

Article 12 **Amend General Bylaws – Municipal Opt-In –**
(Majority vote) **Specialized Stretch Energy Code**

To see if the Town will vote to replace Chapter V of the Bylaws of the Town of Acton entitled “Stretch Energy Code” with the “Specialized Energy Code” pursuant to the entirety of 225 CMR 22 and 23, including Appendices RC and CC, and future editions, amendments or modifications in substantially the form below, or take any other action relative thereto.

Chapter V: SPECIALIZED ENERGY CODE

V1. Purpose

The purpose of the Specialized Energy Code at 225 CMR 22.00 and 23.00, including Appendices RC and CC, is to provide a more energy efficient and low greenhouse gas emissions alternative to the Stretch Energy Code or the baseline Massachusetts Energy Code, applicable to the relevant sections of the building code for both new construction and existing buildings.

V2. Definitions

Effective Date – January 1, 2024.

International Energy Conservation Code (IECC) – The International Energy Conservation Code (IECC), a building energy code created by the International Code Council. The baseline energy conservation requirements of the MA State Building Code are the IECC with Massachusetts amendments, as approved by the Board of Building Regulations and Standards and published in state regulations as part of 780 CMR.

Specialized Energy Code – The energy code codified by the entirety of 225 CMR 22 and 23 including Appendices RC and CC, including the residential and commercial appendices added to the Massachusetts Stretch Energy Code, based on amendments to the respective net-zero appendices of the IECC to incorporate the energy efficiency of the Stretch Energy Code.

Stretch Energy Code – The energy code codified by the combination of 225 CMR 22 and 23 not including Appendices RC and CC.

V3. Specialized Energy Code

The Specialized Energy Code is herein incorporated by reference and shall apply to residential and commercial buildings in the Town of Acton after the Effective Date.

The Specialized Code is enforceable by the Building Commissioner, and by any inspector of the Town of Acton. Notwithstanding the foregoing, if the Town is accepted into the Department of Energy Resources Fossil Fuel-Free Demonstration Project, residential and commercial buildings in the Town shall, to the extent not otherwise exempt under any bylaws of the Town of Acton, be subject to the Specialized Energy Code modified as follows:

1. Low-rise Residential Code (225 CMR 22 Appendix RC): Sections RC102 and RC101 “Zero Energy Pathway” and “Mixed Fuel Pathway” shall not be permitted for use for new construction, and major renovations shall not install any new combustion equipment.
2. Commercial and All Other (225 CMR 23 Appendix CC): Sections CC103 and CC105 “Zero Energy Pathway” and “Mixed-Fuel Pathway” shall not be permitted for new construction, and major renovations shall not install any new combustion equipment.

Summary

The Stretch Energy Code, a stronger energy code than the base Massachusetts energy code, applies to every town in Massachusetts that has elected to become a Green Community, which has included Acton since 2010.

In 2022, the Massachusetts Governor signed into law legislation that included a requirement for the creation of an additional stronger stretch code that Towns could choose to opt-in to. The Department of Energy Resources (DOER) was given the job of creating this new code in line with the legislation language, and released the new regulations late in 2022.

Opting in to this new specialized stretch code will change new construction in a few ways:

- Increases the insulation and air sealing requirements for both new homes and major construction.
- Requires wiring to allow an electric car charging station in new single-family homes, and a higher percentage for commercial electric car charging readiness than in the base code.

The specialized stretch allows for three paths to compliance for new residential buildings.

1. A zero-energy pathway (where onsite renewable energy provides all the needed energy).
2. All-electric pathway
3. Mixed-fuel pathway

Residences over 4,000 sq ft are not allowed the mixed-fuel pathway.

The mixed fuel pathway also requires that wiring be sufficient for an eventual transition to all-electric, including a solar power generation requirement to mitigate the near-term emissions (with an exemption for shaded areas).

The commercial stretch code is similar but more complex. It includes new language on the sides of commercial buildings ('cladding'), allows for more paths to compliance, and has compliance requirements coming in two phases.

Choosing the specialized stretch code is a requirement for participating in the 10-Community Fossil-Fuel Free Demonstration project (Article 13).

