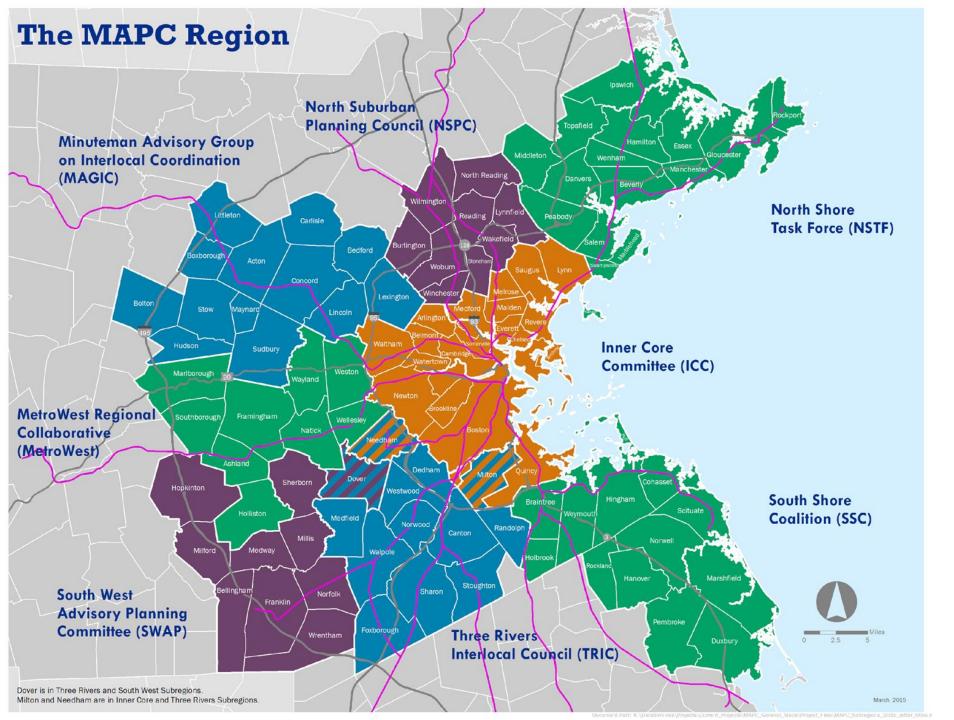


MA Cities and Towns: Improving Codes for Climate

Metropolitan Area Planning Council (MAPC)

December 18, 2018







101 municipalities

1,440 square miles

Nearly 3.2 million residents

1.8 million jobs (2010 Census)

CLEAN ENERGY EXPERTISE



1) Regional Energy Projects

- Green Municipal Aggregation
- Municipal and Community Solar
- LED Streetlight Retrofit Program
- Solar Hot Water

- Green Mobility Program
- ESCO Procurement
- Energy Resiliency



2) Climate and Energy Planning

- Community energy and climate data, baselining, planning, and strategizing
- Connecting municipalities with incentives + plug-and-play programs
- Net Zero planning, guidance & education

