



CITY OF SOMERVILLE, MASSACHUSETTS  
KATJANA BALLANTYNE  
MAYOR

August 12, 2022

Commissioner Patrick Woodcock  
Department of Energy Resources  
100 Cambridge Street Suite 1020  
Boston, MA 02116

Sent via email to [stretchcode@mass.gov](mailto:stretchcode@mass.gov)

Re: City of Somerville Comment on the Municipal Opt-in Stretch Code Draft Regulations

Dear Commissioner Woodcock,

Thank you for providing an opportunity to comment on the draft municipal opt-in specialized stretch energy ("MOSSE," or "net zero") code pursuant to *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy* ("the Act"). MGL ch. 25A § 6 §§14.

The City of Somerville strongly supports the DOER's efforts to create MOSSE. The City shares similar greenhouse gas emissions profiles to neighboring communities; the majority of emissions stem from the built environment. Somerville has long advocated for forward-thinking building policies and regulations. In recent years, Somerville began implementing a rigorous climate action plan, Somerville Climate Forward. The plan aims to equitably mitigate greenhouse gas emissions and adapt to climate change.

As a result, the City has enacted ordinances, programs, and policies to transition away from fossil fuels to support greenhouse gas emissions reduction. The updated Zoning Ordinance is one example.<sup>1</sup> Today in Somerville, there are more than 200 PHUUS housing units in various stages of development, with more than 30 designated affordable. We look forward to utilizing the new tools provided by the DOER to achieve substantial, necessary emissions reduction goals. In coordination with our neighboring cities of Boston and Cambridge, we offer the following comments for your consideration.

First, Somerville commends the DOER for creating MOSSE and proposing changes to the stretch energy code. It is critical that the Commonwealth maintains its reputation as a climate leader. Both codes, along with the base energy code, help maintain this standing. MOSSE consists of necessary steps to reduce and adapt to climate change that are urgently needed and long overdue. This is a significant, positive step forward. We look forward to working with the DOER to continue building upon this strong foundation.

Next, the City supports the DOER establishing strong thermal barriers that foster energy conservation, efficiency, and cost-effective electrification. In addition to reducing emissions, the measures help curb

---

<sup>1</sup> [www.somervillezoning.com/developmentreview](http://www.somervillezoning.com/developmentreview)



CITY HALL • 93 HIGHLAND AVENUE • SOMERVILLE, MASSACHUSETTS 02143

(617) 625-6600, EXT. 2100 • TTY: (866) 808-4851 • FAX: (617) 625- 3434 • E-MAIL: [mayor@somervillema.gov](mailto:mayor@somervillema.gov)

[www.somervillema.gov](http://www.somervillema.gov) • [FB.com/SomervilleCity](https://www.facebook.com/SomervilleCity) • [Twitter @SomervilleCity](https://twitter.com/SomervilleCity)

energy intensity. MOSSE can directly impact the health and safety of Massachusetts residents for decades to come. Resiliency features, such as insulation and air source heat pumps, will help keep buildings comfortable during extreme heat events. As discussed in previous comments, health benefits from improved indoor air quality are further experienced through energy efficiency and all-electric design, including the disallowance of gas stoves. These measures can also reduce energy burdens. In addition, there are many resources to reduce upfront costs, including financial incentives and zero- to low-interest financing, available at all levels of government.<sup>2</sup>

The components of the proposed regulation have been well studied by the DOER.<sup>3</sup> Beyond DOER's analysis, historically, successful environmental regulations have set standards and allowed industry to rise to meet them. The Thermal Energy Demand Intensity ("TEDI") requirements are well designed, attainable, and necessary for the Commonwealth to meet obligations to reduce greenhouse gas emissions. We support the thermal bridging, ventilation energy recovery components, as well as TEDI requirements in commercial buildings.

70% of the buildings in Somerville's housing inventory are 1-4 family homes.<sup>4</sup> The proposed HERS requirements can incentivize low-carbon, strategic building practices. As the DOER cost analysis and case studies show, these levels are feasible for low-rise residential. We support the more stringent HERS 0 or PHIUS Zero requirements for mixed-fuel homes over 4,000 square feet and ask the DOER to increase efficiency and electrification requirements for commercial mixed-fuel buildings overall. For example, increasing the HERS rating requirements will more adequately incentivize fuel switching. Additionally, we support the mixed fuel pathway option being limited to high ventilation and high intensity loads that may necessitate use of fossil fuels at this time. It would be great to see more specific language limiting new fossil fuel equipment to high intensity building types and end uses with requirements for partial electrification.

Moreover, the requirement for multifamily buildings with six or more stories to meet Passive House certification should be moved up to January 2023. As stated in previous comments, PHIUS is currently feasible and building quality is an equity issue. Large buildings with multiple occupants should be held to the same standards as small buildings that are more likely owner-occupied. This way, tenants may experience improved environmental benefits and do not fall victim to the split-incentive.