Direct Inquiries to: John S. Mangiaratti, Town Manager: manager@actonma.gov / (978) 929-6611

Select Board Member: Jim Snyder-Grant: sb@actonma.gov / (978) 929-6611

Recommendations:	<u>Select Board</u> Recommended	<u>Finance Committee</u> No Recommendation
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Article 13 **Amend General Bylaws – Regulating Fossil Fuel Infrastructure in Buildings**
(Majority vote)

To see if the Town will vote to amend Chapter AC of the General Bylaws, “Regulating Fossil Fuel Infrastructure in Buildings” as follows, or take any other action relative thereto.

*[Note: Text deleted from the current bylaw is shown in ~~striketrough~~; new text added to the bylaw is shown in **bold**.]*

Chapter AC. REGULATING FOSSIL FUEL INFRASTRUCTURE IN BUILDINGS

AC1. Purpose

This Bylaw is adopted by the Town of Acton to protect health and safety, and the natural environment, and to reduce air pollution and greenhouse gas emissions, which cause climate change, thereby threatening the Town and its inhabitants. **In addition, this bylaw is intended to fulfill requirements of participation in the Municipal Fossil Fuel Free Building Construction and Renovation Demonstration Project as defined in 225 CMR 24.00 (the “Demonstration Project”).**

AC2. Definitions

2.1 “Effective Date” shall mean ~~December 1, 2022, or six~~ **three** months following the date by which the Town is authorized by the ~~Massachusetts General Court~~ **Department of Energy Resources** to **participate in the Demonstration Project** ~~regulate fossil fuel infrastructure, whichever is later.~~

2.2 “New Building” shall mean a new building as defined in the Acton Zoning Bylaw, Chapter M of the General Bylaws of the Town of Acton, associated with a building permit application filed on or after the Effective Date.

2.3 “On-Site Fossil Fuel Infrastructure” shall mean piping, for ~~fuel~~ **natural** gas, fuel oil, or other fuel hydrocarbons, **or other synthetic equivalents**, that is in a building, in connection with a building, or otherwise within the property lines of premises, extending from a supply tank or from the point of delivery behind a gas meter or the customer-side gas meter.

2.4 “Major Renovation” shall mean a renovation project associated with a valid building permit application filed on or after the Effective Date of this chapter that:

1. for existing structures regulated by the current edition of the International Residential Code as amended by 780 CMR 51: Massachusetts Residential Code, includes the reconfiguration of space and/or building systems, in which the Work Area, not including any added space, is more than 75% of the Gross Floor Area of the principal dwelling, as defined in Section 1.3.7 of the Acton Zoning Bylaw, prior to the project; and
2. for existing structures regulated by the current edition of the International Building Code as amended by 780 CMR 34: Massachusetts Commercial Code, includes the reconfiguration of space and/or building systems, in which the Work Area, not including any added space, is more than 50% of the building floor area prior to the project, as defined by the Massachusetts Building Code.

2.5 “Work Area” shall mean the portions of a building affected by renovations for the reconfiguration of space and/or building systems, as indicated in the drawings associated with a building permit application. Areas consisting of only repairs, refinishing, and/or incidental work are excluded from the Work Area.

AC3. Applicability

3.1 This chapter shall apply to all building permit applications for New Buildings and Major Renovations proposed to be located in whole or in part within the Town, except that this Chapter shall not apply to:

- A. Utility service piping connecting the grid to a meter, or to a gas meter itself;
- B. Piping required to:
 - i. fuel backup electrical generators, outdoor cooking appliances, or appliances for outdoor heating; or
 - ii. produce potable or domestic hot water from centralized hot water systems in buildings with a floor area of at least 10,000 square feet, provided that the Engineer of Record certifies that no commercially available electric hot water heater exists that could meet the required hot water demand for less than 150% of installation or operational costs, compared to a conventional fossil-fuel hot water system;
- C. The extension or modification of heating systems via HVAC system modification, or modification of radiator, steam, or hot water piping, provided new fossil fuel piping is not installed; or
- D. Repairs of any existing portions of a fuel piping system deemed unsafe or dangerous by the Plumbing and Gas Fitting Inspector.
- E. Buildings where the primary use is as a Research Laboratory for Scientific or Medical Research, or as Hospitals or Medical Offices.**

AC4. Enforcement

4.1 As of the Effective Date, no building permit shall be issued by the Town for the construction of New Buildings or Major Renovations that include the installation of new On-Site Fossil Fuel Infrastructure that is subject to this Chapter, except as provided ~~for in Chapter V or in Section AC3 “Applicability” and Section AC5 “Waivers.”~~

4.2 The Town Manager, or their designee, shall publish and present an annual report to the Select Board quantifying the number and ~~locations~~ **location** of ~~residential~~ building permit applications for new and major renovation projects exceeding 75% of the original gross floor area **of the principal dwelling**, and the number and ~~locations~~ **location** of commercial building permit applications for new and major renovation projects exceeding 50% of the building floor area prior to the project; the number of new and major renovation projects requesting a waiver from this Chapter, the disposition of those waivers, the reasons for granting or denying those waivers, and the square footage of each project for which a waiver is granted.

