



Ruthanne Fuller
Mayor

City of Newton, Massachusetts

Office of the Mayor

#49-24

Telephone
(617) 796-1100

Fax

(617) 796-1113

TDD/TTY

(617) 796-1089

Email

rfuller@newtonma.gov

January 8, 2024

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

Honorable City Councilors:

I respectfully submit this docket item to the Honorable Council requesting the approval of an Electrification Ordinance in conjunction with the City's recent conditional approval by the State Department of Energy Resources (DOER) for participation in the Ten Communities Program. The Electrification Ordinance requires all new construction and substantial renovations in Newton to be all-electric.

DOER's approval is conditioned on (1) Newton's meeting (by February 2024) one of the housing affordability programs requirements specified in the Ten Communities Program, and on (2) approval by the City of the proposed electrification ordinance.

We expect to soon officially meet the housing affordability requirement with a state approval of the new zoning ordinance changes passed by the City Council in December, which we believe is in compliance with the MBTA Communities Law.

DOER has now fully approved the seven communities of Acton, Aquinnah, Brookline, Cambridge, Concord, Lincoln and Lexington to participate in the Ten Communities Program. Arlington, along with Newton, has received conditional approval.

Electrification of buildings is critical to meeting Newton's goal of achieving carbon neutrality by 2050. In Newton, more than 60% of our greenhouse gas emissions come from our homes, apartments, and commercial buildings. So, the way we heat and cool these buildings, heat our water, cook our food, and keep the lights on matters a great deal as we work to "Use Less and Green the Rest," as the City says in our Climate Action Plan.

By using cleaner and greener electricity, increasingly generated with renewable sources (solar and wind), we can reduce greenhouse gas emissions caused by fossil fuels, the major contributor to climate change.

Attached is a memo from Co-Director of Sustainability Ann Berwick and Planning & Development Director Barney Heath with additional details. Thank you for your consideration of this matter.

Sincerely,

Mayor Ruthanne Fuller



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

#4924
(617) 796-1120
Telefax
(617) 796-1142
TDD/TTY
(617) 796-1089
www.newtonma.gov

Barney Heath
Director

MEMORANDUM

TO: Mayor Ruthanne Fuller
Jonathan Yeo, Chief Operating Officer

FROM: Barney Heath, Director, Department of Planning and Development
Ann Berwick, Co-Director of Sustainability

DATE: January 5, 2024

RE: Docket Request—Electrification Ordinance for Ten Communities Program

CC: Andrew Lee, Associate City Solicitor
Carol Moore, City Clerk
Cassidy Flynn, Deputy City Clerk
Bill Ferguson, Co-Director of Sustainability
Anthony Ciccariello, Director, Inspectional Services Department

The Planning Department and Climate and Sustainability team respectfully request that you docket the attached proposed Electrification Ordinance. The State Department of Energy Resources (DOER) has conditionally approved the City's application to participate in the State's Ten Communities Program. In doing so, DOER approved the City's proposed Electrification Ordinance as attached, but it remains to be approved by the City Council.

DOER's approval is conditioned on (1) Newton's meeting (by February 2024) one of the housing affordability programs requirements specified in the Ten Communities Program, and on (2) approval by the City of the proposed electrification ordinance as specified in the form attached.

We expect to meet the housing affordability requirement by the State's approving the new zoning ordinance changes passed by the City Council in December, which we believe is in compliance with the MBTA Communities Law.

The other requirement is that the City Council approve the attached proposed Electrification Ordinance, which is what we are addressing in this memo.

The proposed Electrification Ordinance has a lengthy background.... With the unanimous approval of the City Council, the City submitted a "home rule petition" to the State Legislature in 2022 requesting

authority to require all new construction and substantial renovations to be all-electric. The City Council's approval followed several hearings before both the Public Facilities and the Zoning and Planning Committees.

The Legislature never acted on this petition, or on similar petitions from some other communities; instead, the Legislature passed a law saying that the first ten communities to file such home rule petitions would be allowed to enact an electrification requirement, and that any such requirement would have to comply with certain DOER specifications.