3) Energy Technical Assistance

- Peak Demand Management
- Green Communities
- Methane Leaks
- Data Analysis

- Solar Permitting and Zoning
- State and Local Policy
- Grant Writing





Net Zero as a Framework for Holistic Climate Planning



Multi-Benefit Outcomes

- Energy
- Economic
- Environmental
- Public Health
- Equity
- Livability

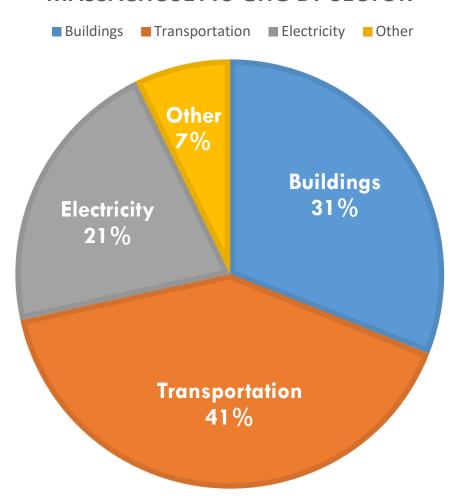


Bringing Net Zero to 101 Cities and Towns and Beyond

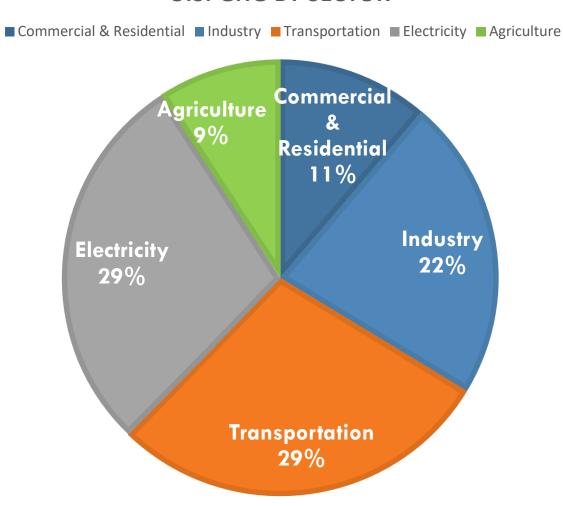
Codes for Climate



MASSACHUSETTS GHG BY SECTOR



U.S. GHG BY SECTOR



Source: Executive Office of Energy and Environmental Affairs. 2015 Update Massachusetts Clean Energy and Climate Plan for 2020. https://www.mass.gov/files/documents/2017/01/uo/cecp-for-2020.pdf. Environmental Protection Agency. Sources of Greenhouse Gas Emissions. https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

IECC Partners







Energy Efficient Codes Coalition







Agenda



- 1 Building Code Basics
- 2 The Big Picture: The IECC as Changemaker
- 3 Getting Involved: The IECC and You
- 4 Next Steps
- 5 Q & A



Building Code Basics

What is a Code?





Q: What is code?

- FEMA

A: "Building codes are sets of regulations that address structural integrity, fire resistance, safe exits, lighting, ventilation, and construction materials. They specify the minimum requirements to safeguard the health, safety, and general welfare of building occupant."

Source: https://www.fema.gov/media-library-data/20130726-1903-25045-1885/building codes toolkit fact sheet.pdf, Accessed 12-9-18

State Building Code



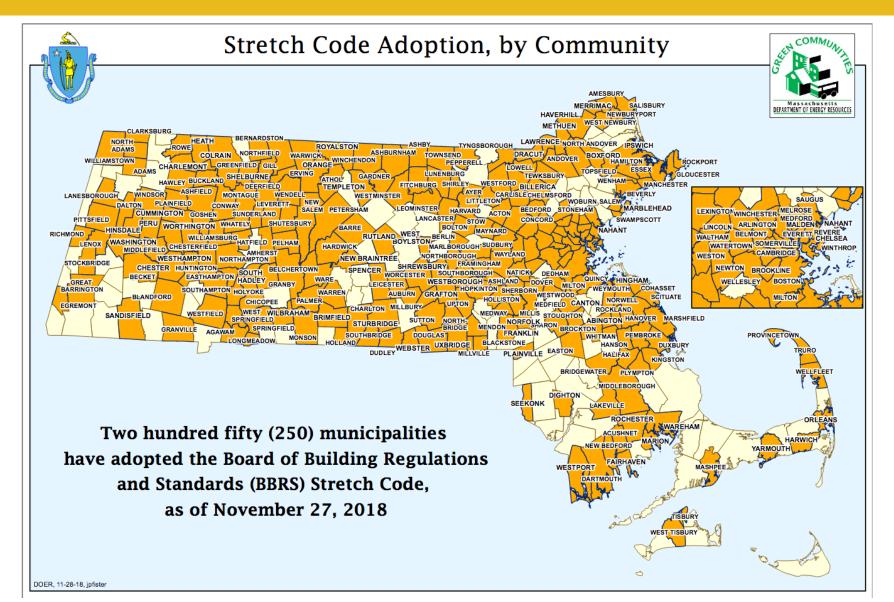
Mass General Law (MGL), Chapter 143, Section 94

"To adopt and fully integrate the latest International Energy Conservation Code as part of the state building code, together with any more stringent energy-efficiency provisions that the board, in consultation with the Department of **Energy Resources, concludes are** warranted."



Stretch Energy Code





How Can We Improve Buildings?