4.3 The Select Board may adopt reasonable regulations to implement this Chapter.

AC5. Waivers

5.1 The Building Commissioner may grant a waiver subject to the requirements of this Chapter in the event that compliance with the provisions of this Chapter makes a project financially infeasible or impractical to implement. Compliance with this Chapter may be considered infeasible if, without limitation:

- A. as a result of factors beyond the control of the ~~applicant~~ **proponent**, the additional cost of the project over the long term, including any available subsidies, would make the project economically unviable; or
- B. technological or other factors would make the project unsuitable for its intended purpose.

5.2 Waivers from compliance with this Chapter may be subject to reasonable conditions. Where possible, waivers shall be issued for specific portions of a project that are financially infeasible or impractical to implement under the requirements of this Chapter, rather than entire projects.

5.3 Waiver requests shall be supported by a detailed cost comparison, including available rebates and credits. A waiver request may be made at any time and may be based upon submission of conceptual plans.

5.4 In considering a request for a waiver, the Building Commissioner may consider as a factor the requesting party's status as a non-profit or government-sponsored affordable housing entity.

5.5 The Select Board shall, prior to the Effective Date, issue and may thereafter amend, guidance regarding the granting of waivers and describing reasonable conditions that may be placed on a waiver.

AC6. Appeals

An applicant may appeal a decision of the Building Commissioner concerning the grant or denial of a waiver pursuant to Section AC5 to the Select Board, or its designee, within 30 days of the decision.

AC7. Reporting

The Select Board, or its designee, shall provide data and other information on the impacts of this Bylaw on emissions, building costs, operating costs, the number of building permits issued, and other information as required or requested by the Department of Energy Resources and the Secretary of Housing and Economic Development.

Summary

Chapter AC of the Acton General Bylaws was passed by Town Meeting in 2021, along with a Home Rule Petition to the legislature to ask their permission to enact it. Seven other towns passed similar bylaws and home rule petitions. The response of the legislature was to pass a requirement for a “10-Community fossil-fuel free demonstration program” and to task the DOER to create a process for communities to enter this pilot. They created draft regulations in December of 2022. The amendments to Chapter AC in this article are the changes needed to allow Acton to apply to be in the pilot program.

Final regulations are not expected from DOER until the end of March, so the motion for this article may need to include additional edits to Chapter AC.

Approval of this article, plus authorization by the Massachusetts Department of Energy Resources (DOER), would require builders of all new construction and major rehabilitation of existing buildings not to pipe in any fossil fuels (primarily gas, oil, and propane), except for certain exempted commercial uses, or to obtain a waiver. Approval of this article would support the transition to non-fossil-fueled systems for heating, cooling, hot water, and appliances.

According to the Town of Acton 2019 greenhouse gas (GHG) inventory, roughly 41% of all GHG emissions come from fossil fuels used in buildings in Acton. The shift to electrically powered buildings, as outlined in the GHG inventory, would help reduce these emissions, and would help fight climate change. This article aligns with the Town’s Environmental Sustainability Policy, and with the Climate Emergency Declaration, which received near-unanimous approval at the Special Town Meeting on September 8, 2020.

The article does not affect existing buildings, unless they are undergoing major rehabilitation, defined in the bylaw as more than 75% of the original floor area for residential buildings and 50% for commercial buildings.

The Acton Building Commissioner would review any requests for waivers, and would grant them whenever the use of fossil fuels would be necessary to avoid creating technical or financial infeasibility for the building project. Appeals of any Building Commissioner decision could be made to the Select Board, which would be tasked (prior to bylaw enactment) with generating guidelines for the waiver and appeals processes.

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Recommendations:	<u>Select Board</u> Recommended	<u>Finance Committee</u> No Recommendation
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