

## Codes for Climate: Stretch and Specialized Energy Code

January 23, 2024



# **Today's Topics**

- 1. Meeting State's Climate Goals through Building Code
- 2. Municipal Adoption of Specialized Code
- 3. Who to reach out to on specific technical questions, code language or enforcement questions.

### Why Address Climate Through Building and Electrical Code?

- 2008 Green Communities Act
  - Base Energy Code and established the Stretch Energy Code alongside the Green Communities Program
- 2021 Climate Act
  - > 50% emission reduction by 2030
  - Gave authority to DOER to update the Stretch Code and to develop a municipal opt-in Specialized energy code that includes
    - Net Zero building performance standard
    - Definition of net-zero building
    - Designed to achieve MA GHG emissions limits
    - May be phased in by building type



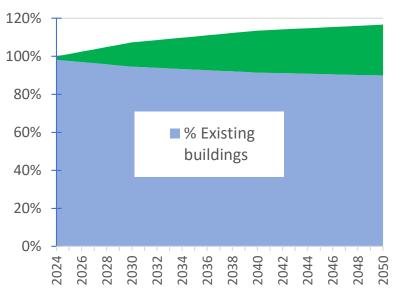


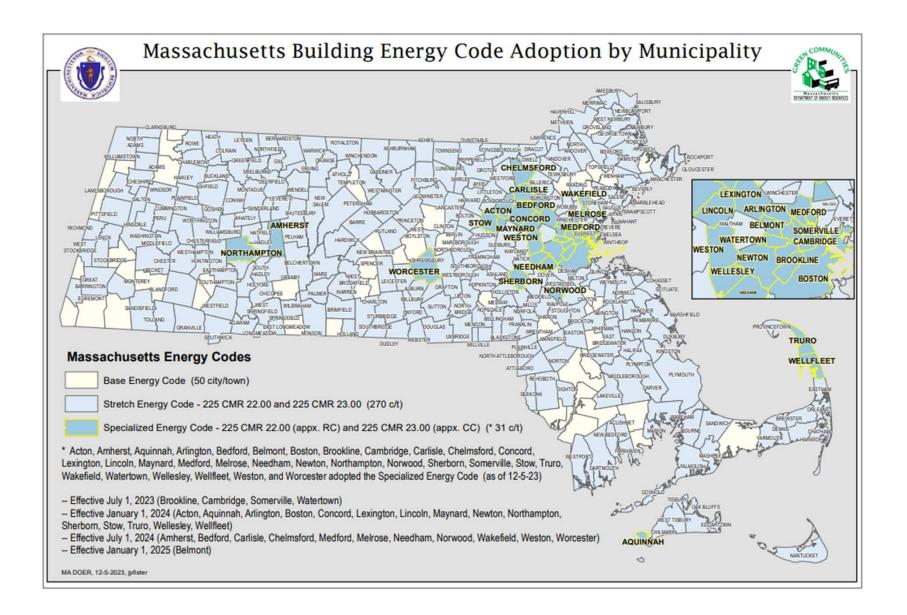


### Building Energy Code role in reducing emissions

- Building code is the primary policy impacting new buildings.
- New buildings (built after 2023) ~27% of all building space by 2050
- New buildings are easiest and cheapest to make 2050-compliant
- New construction market helps drive cost reductions in building retrofits.
- 2030: Massachusetts legal limit is at least 50% reduction in GHG from 1990







	Current Base Code	Updated Stretch Code	Specialized Code
# Jurisdictions	49 communities	270 communities	31 communities, Requires special adoption
Code	IECC 2018 with MA Amendments; Proposed update to IECC 2021 (10th ed) codes – public hearings now	IECC 2021 with MA amendments + Stretch Code Amendments	IECC 2021 with MA Amendments + Stretch Code Amendments + Specialized Code Appendices
Timeline/Effective Date	TBD	Residential: Jan 2023 Commercial: July 2023	6-11 months after adoption; recommended July 1 <sup>st</sup> or January 1st
Goals	Ensure new construction is built with energy efficiency in mind	More energy efficient than base code	Consistent with MA state GHG limits and targets

## **EV Requirements**

	Current Base Code	Updated Stretch Code	Specialized Code
EV CHARGING RESIDENTIAL CODE (low-rise)	Proposed: 1-2 family- 1 space per dwelling; Other R uses minimum of 10% of spaces to be wired for EV charging	1-2 family- Requires 1 space per dwelling; Other R uses minimum 20% of spaces to be wired for EV charging	1-2 family- Requires 1 space per dwelling; Other R uses minimum 20% of spaces to be wired for EV charging
EV CHARGING COMMERCIAL CODE	requires wiring for 10% of new parking spaces	Group R & B- Minimum 20%; All other occupancies 10%	Group R & B- Minimum 20%; All other occupancies 10%

