Stretch Code Proposals Info Session for Municipal Stakeholders
Codes for Climate
Metropolitan Area Planning Council (MAPC)
March 2, 2022
NOTIFICATION OF RECORDING

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Agenda

I. Overview & Housekeeping
II. Codes for Climate
III. Presentation from the Department of Energy Resources
IV. Moderated Q & A
V. How to Participate & Resources
101 municipalities

1,440 square miles

Over 3.4 million residents
MAPC: Clean Energy and Climate

Regional Clean Energy and Climate Projects
- LED Streetlight Retrofits
- Energy Efficiency
- Solar
- Climate Coalitions, Taskforces, and Convenings
- Green Municipal Aggregation
- Clean Mobility
- Energy Resiliency

Clean Energy and Climate Planning
- Municipal Net Zero Playbook and Community GHG Inventory Tool
- Net Zero Action planning and strategizing
- Connecting municipalities with incentives + plug-and-play programs
- Outreach programming and education

Clean Energy and Climate Technical Assistance
- Grant Writing
- Green Communities Support
- Methane Leaks
- Permitting and Zoning
- State and Local Policy
- Building Decarbonization
Net Zero as a Framework for Holistic Climate Planning

Multi-Benefit Outcomes

• Energy
• Economic
• Environmental
• Public Health
• Equity
• Livability

Bringing Net Zero to 101 Cities and Towns and Beyond
MA GHG Emissions from Buildings

Massachusetts GHG Emissions from Fuel Combustion (by Sector)

% of 2017 73.0 MMTCO$_2$e GHG Emissions by Sector

Gas vs. Electric Heating: CO₂ Emissions

Source: MAPC webinar with BH+A and BE+, November 4, 2020
Getting to Net Zero

Energy Efficiency

Electrifcation (Heat + Hot Water)

Renewable Energy

= Net Zero
How Can We Improve Buildings?

There are three main ways that Massachusetts municipalities can impact building regulations:

**COMMENT**
- Base Code (MA Building Code CMR 780)
- Stretch Energy Code (780 CMR Ch. 15 AA)
- New Municipal Opt-in Specialized “Net Zero” Code

**ADOPT**
- Zoning and other local ordinances
- Stretch Energy Code (780 CMR Ch. 15 AA)
- New Municipal Opt-in Specialized “Net Zero” Code

**ENFORCE**
- Zoning and other local ordinances
- Base Code
- Stretch Energy Code
- Net Zero Code
Building Energy Code

How the Energy Code Improves a Home

- **Ceiling Insulation**: Installing adequate insulation properly reduces heat transfer and prevents destructive ice-damming in the winter.
- **Thermal Barrier**: Installing a complete barrier on all sides of the home improves occupant comfort and reduces the heating and cooling load.
- **Air Barrier**: Sealing cracks and penetrations prevents unwanted air movement and improves indoor air quality by reducing contaminants in the living environment.
- **Efficient Lighting**: Installing LED or CFL dramatically lowers electricity usage and reduces unnecessary energy wasted in the home.
- **Duct Sealing**: Sealing all components of the HVAC system and testing to verify, improves indoor air quality, system efficiency, and increases occupant comfort by ensuring air is evenly distributed to all rooms in the home.
- **Efficient Windows**: It is critical that windows be well insulated and well-sealed to prevent unwanted heat transfer and moisture infiltration.
- **HVAC System Sizing**: Properly sizing the HVAC system reduces capital costs, prolongs the life of the system, and improves system efficiency.
- **Mechanical Ventilation**: Installing a dedicated air handling system, supply or balanced ventilation system, ensures indoor air quality by guaranteeing source-controlled fresh air is being supplied to the home.

Created by MEEA
Presentation from the Department of Energy Resources
Q & A
How to Participate

**ACTION ITEMS:** We encourage municipal stakeholders to:

- **Attend and provide comments at the DOER Public Hearings:** [www.mass.gov/info-details/stretch-energy-code-development-2022](http://www.mass.gov/info-details/stretch-energy-code-development-2022)
- **Submit written comments to DOER**
- **Stay engaged!**
- **Check out MAPC resources:**