



February 10, 2023

Commissioner Patrick Woodcock  
Department of Energy Resources  
100 Cambridge Street, 9th Floor  
Boston, MA 02114

*By Electronic Submission to [green.communities@mass.gov](mailto:green.communities@mass.gov)*

RE: Municipal Fossil Fuel Free Building Construction and Renovation Demonstration Project  
Proposed Regulations (225 CMR 24.00) and Model Rule

Commissioner Woodcock,

The City of Boston respectfully submits these comments on the Department of Energy Resources' (the "Department") proposed regulations and model rule for the Municipal Fossil Fuel Free Building Construction and Renovation Demonstration Project (collectively, the "Proposal") pursuant to Section 84 of the Act Driving Clean Energy and Offshore Wind, St. 2002, c. 179. While the City of Boston is already taking steps to mitigate emissions from buildings, the Fossil Fuel Free Building Construction and Renovation Demonstration Project (the "Demonstration Project") can further accelerate decarbonization, strengthen the green economy, and help ensure that Bostonians and other residents of the Commonwealth live and work in buildings with better indoor air quality.

In brief, Boston supports the Proposal and recommended relationship to the Specialized Energy Code, specifically 225 CMR 22 Appendix RC and 225 CMR 23 Appendix CC. This approach builds on a system that is familiar to the regulated community, and that was subject to public input, and enables Participating Communities to utilize existing enforcement mechanisms.

This letter recommends several revisions to the Policy to advance equitable distribution of the Demonstration Project's benefits and create additional certainty for municipalities participating in the Demonstration Project and for the developers operating in those jurisdictions. As discussed further below, these recommendations include the following:

- The Proposal should include diversity of public health profiles in the selection criteria for Substitute Communities;

- Affected cities and towns should be able to participate in any consultation between the Department and electric distribution companies regarding localized electric grid investments needed to support the Demonstration Project; and
- Municipalities should not be required to obtain additional Local Approval prior to filing an application if they have already approved pursuing a fossil fuel-free construction ordinance or bylaw that is consistent with the Proposal.

These comments also suggest several revisions to increase clarity around implementation of the Demonstration Project.

**1. The Proposal is an Important Step in Advancing the Climate Change Mitigation Commitments of the Commonwealth and Municipalities like Boston and Utilizes Measures that Are Achievable, Cost-Effective and Beneficial to Residents**

Pursuing fossil fuel-free construction is feasible, cost-effective and consistent with the continued development of new multifamily housing.<sup>1</sup> Research and experience show that there is little-to-no cost increase for building multi-family housing to a net-zero standard, indicating that it is feasible today to construct high-performance, fossil fuel-free housing, delivering the long-term benefits of increased air quality, lower energy cost burdens, reduced carbon emissions and enhanced thermal comfort to our residents.

To the extent fossil fuel-free building techniques are new to some developers, we support the Proposal's suggestion that Participating Communities collaborate with the Department on outreach and training regarding the Demonstration Project. The City has experience working with project applicants to integrate energy efficiency, renewable energy and other carbon emission reduction measures into building design and construction, and looks forward to continuing this collaboration.

Fossil fuel free construction will also help advance important public health and equity goals. As just one example, studies regarding the negative health impacts of gas stoves in residences underscore the benefits of developing fossil fuel-free construction. Gas stoves, particularly in poorly ventilated buildings, can emit methane and levels of nitrogen dioxide that exceed indoor

---

<sup>1</sup> Recent examples include 11 East Lenox Street (Roxbury), a 7 story building with 34 residential units; 380 Stuart Street (Back Bay), a 625,000 square foot, 27 story building with all-electric systems; and Boston University's Data Sciences Center (Kenmore), a 19-story building that leverages geothermal wells for heating and cooling and does not use natural gas.

and outdoor standards.<sup>2</sup> These emissions can exacerbate illnesses associated with air pollution, particularly in children.<sup>3</sup>

A diverse array of Participating Communities, measured from the perspective of both residents and building types, will not only increase the learning outcomes of the Demonstration Project but also help achieve an equitable distribution of the benefits.

