



Massachusetts Department of Energy Resources
100 Cambridge Street, 10th Floor
Boston, MA 02114

August 10, 2022

Dear Commissioner Woodcock, Secretary Kennealy & Secretary Card:

Thank you for the opportunity to submit input on DOER's June 2022 draft of the *Municipal Opt-In Specialized Stretch Energy Code*.

As I've noted in previous letters about draft stretch codes, these comments are informed by my experience consulting with homeowners on energy upgrades, having been certified by the Building Performance Institute as a building analyst, serving on my town's energy committee for 12 years and counting, and engaging as a climate activist.

First, thank you for making the following changes to the draft Specialized Stretch Energy Code:

- Applying HERS retrofit standards to additions and renovations, to cover changes to existing buildings that will make up most of the buildings in use in 2050.
- Requiring significant energy efficiency increases for residential and commercial buildings.
- Incorporating the industry-standard definition of net zero buildings.
- Appointing building energy experts to a Technical Advisory Group.
- Requiring all multi-family housing over 12,000 SF to meet Passive House standards.

I urge you to incorporate the following recommendations to further strengthen the code, to address the climate crisis in an equitable manner, with emission reductions sufficient to move MA quickly toward our building sector's GHG targets:

- **As recognized by its inclusion in your prior code draft, to truly realize net zero emissions, buildings must include the embodied GHG emissions of building materials in their emission calculations. The use of high GWP building materials may result in the immediate & significant release of greenhouse gases that can take decades to recoup with operational energy savings, time we do not have. This component of the code should be restored in DOER's final regulations.**
 - **All buildings should be required to use low-carbon materials.** Larger buildings should also be required to provide Whole Building Life Cycle Analysis modeling, to assess the lifecycle impact of a building's components.
 - Buildings using heat pumps and refrigeration systems should be required to use the lowest GWP refrigerant available, to annually monitor these refrigerants for leaks, and to dispose of them at their end of life in a manner capturing the HFCs, to avoid their release into the atmosphere.

- **Only all-electric new construction, additions, and renovations should be permissible under the Specialized Stretch Code.** All-electric buildings are not only feasible but are being constructed across MA. New fossil fuel buildings will only extend our long-term use of high GHG-emitting fuels, making it less likely we will meet our 2030 emission reductions.

As you are aware, in her March 18, 2022, letter to DOER, Attorney General, Maura Healy determined that the Specialized Stretch Code can legally require all-electric construction in municipalities that adopt this code.

- Municipalities that adopt the Specialized Stretch Code should be allowed to opt-in as soon as the code goes into effect.
- All buildings should be required to install on-site solar in proportion to the square feet available with sufficient solar exposure.
- DOER should report on how 2030 building sector greenhouse gas emission limits meet the EEA's legally mandated 2025 and 2030 emissions limits and model progress toward these targets, using various scenarios.
 - To that end, owners of new buildings falling under this code should be required to report annual building performance, to ensure that they are operating as designed.
- Unlike electric heat pumps that run efficiently on an increasingly clean and renewable electric grid, **fossil fuels used to heat and cool buildings only increase GHG emissions.** And contrary to statements made by area propane companies, propane has even [higher GHG emissions](#) per Btu than natural gas and is **not** a source of clean energy!

The Massachusetts Clean Energy & Climate Plan for 2025 and 2030 states that, "Heating in buildings by oil and gas represented 30% of statewide GHG emissions in 2020. **The Commonwealth's primary strategies to reduce emissions from buildings** are to improve the energy efficiency of buildings **and convert the heating systems for homes and businesses to electric heat pumps.**"

- The threshold for triggering HERS compliance for renovations to existing homes should be set at over 50% of a home's square footage, rather than based on the assessed value of a property, which inequitably impacts smaller and lower valued homes while being less likely to affect higher value and larger properties.
- Cost studies should be revised to reflect current gas and electricity prices and include the substantial cost premiums for retrofitting fossil fuel heated buildings in the future.

With daily evidence of the climate emergency intensifying, the Specialized Stretch Energy Code should require new and renovated buildings to meet net zero standards in material and operational GHG emissions.

Thank you for considering my comments.

Sincerely,
Sally Pick