Newton is one of the first ten. DOER has now fully approved Acton, Aquinnah, Brookline, Cambridge, Concord, Lincoln and Lexington to participate in the Program. Along with Newton, Arlington has received conditional approval.

We note that Newton included in its proposed Electrification Ordinance several provisions that were not included in DOER's Model Electrification Ordinance. These provisions include, among others, exceptions for freestanding outdoor heating and cooking appliances that are not connected to the building's natural gas or propane infrastructure, emergency generators, and certain appliances to produce potable or domestic hot water from centralized hot water systems in large commercial buildings.

The proposed Ordinance also provides for waivers for major renovation projects "with respect to which an architect, engineer, or general contractor on the project certifies by affidavit that compliance with the requirements of the Ordinance will increase the costs of the project by 50% or more, compared to the costs of complying only with the requirements of the applicable (i.e., residential or commercial) specialized building code." This waiver provision was specifically requested by Newton's Department of Inspectional Services.

Electrification of buildings is critical to meeting Newton's goal of achieving carbon neutrality by 2050. In Newton, more than 60% of our greenhouse gas emissions come from our homes, apartments, and commercial buildings. So, the way we heat and cool these buildings, heat our water, cook our food, and keep the lights on matters a great deal as we work to "Use Less and Green the Rest," as the City says in its Climate Action Plan.

By using cleaner and greener electricity, increasingly generated with renewable sources (solar and wind), we can reduce greenhouse gas emissions caused by fossil fuels, the major contributor to climate change.

Finally, in light of recent changes in the building and energy codes which have required a challenging period of readjustment by all those affected, and in consultation with the City's Department of Inspectional Services, we suggest that the proposed Ordinance go into effect no earlier than September 1, 2024, and possibly on January 1, 2025.

Draft Newton Electrification Ordinance and Amendments to the Specialized Energy Code

Purpose

The City of Newton adopts this Ordinance in order to enable the City to participate in the State's Fossil Fuel-Free Demonstration Project, 225 CMR 24.00. The purpose of the Fossil Fuel-Free Demonstration Project is to restrict and prohibit new building construction and Major Renovation Projects that are not fossil fuel-free in ten communities in Massachusetts. The Ordinance will protect the health and welfare of the City's inhabitants and the environment by reducing greenhouse gases, which cause climate change, and by reducing other air pollutants.

The Ordinance requires new construction and Major Renovation Projects to use electricity instead of fossil fuels for heating and cooling systems and cooking and clothes drying appliances; and, for hot water, to use either electricity or thermal solar.

Definitions

"Department" means The Massachusetts Department of Energy Resources, as established by MGL chapter 25A.

"Commissioner" means the Commissioner of Inspectional Services of the City of Newton, as established by Section 5-16 of the Ordinances of the City.

"Fossil Fuel-Free Demonstration Project" means the project codified by the entirety of 225 CMR 24.00, enabling ten communities designated by the Department to require new construction and Major Renovation Projects to be fossil-fuel free, notwithstanding MGL chapter 40A; MGL chapter 142, section 13; MGL chapter 164; or any other general or special law to the contrary.

"Hospitals or Medical Offices" means a facility licensed or approved by the Department of Public Health to provide health care, including clinics licensed as health care facilities and facilities that provide substance use disorder treatment

services, including outpatient withdrawal management, opioid treatment programs, office-based opioid treatment programs, acute treatment services (inpatient detoxification), and clinical stabilization services.

“Major Renovation Project” means (a) low-rise residential additions over 1,000 square feet and additions exceeding 100% of the conditioned floor area of the existing dwelling unit; (b) additions over 20,000 square feet and additions that exceed 100% of the conditioned floor areas of the existing building for all building use types except low-rise residential; (c) Level 3 Alterations as defined in the International Existing Building Code (IEBC 2021) (which exceed 50% of the existing conditioned floor area) exceeding 1,000 square feet for low-rise residential, or exceeding 20,000 square feet for all other building uses; or (d) Change of use of over 1,000 square feet per International Energy Conservation Code (IECC 2021) Sections R505; or (e) change of use of over 20,000 square feet or change of use of 100% of the conditioned floor areas of the existing building for all building use types except low-rise residential, International Energy Conservation Code (IECC 2021) Sections C505.