## **2. The Proposal Should Include Diversity of Local Public Health Profiles as a Selection Criteria for Substitute Communities in order to Support Equitable Distribution of the Benefits of the Demonstration Project**

We support the opportunity for Substitute Communities to submit applications to participate in the Demonstration Project and appreciate the Proposal's attention to the process for adding these communities. In particular, we support the selection criteria outlined in Section 24.06(3)(a) of the Proposal. The enumerated community features should be expanded to include diversity in public health profiles, such as asthma rates. As noted above, ongoing research underscores the relationship between fossil fuels and public health, both at a macro scale with respect to generation and at the building level with respect to emissions from indoor gas-powered appliances. To the extent the Demonstration Project will lead to the development of homes that reduce exposure to harmful pollutants, the resulting benefits can vary based on the underlying health of the residents, which in turn is influenced by ambient air quality, which is often worse in environmental justice communities.

Section 24.06(3)(a) should be revised as follows:

Contribution to the overall Demonstration Project, including diversity of Participating Communities, such as gateway cities, environmental justice communities, diversity of demographics, **diversity in residential public health conditions**, diversity of size, scale of building development, and type of housing development.

---

<sup>2</sup> See e.g., Eric D. Lebel, Colin J. Finnegan, Zutao Ouyang, and Robert B. Jackson, Methane and NO<sub>x</sub> Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes, *Environmental Science & Technology* 2022 56 (4), 2529-2539 (estimating that natural gas stoves emit 0.8-1.3% of the gas they use as unburned methane); and Brady Seals and Andee Krasner, Health Effects from Gas Stove Pollution, Rocky Mountain Institute, Physicians for Social Responsibility, Mothers Out Front, and Sierra Club, 2020 (comparing indoor NO<sub>2</sub> emissions to outdoor standards from the Environmental Protection Agency, Canada and California and to indoor standards from Canada and the World Health Institute).

<sup>3</sup> See e.g., *id.*; Gruenwald, T., Seals, B.A., Knibbs, L.D., Hosgood, H.D., III Population Attributable Fraction of Gas Stoves and Childhood Asthma in the United States., *Int. J. Environ. Res. Public Health* 2023, 20, 75 ("Indoor gas stove use for cooking is associated with an increased risk of current asthma among children and is prevalent in 35% of households in the United States.")

**3. The Process for Evaluating Necessary Localized Electric Grid Investments Needs to be Open to Third-Party Input, Transparent and Accessible to Affected Communities**

We recognize the importance of understanding the capabilities of electric grids as communities move forward in planning and implementing electrification initiatives. Given this importance, discussions about electric grid capabilities should be open and transparent, particularly as the Proposal suggests using this information as a selection criteria for Substitute Communities (Section 24.06(3)(e)). Representatives of affected municipalities should be included in any consultation between the Department and electric distribution companies and should be able to present data for consideration by the Department. Municipalities bring localized knowledge and an important perspective to these conversations. At the time of a consultation, an affected municipality should be able to recommend additional participants, such as the Attorney General's Office or the Department of Public Utility. Any reports or other written conclusions from these consultations should be available to the public.

Section 24.06(e)(3) should be revised as follows:

Localized electric grid investments needed to support the Demonstration Project as determined through consultation between the Department, ~~and electric distribution companies,~~ **affected communities, and other parties that the Department and relevant affected communities agree should participate. Any report or other written conclusions from these consultations shall be available to the public.**

**4. The Proposal Should Tailor the Need for Local Approvals for Applications in order to Preserve Municipal Resources**

The Proposal currently provides that applications must include “[p]roof of Local Approval” (Section 24.04(a)(e)) and that eligibility criteria include Local Approval “on the subject matter of these regulations.” (Section 24.05(1)(b)). These requirements are in addition to providing the Department a copy of a filed home rule petition regarding the subject matter of the regulations. While we appreciate that the Department should focus its time and resources on reviewing applications that have requisite support to proceed, requiring Local Approval of a draft ordinance or bylaw could create an unnecessary procedural burden for municipalities.

Cities and towns that have already obtained Local Approval to pursue a fossil fuel-free construction ordinance or bylaw that is consistent with the Proposal should not be required to go through another Local Approval process before submitting an application. The combination of such prior Local Approval, which could take the form of a home rule petition, and a municipality's demonstrated commitment to collaborate with the Department (part of the

application pursuant to Section 24.04(c)(2)), should be sufficient to demonstrate the buy-in of any Prioritized or Substitute Community.

