with responsibility over regulated housing programs;

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BE IT FURTHER RESOLVED that NAHB supports the ability of jurisdictions to amend the model codes and standards to address specific cost, climatic, regional, market, and energy grid factors and to ensure compliance with the jurisdiction's regulations;

BE IT FURTHER RESOLVED that NAHB continue to develop educational programs to help builders, code officials, and others understand and correctly apply the provisions of the energy codes and standards; and

BE IT FURTHER RESOLVED that NAHB urges jurisdictions and communities to focus their resources on improving the performance of existing buildings where more significant cumulative reduction in energy use, peak energy demand, and greenhouse gas emissions can be achieved when compared to new buildings which already comply with rigorous energy code requirements and add only about one (1) percent of the total number of homes to the nation's housing stock per year.

Leadership Council Action: Approved

Resolutions Committee Action: Recommends Approval Custom Home Builders Committee Action: Recommends Approval Recommends Approval Construction. Codes & Standards Committee Action: Multifamily Council Board of Trustees Action: Recommends Approval State and Local Government Affairs Committee Action: Recommends Approval Climate Risk and Sustainability Committee Action: Recommends Approval **Buildings Systems Council Action:** Recommends Approval Remodelers Council Board of Trustees Action: Recommends Approval Federal Government Affairs Committee Action: Recommends Approval Single-Family Builders Committee Action: Recommends Approval

Energy & Green Codes and Standards Subcommittee of the

Construction, Codes & Standards Committee Action: Recommends Approval

Please note: if approved, this resolution will update and replace existing policy (2008.2 No. 5 Cost Effective and Affordable Energy Codes and Standards) that is due to sunset.