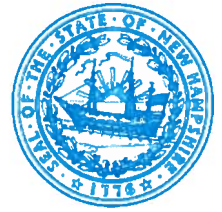




The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

January 16, 2019

The Honorable Jeffrey Goley, Chair  
Executive Departments and Administration Committee  
Legislative Office Building, Room 306  
Concord, New Hampshire 03301

**Re: House Bill 247, relative to the definition of the state building code**

Dear Chair Goley and Members of the Committee:

Thank you for the opportunity to testify on House Bill 247. This bill amends the definition of the state building code in RSA 155-A:1, I to include the majority of the chapters of the 2015 International Codes developed by the International Code Council, excluding the 2015 International Energy Conservation Code (IECC). This retains the 2009 IECC as the statewide building energy code. The New Hampshire Department of Environmental Services (NHDES) takes no position on this bill as drafted, but offers the following information for the committee's consideration.

Energy for heating, cooling and electrical use in residential and commercial buildings accounts for about half of all energy consumed in the state. By reducing building-energy consumption, energy-efficiency measures are recognized as having a direct, positive impact on public health and the quality of our natural environment. Modern building-energy codes are recognized as one of the most cost-effective measures to reduce energy demand in the commercial and residential building sector.<sup>1,2</sup> Adoption of the 2015 IECC, therefore, would lead to a significant reduction in energy demand in buildings, lowering emissions of both smog-forming compounds and particle pollution that cause direct health impacts. It is expected that adoption of the 2015 IECC could reduce greenhouse gas emissions, which are the leading cause of climate change, by nearly 20 percent in multi-family homes and 30 percent in single-family homes.<sup>3</sup>

Adoption of the 2015 IECC would also result in significant economic benefits for the state. An analysis conducted by the US Department of Energy projected that residential buildings in New Hampshire, including both single and multi-family dwellings, would experience a 20.8 percent reduction in

<sup>1</sup> The 2009 New Hampshire Climate Action Plan<sup>1</sup> ("the Plan") recognized the importance of building codes as a strategy in mitigating climate change impacts. CCPTF (2009). The 2009 NH Climate Action Plan: A Plan for New Hampshire's Energy, Environmental and Economic Development Future, [http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action\\_plan/nh\\_climate\\_action\\_plan.htm](http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/nh_climate_action_plan.htm).

<sup>2</sup> The Edison Foundation. [Utilities and Building Energy Codes: Air Quality and Energy Savings Opportunities](http://www.imt.org/uploads/resources/files/IEE-IMT-UtilitiesAndBuildingEnergyCodes_FactSheet.pdf). Available at: [http://www.imt.org/uploads/resources/files/IEE-IMT-UtilitiesAndBuildingEnergyCodes\\_FactSheet.pdf](http://www.imt.org/uploads/resources/files/IEE-IMT-UtilitiesAndBuildingEnergyCodes_FactSheet.pdf). (Describing the cost of energy codes and standards as 1.1 cents/kWh, or 1/3 the cost of the average residential program.

<sup>3</sup> US DOE (2015). [National Cost-Effectiveness of the Residential Provisions of the 2015 IECC](https://www.energycodes.gov/sites/default/files/documents/2015IECC_CE_Residential.pdf), Pacific Northwest National Labs, [https://www.energycodes.gov/sites/default/files/documents/2015IECC\\_CE\\_Residential.pdf](https://www.energycodes.gov/sites/default/files/documents/2015IECC_CE_Residential.pdf).

[www.des.nh.gov](http://www.des.nh.gov)

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095  
(603) 271-3503 • Fax: 271-2867 TDD Access: Relay NH 1-800-735-2964

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House Executive Departments and Administration Committee  
January 16, 2019  
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energy consumption if built to the 2015 IECC when compared to the 2009 IECC.<sup>4</sup> The reduced energy consumption equates to an average annual avoided-energy cost of \$542 across single and multi-family homes in the southern tier of the state, and an average annual avoided-energy cost of \$693 in the northern tier.<sup>5</sup> The analysis found that the energy-cost savings would result in cash positive situations within three months and would pay for the energy-efficiency measures in just three to four years.<sup>6</sup> Over the life of a 30-year mortgage, homeowners were projected to realize \$8,575 in avoided-energy costs in southern New Hampshire and \$10,258 in northern areas. As energy prices rise, the energy cost savings would continue to increase. In addition to saving money for owners and occupants, the reduced energy demand can reduce energy costs for all New Hampshire ratepayers by delaying or eliminating the need for additional electric generation facilities or transmission upgrades. In turn, those saved energy dollars may be spent on goods and services that more directly support the local economy.

Achieving the potential environmental and economic benefits is contingent on installing the appropriate measures during initial construction or major renovations. Not only would the owners and occupants realize benefits from day one, but incorporating energy efficiency measures at the time of construction is one of the most cost-effective strategies for reducing fuel and utility costs otherwise borne by the consumer.<sup>7</sup>

Thank you again for the opportunity to comment on HB 247. If you have any questions or require further information, please contact either Chris Skoglund, Climate and Energy Program Manager, ([Christopher.Skoglund@des.nh.gov](mailto:Christopher.Skoglund@des.nh.gov), 271-7624) or Rebecca Ohler, Administrator, Technical Services Bureau ([Rebecca.Ohler@des.nh.gov](mailto:Rebecca.Ohler@des.nh.gov), 271-6749).

Sincerely,



Robert R. Scott  
Commissioner

cc: Sponsors HB247: Representatives Beaudoin, McGuire, Senators Carson, Giuda

<sup>4</sup> US DOE (2015). National Cost-Effectiveness of the Residential Provisions of the 2015 IECC, Pacific Northwest National Labs, [https://www.energycodes.gov/sites/default/files/documents/2015IECC\\_CE\\_Residential.pdf](https://www.energycodes.gov/sites/default/files/documents/2015IECC_CE_Residential.pdf).

<sup>5</sup> This assumes \$2.96/gallon of heating oil, \$1.28/therm of natural gas, and \$0.18/kWh. Information was obtained from the New Hampshire Office of Strategic Initiatives "Fuel Prices" website: <https://www.nh.gov/osi/energy/energy-nh/fuel-prices/index.htm> on March 12, 2018.

<sup>6</sup> US DOE (2015). Cost-Effectiveness Analysis of the Residential Provisions of the 2015 IECC for New Hampshire, Pacific Northwest National Labs, [https://www.energycodes.gov/sites/default/files/documents/NewHampshireResidentialCostEffectiveness\\_2015.pdf](https://www.energycodes.gov/sites/default/files/documents/NewHampshireResidentialCostEffectiveness_2015.pdf).

<sup>7</sup> The Edison Foundation. Utilities and Building Energy Codes: Air Quality and Energy Savings Opportunities. Available at: [http://www.imt.org/uploads/resources/files/IEE-IMT-UtilitiesAndBuildingEnergyCodes\\_FactSheet.pdf](http://www.imt.org/uploads/resources/files/IEE-IMT-UtilitiesAndBuildingEnergyCodes_FactSheet.pdf). (Describing the cost of energy codes and standards as 1.1 cents/kWh, or 1/3 the cost of the average residential program.)