Section 24.04(1)(e) should be revised as follows:

**Proof of Local Approval, provided that Local Approval issued prior to the effective date of these regulations, including in the form of a filed Home Rule petition, shall be sufficient if such Local Approval to pursue a fossil fuel-free construction ordinance or bylaw is consistent with the definitions and applicability provisions of 225 CMR 24.00.**

Section 24.05(1)(b) should be revised as follows;

**Local Approval received on the subject matter of these regulations, provided that Local Approval issued prior to the effective date of these regulations, including in the form of a filed Home Rule petition, shall be sufficient if such Local Approval to pursue a fossil fuel-free construction ordinance or bylaw is consistent with the definitions and applicability provisions of 225 CMR 24.00.**

## **5. Several Aspects of the Proposal Could be Revised to Increase Clarity**

### 24.02 Definitions

- A. It would be helpful to clarify that the definition of “Fossil Fuel-free” refers to the direct use of fossil fuels, *i.e.*, that electricity from the grid is permitted. The Proposal could be revised by adding “**directly**” before the word utilize in the definition of Fossil Fuel-free.
- B. The proposed definition of “Major Renovation” refers to “a level 3 alteration *as defined in 225 CMR 22.00 and 23.00*” (emphasis added). However, the definition of a Level 3 alteration is not clearly provided in the cited regulations. For clarity and convenience of the Participating Communities and regulated community, we recommend that the Proposal directly provide a definition of “Major Renovation.”

### 24.04 Application Materials and Review Process

- A. Section 24.04(1)(a) requires that applications include a copy of a community’s home rule petition regarding the Demonstration Project, and specifies that Prioritized Communities do not need to update or resubmit their home rule petitions to be eligible for participation. (Section 24.04(a)(1)). This provision should be revised to clarify that there is also no re-submission requirement for Substitute Communities that file a home rule petition prior

to the promulgation of 225 CMR 24.00. Section 24.04(1)(a)(1) of the Proposal could be revised as follows: “Home rule petitions filed by Prioritized Communities **and home rule petitions filed by Substitute Communities prior to the promulgation date of these regulations** do not need to be updated or resubmitted to the general court to be eligible for participation.”

- B. Section 24.04(1)(c)(2) requires a “demonstrated commitment” to collaborate with the Department on data collection, reporting, and outreach/training. It would be helpful to clarify what constitutes a “demonstrated commitment.” For example, the Proposal could be revised as follows: “A demonstrated commitment, **such as a letter signed by an authorized representative of the city or town or relevant department, ...**”
- C. Section 24.04(1)(d) requires applications to include documentation to demonstrate that the applicant has achieved at least one of the three housing production eligibility thresholds set forth in 24.05(1)(c). Section 24.04(3)(c) provides that the final deadline to submit a complete application is November 10, 2023, but Section 24.04(3)(d) provides that Feb. 11, 2024 is the final deadline to meet the eligibility requirements, including the housing production requirements. These dates should be resolved to avoid confusion.

#### 24.07 Reporting and Assessment of Results

- A. Section 24.07(1)(e) should clarify that (i) the Department’s recommendations for the continuation or termination of the Demonstration Project shall consider input from Participating Communities, and (ii) that any termination will not impact existing ordinances or bylaws. The Proposal could be revised as follows: “Recommendations for the continuation or termination of the Demonstration Project **that consider, among other factors, input from Participating Communities.**”
- B. Sections 24.07(2)(a) and (b) should clarify that Participating Communities are required to submit estimated construction costs and third-party energy reporting only to the extent such information is already required by a Participating Community’s laws and is submitted by a project applicant. Section 24.07(2)(a) could be revised by adding “**if reported by an applicant**” to the end of the provision. Section 24.07(2)(b) could be revised as follows: “Electronic copies of any third-party energy reporting **submitted to a Participating Community by an applicant ...**”

#### Model Rule

- A. Section 3, regarding applicability, should clarify that the Demonstration Project would apply to other non-residential uses beyond commercial uses. The Proposal could be

revised as follows: “This restriction applies to residential and ~~commercial~~  
**non-residential** buildings ....”

- B. In Section 4, rather than direct Participating Communities to incorporate the entirety of 225 CMR 24.00, the Model Rule should specify the portions that create obligations for Participation Communities. Provisions such as those regarding application requirements, the Department’s review of applications, and reporting by utilities and the Department would not be appropriate for local ordinances and bylaws.

\* \* \*

The Proposal is an important step in positioning communities, and the Commonwealth, to address climate change via measures that will provide important co-benefits to our residents. Adoption of the recommendations discussed herein will support a more efficient implementation of the Demonstration Project and equitable distribution of the benefits.

Thank you for your consideration of these comments. We look forward to continuing to work with the Department to achieve our collective climate targets.

Sincerely,

A handwritten signature in black ink, appearing to be 'M. White-Hammond', written in a cursive style.

Chief Mariama White-Hammond  
Environment, Energy and Open Space  
City of Boston