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

VOTE

COMMENT

ADOPT

ENFORCE

International Energy Conservation Code (IECC) Base Code (MA Building Code CMR 780)

Stretch Energy Code (780 CMR Ch. 15 AA)

Zoning and other local ordinances

Stretch Energy Code (780 CMR Ch. 15 AA)

Zoning and other local ordinances

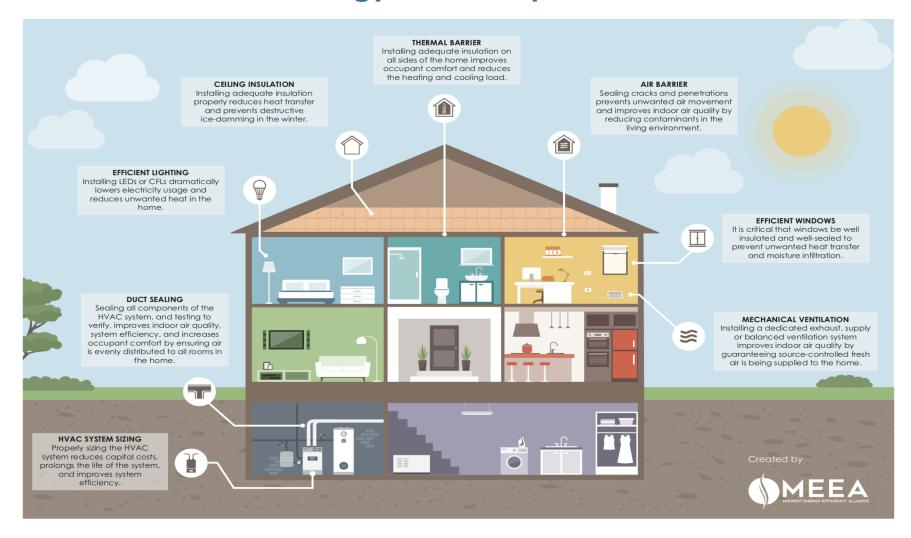
Base Code (MA Building Code CMR 780)

Stretch Energy Code (780 CMR Ch. 15 AA)

Codes for Climate



How the Energy Code Improves a Home





Big Picture: The IECC as Changemaker

Putting America's Model Energy Code on a Glide Path to Net Zero Buildings



NATIONAL Building Energy Policy is Determined by LOCAL Government



Energy Efficient Codes Coalition

Government

ICLEI

National Association of State Energy Officials

Energy Efficiency Groups

The Alliance to Save Energy
American Council for an Energy Efficient Economy (ACEEE)
United Nations Foundation

Affordable Housing Advocates

Enterprise Community Partners
Global Green USA
LISC – Local Initiatives Support Corp.
National Housing institute
National Low Income Housing Coalition

Environmental Groups

Natural Resources Defense Council (NRDC)
Center for Environment, Commerce & Energy
Climate Crisis Coalition
Environment America
National Wildlife Federation
Sierra Club
2020 Vision

Labor

Blue Green Alliance

Energy Consumers

Public Citizen
Consumers Federation of America

Academia/Think Tanks

American College and University Presidents
Climate Commitment
Institute for Market Transformation
New Buildings Institute

Regional Energy Alliances

Midwest Energy Efficiency Alliance (MEEA)
Northeast Energy Efficiency Partnerships (NEEP)
Northwest Energy Codes Group
NW Energy Coalition
Southwest Energy Efficiency Project (SWEEP)
Southeast Energy Efficiency Alliance (SEEA)
South-central Partnership for Energy Efficiency as a Resource

