

Submitted Via Email

August 5, 2025

Theresa Smith, Hearing Officer
Delaware Department of Natural Resources and Environmental Control
Office of the Secretary
89 Kings Highway
Dover, DE 19901

RE: RECA Comments Supporting the Adoption of the 2024 *International Energy Conservation Code* as the Delaware Building Energy Conservation Code

Dear Ms. Smith,

The Responsible Energy Codes Alliance submits these comments in response to the proposed adoption of the 2024 *International Energy Conservation Code (IECC)* and *ASHRAE Standard 90.1-2022* as the Delaware Building Energy Conservation Code, as noticed in the July 1, 2025 Delaware Register.¹ We generally support the adoption of the 2024 *IECC* as the foundation for a range of energy efficiency, resiliency, and environmental benefits for the owners and occupants of buildings in Delaware. The proposed Residential Building Energy Conservation Code includes various amendments to the 2024 *IECC*, which we understand are intended to achieve statutory goals for zero net energy readiness.² Although RECA does not generally oppose strengthening amendments, our comments are focused on the value of using the framework of the 2024 *IECC* to achieve these goals. **As a result, we recommend that the Department adopt the 2024 *IECC* as a minimum efficiency standard with additional improvements the Department deems necessary to comply with state statutes.**

1. The 2024 *IECC* Will Provide Consistent Energy and Cost Savings

The *IECC* is the most widely adopted model energy code for residential construction, and earlier versions have been adopted in Delaware and nearly every state that has a statewide energy code. The *IECC* has improved in overall efficiency with every new edition, providing straightforward energy and cost savings for homeowners and providing an important policy tool for federal, state and local governments to achieve energy efficiency and carbon reduction goals.

¹ See 29, Del. Reg. Regs. 27 (July 1, 2025).

² 16 Del.C. §7602

The current Delaware Residential and Commercial Energy Conservation Codes are based on the 2018 *IECC* and *ASHRAE* Standard 90.1-2016. Adopting the new 2024 *IECC* and *ASHRAE* Standard 90.1-2022 presents an important opportunity for the state to upgrade to the current version of the model energy codes while capturing significant additional reductions in energy use and emissions and providing long-term benefits for building owners.

In accordance with federal law, the U.S. Department of Energy (DOE) analyzes the model energy codes and publishes climate zone-specific energy cost savings expected to be generated by each new edition of the *IECC* for residential construction and *ASHRAE* Standard 90.1 for commercial construction (which is a referenced compliance option in the *IECC* commercial provisions). Although DNREC is proposing to incorporate efficiency improvements that go beyond the model energy codes, even if the state were to adopt the 2024 *IECC* and *ASHRAE* 90.1-2022 unamended, the energy savings would be substantial. As indicated in the summary tables of DOE findings below, the owners and occupants of both residential and commercial buildings in Delaware stand to benefit from significant energy cost savings with the adoption of the most recent editions of the model energy codes.

Table 1. Summary of U.S. DOE Analyses of Energy Savings Comparing 2018, 2021, and 2024 <i>IECC</i> for Climate Zone 4		
Model Energy Code	Annual Energy Cost Savings	30-year Life Cycle Cost Savings
2018 <i>IECC</i> to 2021 <i>IECC</i> ³	\$205	\$2,243
2021 <i>IECC</i> to 2024 <i>IECC</i> ⁴	\$177	\$3,790

³ U.S. Dep’t of Energy, *National Cost Effectiveness of the Residential Provisions of the 2021 IECC* at iii, 21 (June 2021), available at https://energycodes.gov/sites/default/files/2021-07/2021IECC_CostEffectiveness_Final_Residential.pdf.

⁴ U.S. Dep’t of Energy, *National Cost Effectiveness of the Residential Provisions of the 2024 IECC* at iv, 29 (Jan. 2025), available at https://energycodes.gov/sites/default/files/2025-01/2024_IECC_CostEffectiveness_Residential_Final.pdf.

Table 2. Summary of U.S. DOE Analyses of Energy Savings Comparing 2016, 2019, and 2022 Editions of ASHRAE 90.1-2019 to ASHRAE 90.1-2022 for Climate Zone 4

Model Energy Code	Annual Energy Cost Savings	30-year Life Cycle Cost Savings
ASHRAE Std 90.1-2016 to 2019 ⁵	\$0.02-0.08/sq.ft.	\$1.83-13.86/sq.ft.
ASHRAE Std 90.1-2019 to 2022 ⁶	\$0.017/sq.ft.	\$0.95-3.68/sq.ft.

The adoption of the most recently published model energy codes will save homeowners and building owners in Delaware thousands of dollars over 30 years. These savings can be accomplished cost-effectively using materials and methods available today, while creating new jobs and spurring economic activity within the state.