“Research Laboratories for Scientific or Medical Research” means a building in which a laboratory procedure or research activity occurs, and where the building has an average ventilation at full occupancy greater than 0.5 cfm/sf. Such buildings shall provide the ventilation design documentation described in 225 CMR 23.00, Section C103.2, at the time of building permitting.

“Specialized Energy Code” means the building code in 225 CMR 22.00 and 23.00; including Appendices RC and CC, which add residential and commercial appendices to the Massachusetts Stretch Energy Code.

Applicability

The fossil fuel restriction applies to residential and commercial buildings located in the City that qualify as new construction or Major Renovation Projects, except as listed in the Section herein entitled “Exceptions.”

Exceptions

The requirements of this Ordinance do not apply to any of the following:

- A. Research Laboratories for Scientific or Medical Research;

- B. Hospitals or Medical Offices;
- C. Freestanding outdoor cooking appliances that are not connected to the building's natural gas or propane infrastructure;
- D. Freestanding outdoor heating appliances that are not connected to the building's natural gas or propane infrastructure;
- E. Emergency generators;
- F. Appliances to produce potable or domestic hot water from centralized hot water systems in commercial buildings with a gross floor area of at least 10,000 square feet, provided that the architect, engineer, or general contractor on the project certifies by affidavit that no commercially available electric hot water heater exists that could meet the required hot water demand for less than 150% of installation costs, compared to the costs of complying only with the requirements of the applicable (i.e., residential or commercial) specialized building code.
- G. Fossil fuels for process loads for manufacturing, industrial, and commercial purposes.

Waivers

The City will entertain waiver requests for Major Renovation Projects with respect to which an architect, engineer, or general contractor on the project certifies by affidavit that compliance with the requirements of the Ordinance will increase the costs of the project by 50% or more, compared to the costs of complying only with the requirements of the applicable (i.e., residential or commercial) specialized building code.

Application Requirements

When applying for a building permit for new building construction or a Major Renovation Project the applicant must submit documents with the application that identify the heating and cooling and hot water systems and cooking and clothes drying appliances that will be installed and used in the building.

Compliance

The Commissioner shall not issue any building permit for the construction of a new building or Major Renovation Project unless the applicant submits the

documentation set forth in the Section herein entitled “Application Requirements.” The Commissioner shall not issue a certificate of occupancy for any building subject to this Ordinance prior to inspection and confirmation that the heating and cooling and hot water systems and cooking and clothes drying appliances installed in the building comply with the applicant’s documents submitted pursuant to the Section herein entitled “Application Requirements.”

Effective Date

This Ordinance shall apply to all building permits, special permits, and comprehensive permits issued **XXX** days after the approval by the Department of participation by the City in the Fossil Fuel Demonstration Project.

Amendments to the Specialized Energy Code

With adoption of the Fossil Fuel-Free Demonstration Project by the City, and upon approval by the Department, the following amendments to the Specialized Energy Code are adopted. These changes are enforceable by the Commissioner and will go into effect for any project seeking a permit after the effective date of this Ordinance.

a. Low-rise Residential Code (225 CMR 22 Appendix RC)

1. Sections RC102 and RC101 “Zero Energy Pathway” and “Mixed Fuel Pathway” shall not be permitted for use for new construction or Major Renovations.

b. Commercial and All Other (225 CMR 23 Appendix CC)

i. Sections CC103 and CC105 “Zero Energy Pathway” and “Mixed-Fuel Pathway” shall not be permitted for new construction or Major Renovations, with the following exceptions:

1. Research Laboratories for Scientific or Medical Research;
2. Hospitals or Medical Offices;
3. Buildings heated with Clean Biomass Heating Systems as defined in 225 CMR 23, as the only combustion equipment;

4. Multi-family buildings over 12,000 square feet with permit application filed prior to January 1, 2027 may utilize gas or propane for domestic water heating as the only combustion equipment.