Business/Insurance

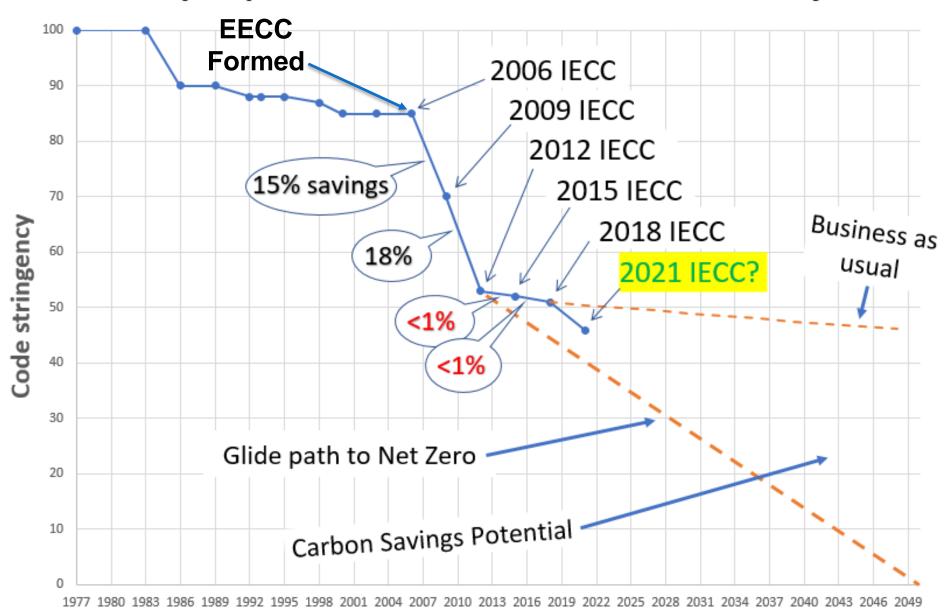
Structural Insulated Panel Association (SIPA)
Polyisocyanurate Insulation Manufacturers Assn (PIMA)
North American Insulation Manufacturers Assn (NAIMA)
Northwest Environmental Business Council
American Chemistry Council
Business Council for Sustainable Energy
Current Energy
Extruded Polystyrene Foam Association (XPSA)
Fireman's Fund
Green Chamber of Commerce
Vinyl Siding Institute (VSI)
Bayer

Utilities

American Public Power Association
Edison Electric Institute
National Rural Electric Cooperative Association



Efficiency Improvements of IECC: Historic and Projected



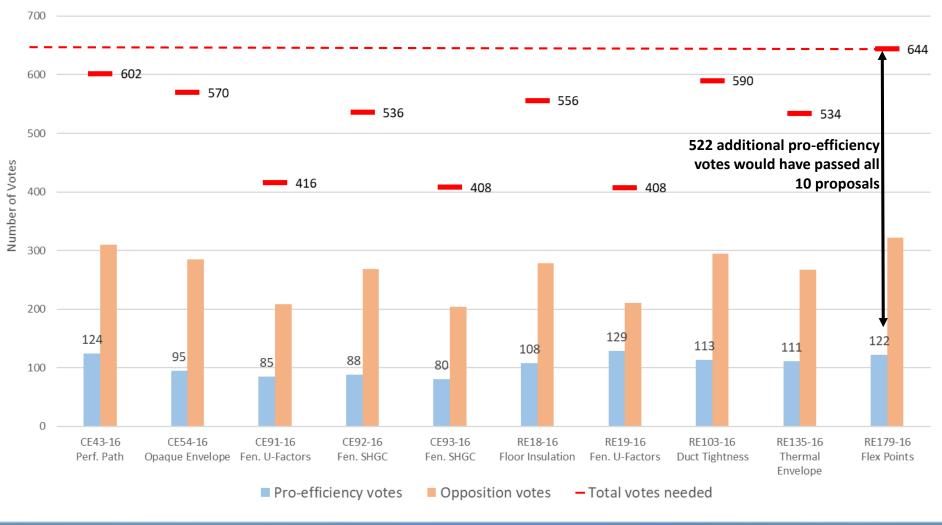
Mayors Support Glide Path to Zero Energy Buildings