2. Updated Building Energy Codes Will Bring Health, Safety, Welfare, Resiliency, and Equity Benefits.

Efficient buildings with lower operating costs will also contribute to the health, safety, and welfare of building occupants in several ways. The U.S. Energy Information Administration recently reported that nearly one in three households struggle to pay energy bills or to maintain adequate temperatures in their homes every year. One in five households reported reducing or foregoing basic necessities like food or medicine to pay energy bills.⁷ More efficient buildings provide a range of additional benefits, including better indoor environmental quality and increased occupant comfort.⁸ More efficient buildings are also associated with lower foreclosure rates.⁹ Efficient buildings also play critical roles in

⁵ See U.S. Dep't of Energy, *National Cost Effectiveness of ANSI/ASHRAE/IES Standard 90.1-2019* at 5.6-5.8 (July 2021), available at https://energycodes.gov/sites/default/files/2021-07/90.1-2019_National_Cost-Effectiveness.pdf.

⁶ See U.S. Dep't of Energy, *National Cost Effectiveness of ANSI/ASHRAE/IES Standard 90.1-2022* at 45-46 (Dec. 2024), available at https://www.energycodes.gov/sites/default/files/2025-01/90.1-2022_National_Cost-Effectiveness.pdf.

⁷ See U.S. Energy Information Administration, *2020 Residential Energy Consumption Survey (RECS)*, available at <https://www.eia.gov/consumption/residential/data/2020/hc/pdf/HC%2011.1.pdf>.

⁸ See U.S. Environmental Protection Agency, *Improving Indoor Air Quality*, available at <https://www.epa.gov/indoor-air-quality-iaq/improving-indoor-air-quality>.

⁹ See UNC Center for Community Capital and Institute for Market Transformation, *Home Energy Efficiency and Mortgage Risks* (March 2013), available at http://www.imt.org/uploads/resources/files/IMT_UNC_HomeEEMortgageRisksfinal.pdf.

community and household resilience.¹⁰ Buildings constructed to the latest efficiency standards can improve passive survivability during extreme heat or cold weather events.

Efficient buildings can also play a substantial role in reducing energy and housing inequity. According to a recent report by the American Council on an Energy Efficient Economy, the negative impacts of high energy bills are felt more acutely in lower-income households, which spend three times more of their income (on a percentage basis) on energy costs as compared to the median spending of non-low-income households. Black, Hispanic, and Native American households, as well as households with older adults, all have disproportionately higher energy burdens as compared to the national median households.¹¹ It is vitally important that every new building be constructed in a way that minimizes operation and maintenance costs for owners and occupants, since these buildings will be part of Delaware's building stock for 70 years or more.

3. Conclusion

RECA's members and supporters have been involved in energy code development and adoption for decades, and we offer our assistance and experience as you work to maximize energy efficiency in residential and commercial buildings. Please contact us if you have any questions or would like to discuss how RECA can be of assistance.

Sincerely,

Eric Lacey
RECA Chairman

¹⁰ International Code Council, *The Important Role of Energy Codes in Achieving Resilience* at 13, available at https://www.iccsafe.org/wp-content/uploads/19-18078_GR_ANCR_IECC_Resilience_White_Paper_BRO_Final_midres.pdf. "Using energy codes to provide enhanced passive survivability provides significant co-benefits. Community and individual resilience is enhanced while building owners and tenants reap energy efficiency related rewards everyday in the form of lower energy bills and greater cost certainty."

¹¹ American Council for an Energy Efficient Economy, *How High Are Household Energy Burdens?* at iii (Sept. 2020), available at <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>.

RECA is a broad coalition of energy efficiency professionals, regional efficiency organizations, product and equipment manufacturers, trade associations, and environmental organizations with expertise in the development, adoption, and implementation of building energy codes nationwide. RECA is dedicated to improving the energy efficiency of homes throughout the U.S. through greater use of energy efficient practices and building products. It is administered by the Alliance to Save Energy, a non-profit coalition of business, government, environmental and consumer leaders that supports energy efficiency as a cost-effective energy resource under existing market conditions and advocates energy-efficiency policies that minimize costs to society and individual consumers. Below is a list of RECA Members that endorse these comments.

Air Barrier Association of America

Alliance to Save Energy

American Chemistry Council

American Council for an Energy-Efficient Economy

CertainTeed LLC

Energy Efficient Codes Coalition

EPS Industry Alliance

Extruded Polystyrene Foam Association

Institute for Market Transformation

Johns Manville Corporation

Knauf Insulation

National Electrical Manufacturers Association

National Fenestration Rating Council

North American Insulation Manufacturers Association

Owens Corning

Polyisocyanurate Insulation Manufacturers Association