We are excited to see that the proposal includes existing buildings undergoing additions, alterations, and change of use/occupancy. We encourage the DOER to allow requirements to apply to renovations in residential and commercial buildings, too. According to the Commonwealth's 2050 Decarbonization Roadmap, "electrification and efficiency strategies rely on infrequent opportunities to change out...equipment" including at "end-of-life or major renovation. Leveraging these opportunities early is essential for keeping costs low."<sup>5</sup>

Next, we strongly support the DOER including an all-electric pathway for buildings. From a technical perspective, it may not be necessary to install new fossil fuel systems in residential and commercial new construction that meet the high-performance envelope requirements. Energy loads may be easily met with renewable thermal technologies. The current structure of the mixed fuel pathway may compel fuel

---

<sup>2</sup> [www.somervillema.gov/r2nz](http://www.somervillema.gov/r2nz)

<sup>3</sup> <https://www.mass.gov/lists/stretch-energy-code-development-support-documentation>

<sup>4</sup> <https://www.somervillema.gov/sites/default/files/housing-needs-assessment-2021.pdf>

<sup>5</sup> <https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download> at 44.

switching; however, as we have learned through local and state renewable thermal programs, in this transition period there is no guarantee that developers will choose the all-electric option in favor of the incumbent gas technologies.

Under the proposed definition of net-zero, new buildings would not be required to achieve net zero emissions until 2050. As written, the definition describes a “net zero emissions ready” building, or a building that could be net-zero today if the owner opted to purchase 100% renewable power. As mentioned in the City of Cambridge’s comment, “the definition of a net zero building should mean that a building emits no greenhouse gas emissions from onsite combustion and will have zero total greenhouse gas emissions once grid electricity is fully renewable.” On its face, the approach to define net zero buildings to include fossil fuels through 2050 does not align with the Commonwealth’s 2050 Decarbonization Roadmap.<sup>6</sup> Paired with both stringent energy efficient and all-electric requirements, there is opportunity for substantial, incremental progress, but there remain opportunities to accelerate the necessary transition to Zero-Energy or All-Electric buildings, per proposed definitions by DOER.

Overall, the base, optional stretch, and optional net-zero energy codes should be distinct, with the top tier setting the highest standard. The stretch code should retain the proposed edits by the DOER. The DOER could make the net-zero code more distinct by explicitly stating the code sets minimum standards for municipalities. A second option is to grant voluntary municipalities the authority to choose one or more pathways identified in the proposed residential and commercial codes as their compliance options, and not be required to provide all three pathways as an option to developers. This authority could be available for municipalities to use either across the board or for specific types of building. Another alternative would be to allow municipalities to have one requirement across the board, but with the authority to grant variances to use the other pathways. As a result, All-Electric buildings can reduce lock-in emissions over the next several decades, reduce financial and resource expenditures for building electrification retrofits, and improve equity.

Regarding electrification standards, we are concerned the proposed language may set state maximums below current and planned local minimum standards. A potential example of this can be seen with electric vehicles. The proposed residential EV Ready Space definition is limited to 20% spaces equipped with level two charging capabilities within six feet of the parking space with designated space on the electric panel. It also includes two exceptions that apply to all other residential-use buildings, including that the state requirement “shall not be greater” than local requirements and that the state’s “requirement will be considered met if all spaces which are not EV Ready are separated from the premises by a public right-of-way” (R404.4). Commercial-use EV Ready Space requirements are set at a maximum of 20%.

A 20% EV Ready Space standard is less than the standard Boston, Cambridge, and Somerville are currently utilizing. All three cities require or recommend at least 25% total parking spaces have electric vehicle supply equipment and remainder be EV Ready Spaces on day one. In the proposed language, electric vehicle supply equipment is not included as a requirement. We also anticipate on-street EV charging to be a critical component of building out EV charging infrastructure in densely populated areas that lack

---

<sup>6</sup> <https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download>

private parking options.<sup>7</sup> Furthermore, providing on-street electric vehicle charging can be used by developers to demonstrate how a development project is providing a neighborhood benefit.

We applaud the DOER's support for electric vehicles, but the proposed requirements may not be sufficient to support the 2,000-6,600 electric vehicles projected to be in Somerville by 2025.<sup>8</sup> There is also a concern for a potential loophole in the solar PV ready requirements. For building roofs that do not support onsite solar, DOER may consider adding an alternative compliance requirement (e.g., purchasing Class I RECs for 10 years).

While these are a few examples, the preservation of municipal flexibility should apply to all components of MOSSE. DOER should make clear that any requirements (including but not limited to electric vehicles, solar PV, etc.) do not limit a municipality's ability to require, via zoning or otherwise, more stringent compliance for buildings, whether or not subject to specific provisions in the stretch or net zero code. Through the DOER's efforts, our hope is that the final regulation will not hinder the advancements of municipalities by imposing ceilings on local climate regulations. We encourage the DOER to provide a clear pathway for municipalities to voluntarily mandate Zero-Energy or All-Electric buildings with limited exceptions.

The City of Somerville applauds the DOER for creating a first of its kind code for the Commonwealth. We encourage DOER to continue strengthening the regulations to progress our shared emissions goals. We support the DOER's efforts to create a net-zero stretch code that both complements and enhances municipal efforts. We look forward to the outcome of this proceeding and future opportunities to collaborate with the DOER.

Thank you for the opportunity to provide public comment. We appreciate your time and consideration.

Sincerely,



Katjana Ballantyne  
Mayor

---

<sup>7</sup> [https://www.somervillema.gov/sites/default/files/EVCharging%20Report\\_Final.pdf](https://www.somervillema.gov/sites/default/files/EVCharging%20Report_Final.pdf) at 11 through 13.

<sup>8</sup> [https://www.somervillema.gov/sites/default/files/EVCharging%20Report\\_Final.pdf](https://www.somervillema.gov/sites/default/files/EVCharging%20Report_Final.pdf) at 9, 10.