\* Subtype R- Residential Use B- Business Use Occupancies in the Commercial Code



### Specialized Code: Adoption process & Timeline

Specialized code adoption at the local level, similar to prior stretch code process:

- Warrant article
- Town Meeting bylaw or City Council ordinance vote
- Effective date: Jan 1, or July 1
- Recommend implementing 6-12 months after adoption



#### SPECIALIZED CODE FAQ: UNDERSTANDING WARRANT ARTICLE 10

Warrant Article 10 for the Fall Special Town Meeting is a citizens' petition to adopt the Specialized Code. While understating what this code entails may seem daunting, here are answers to some frequently asked questions:

#### What is the Stretch Code?

At the end of 2022 the Commonwealth completed a comprehensive revision of the energy code provisions of the statewide building code. As one of approximately 300 Green Communities in the state, we automatically adopted the Stretch Code provisions of this updated energy code. These new provisions became effective on January 1, 2023. More stringent residential Stretch Code provisions become effective starting July 1, 2024.

### We already have adopted the Stretch Code $% \left( {{\rm{Code}}} \right)$ , so why do we need the Specialized Code?

The Specialized Code was created as a result of a legislative mandate. The legislation required an energy code option that better addressed the Commowealth's climate change and greenhouse gas reduction goals. Adoption of this option - the Specialized Code - requires active approval by each municipality wishing to adopt it.

## **Resources from DOER**

### Sample Town Warrant download (mass.gov)

### Sample FAQ download (mass.gov)

Contact Green Communities Regional Coordinator to schedule a public information forum prior to Town Meeting/City Council vote

Contact GC Coordinator | Mass.gov



#### GUIDANCE for Specialized Energy Code Adoption



#### **Specialized Energy Code Adoption Process**

#### INTRODUCTION

The Municipal Opt-in Specialized Stretch Energy Code (Specialized Code) is required (MGL 25A Section 6) to be designed to help achieve MA GHG emission limits and building sector sub-limits set every five years from 2025 to 2050. As a result, all compliance pathways under the Specialized Code are designed to ensure new construction that is consistent with a net-zero Massachusetts economy in 2050, primarily through building envelope energy efficiency, that it turn enables reduced heating loads and efficient electrification. The largest greenhouse gas emissions impact for many buildings stems from the heating loads and choice of heating fuel for the building. Buildings reliant on combustion equipment have no clear path to zero emissions, while electrically heated buildings using heat pump technologies do due to the steady increase in renewable and clean energy sources on the ISO-NE electric grid, and opportunities for distributed solar and other on-site renewable energy generation. Accordingly, the Specialized Code requires all new buildings to be designed with electric leaving aud with clear for future electrification of space and water heating as well as any combustion equipment appliance loads.

The Specialized Code regulations may be adopted by any municipality in the Commonwealth, by decision of its governing body. Municipalities that have already adopted the Stretch Energy Code and have enacted a bylaw or ordinance may choose to amend their existing Stretch Code Bylaws or Ordinances accordingly.

#### PROCESS for ADOPTION

In a city having a Plan D or Plan E charter the governing body shall be the city manager and the city council, and in any other city the mayor and city council. In towns the governing body shall be the town meeting. In order to be adopted, the regulations must be considered at an appropriate municipal public hearing, subject to the municipality's existing public notice provisions. Cities are advised to adopt the stretch and specialized energy codes by general ordinance and towns are advised to adopt the codes as a general bylaw.

Please note, once the Specialized Code is adopted by a municipality, all future editions, amendments, and modifications of the Specialized Code are automatically adopted unless the municipality rescinds adoption of the Specialized Code itself. A community must adopt the Specialized Code "as-is," without applying any amendments or conditions, and in full; both the low rise residential and the commercial appendices are adopted together. As such, Municipalities must adopt the entirety of 225 CMR 22 and 23 including Appendices RC and CC

## **Resources and Trainings**

- DOER Technical Support Questions: <u>Stretchcode@mass.gov</u>
- Mass Save Energy Code Technical Support Program Call <u>1-855-757-9717</u> or email <u>energycodesma@psdconsulting.com</u>
- Policy Adoption Questions: Reach out to your Green Communities Regional Coordinator
- MAPC <u>cleanenergy@mapc.org</u>

### Websites:

- Building Energy Code | Mass.gov
- <u>Energy Code Training and Events (masssave.com)</u>
- <u>Codes for Climate: Reducing GHG Emissions through Massachusetts</u> <u>Stretch Energy Code and Specialized Code (mapc.org)</u>