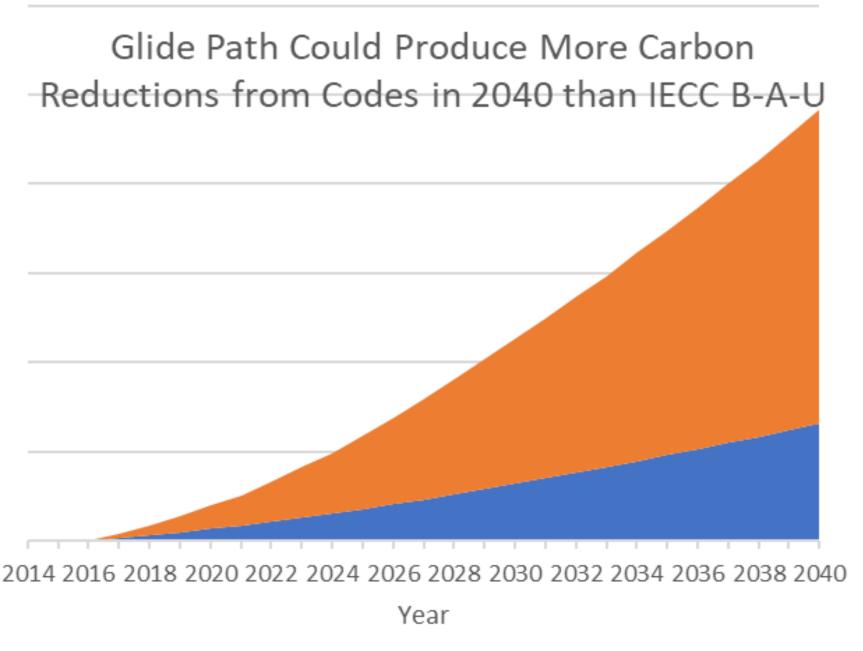
Unanimously Adopt Resolutions in 2008, 2010, 2013, 2016 and 2018 that:

- Encourage Municipal Support for All Eligible Code Officials to Vote Online
- Endorse Endorsed EECC Voting Guide
- Oppose Rollbacks and Trade-Offs that Weaken the Stringency of Gains

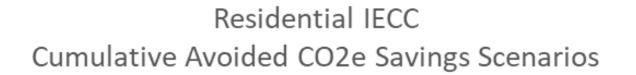


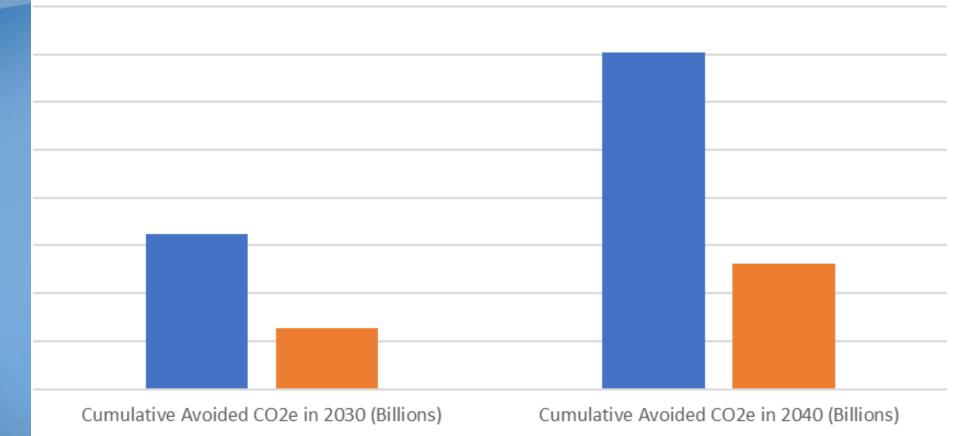
Vote Totals on 10 Proposals That Would Have Improved the 2018 IECC 10%





■ Business-as-Usual: 1% EE Gains/Cycle ■ Glide Path: 5% EE Gains/Cycle

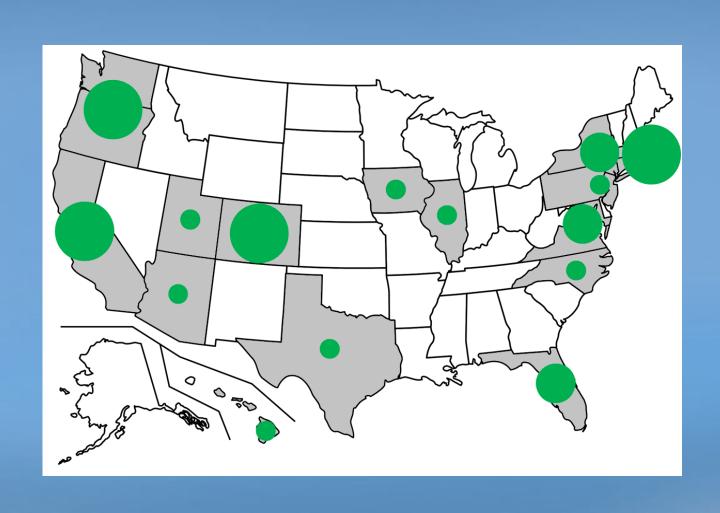




Snapshot Years: 2030 and 2040

■ Glide Path - 5%/cycle ■ B-A-U - 1%/cycle

Work Plan Status Update 15 Priority Venues







BILL FAY

bfay@ase.org

(202) 744-4572 (mobile)





