

Comments on the Vermont Residential Building Energy Standards (RBES) Amendments -- Signed by
June E. Tierney DPS Commissioner, 4/25/23

Comments from Andrew M. Shapiro, Energy Balance, Inc., Montpelier VT 05602

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I have been a building energy consultant in Vermont since 1988, working on residential, commercial and institutional buildings, new and retrofit, from single family homes to multi-family, ranging in size up to 50,000 square feet. I hold an engineering degree. Please consider my following comments.

1. The 2024 Residential Building Energy Standards were developed with an extensive two-year rule making process that resulted in the 2024 standard, which included a year of delay of implementation. A thoughtful process was led by the Public Service Department (PSD) with a working group and stakeholders from various sectors. This rulemaking should not be over-ridden without a similar process of engagement of the working group and stakeholders, including public meetings, testimony and analysis of cost-effectiveness.
2. The study undertaken in support of the 2024 code development showed that the 2024 code is cost effective from a consumer perspective. That is, when a homeowner buys a new home built to the 2024 standard the annual energy cost savings are greater than the incremental cost of the mortgage to support the higher level of efficiency. The study showed that the upgrade is cash flow positive for the homeowner. In other words, it cost less to own the home built to the 2024 standard than it did to own the same home built to the 2020 standard. This is a far more relevant metric than construction cost when considering affordability, since almost all construction is financed over time.
3. The PSD has a study planned for Spring to re-assess the baseline efficiency and compliance to 2020 and 2024 Standards, with results expected by May, including HERS rating to determine compliance to codes and cost of non-compliance. It makes no sense to make conclusions before this study is completed. Costs for construction and fuel have increased since this analysis was done and the cost/benefit analysis should be updated before declaring the 2024 standard not cost-effective.
4. The 2024 code is not only cost-effective, it improves building durability and occupant comfort and health. In my consulting practice, lack of whole house ventilation (required in the 2024 standard) has led to moisture and mold problems. These problems are costly to repair and mold can have significant health impacts.
5. Disregarding the 2024 Standard creates market confusion. There have been two years of training on the 2024 code. Consistency is important for businesses -- they need to have clear rules that do not change unnecessarily. Th Governor has introduced significant confusion by attempting to

promulgate this rule during the time when builders are planning and costing out projects for the Spring. To blame this confusion on the Energy Standards is misguided. This rule should be rescinded immediately to create certainty for builders for this building season, with a considered process for any revision to take place instead.

6. If the Governor wants to be helpful in making buildings efficient and affordable, he should name the Division of Fire Safety as the authority having jurisdiction over the Energy Standards. At present there is no enforcement of the Standards, disadvantaging builders who abide by the rules compared to those that do not. Surveys have indicated significant lack of adherence to building to the Standards that are now in place.
7. Vermont has adopted a Climate Action Plan to reduce greenhouse gas emissions. Adopting a rule that increases costs to homeowners while increasing greenhouse gas emissions is in direct opposition to that Plan.
8. The high cost of construction, and the rapid rise of those costs, is NOT caused by the 2024 RBES. The incremental cost for going from 2020 to 2024 code is a very small fraction of the general rise in materials and labor costs.
9. The proposition that designers/builders can choose between the 2020 or 2024 standard is a smoke screen for deleting the 2024 standards: why would a builder --- who must be competitive to get a job -- bid a project that is a bit more expensive following the 2024 standard? This is despite the fact that the cost of ownership – financing + energy costs – is lower with the 2024 code.