Getting Involved: The IECC and You

2019 IECC Code Cycle





January 1st – March 16th
Registration of
Governmental Members
with ICC

March 16th – September 24th
Voters for each Governmental
Member ID'd by Primary
Representative

November
Voting Guide Released
Two Week Voting Window

Governmental Voting Members



Population

Voters per Governmental Member Less than 50,000

50,000 -150,000

More than 150,000







4

8

12

Multiple Governmental Members Per Municipality



Planning Department



Sustainability Department

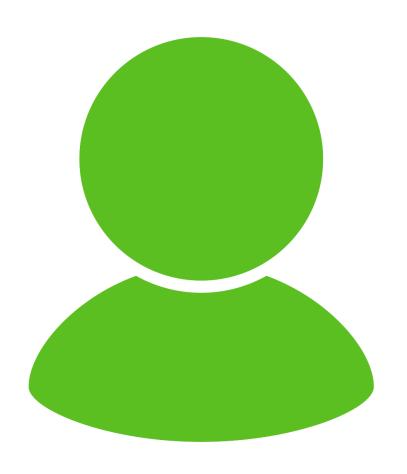


Inspectional Services



Primary Voters





- Must register by March 29, 2019
- Determine the eligibility of the other voters in the Governmental Member (municipal department)
- Sign up the other voters within the Governmental Member over the summer (by September 24, 2019)

Voter Eligibility





"Voting Representatives must be employees or officials of that Governmental Member and are actively engaged full or part-time in the administration, formulation or enforcement of laws, regulations or ordinances relating to public health, safety and welfare."

Membership Fees



Population

Fee per Governmental Member (department) Less than 50,000

50,000 -150,000

More than 150,000

\$135

\$240

\$370

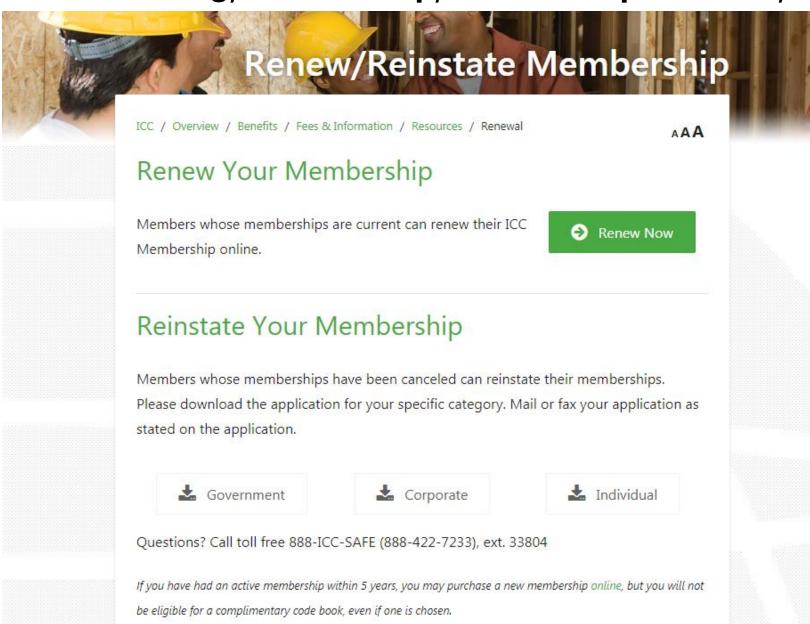






https://www.iccsafe.org/membership/membership-renewal/





Next Steps – Get involved!



- Partner with us to engage your municipality
- Stay tuned for more resources and webinars from MAPC and partners on the IECC process
- Identify eligible departments to register as Governmental Members
- Budget for Governmental Member registration fees
- Select Primary voting representatives
- Before March 29: Register primary voting representatives
- Reach out to MAPC for any help navigating this process!

Questions?

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