



# *MA Cities and Towns:* How (and Why!) to Vote on the International Energy Conservation Code

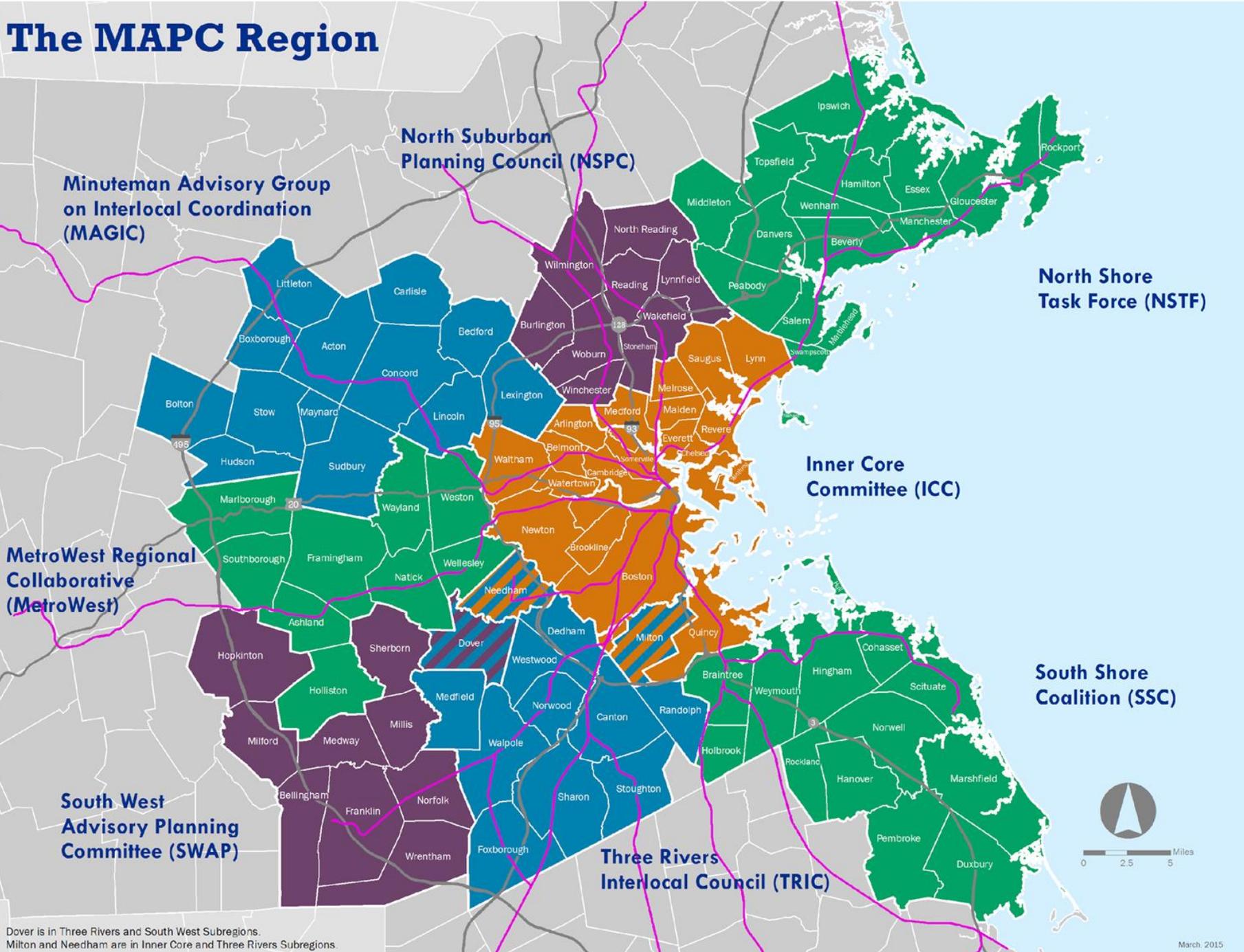
Metropolitan Area Planning Council (MAPC)

January 24, 2019

# Poll:

What is your comfort level with the  
International Energy Conservation Code?

# The MAPC Region



**101 municipalities**

**1,440 square miles**

**Nearly 3.2 million residents**

**1.8 million jobs (2010 Census)**

Dover is in Three Rivers and South West Subregions.  
Milton and Needham are in Inner Core and Three Rivers Subregions.

# 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
- Codes for Climate



# Net Zero as a Framework for Holistic Climate Planning

## Multi-Benefit Outcomes

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

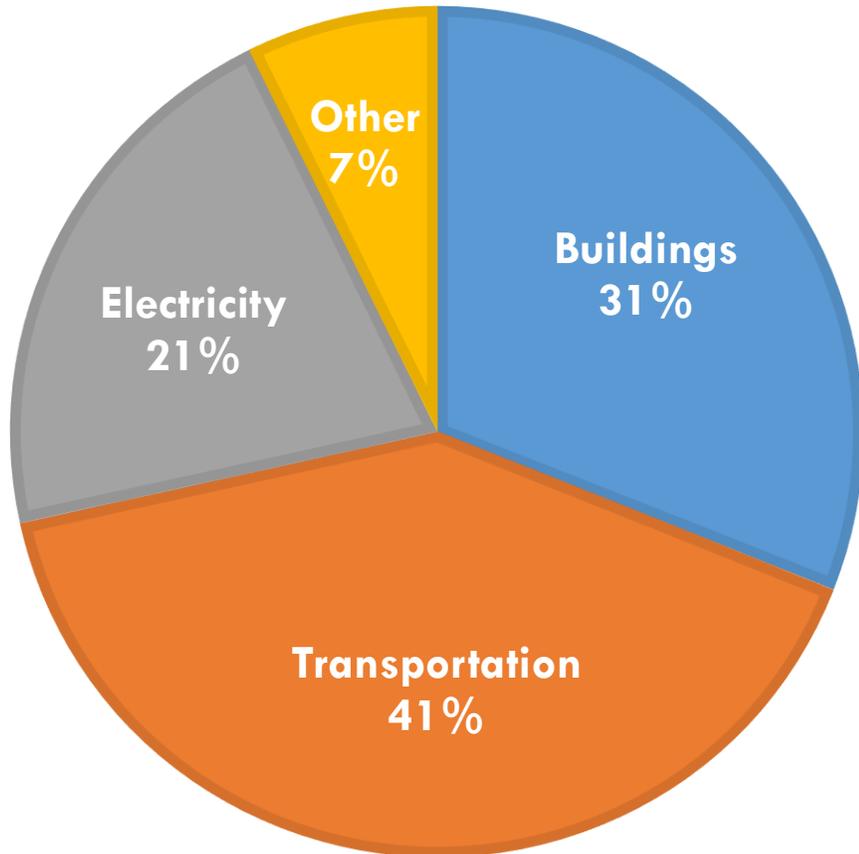


*Bringing Net Zero to 101 Cities and Towns  
and Beyond*

# Codes for Climate

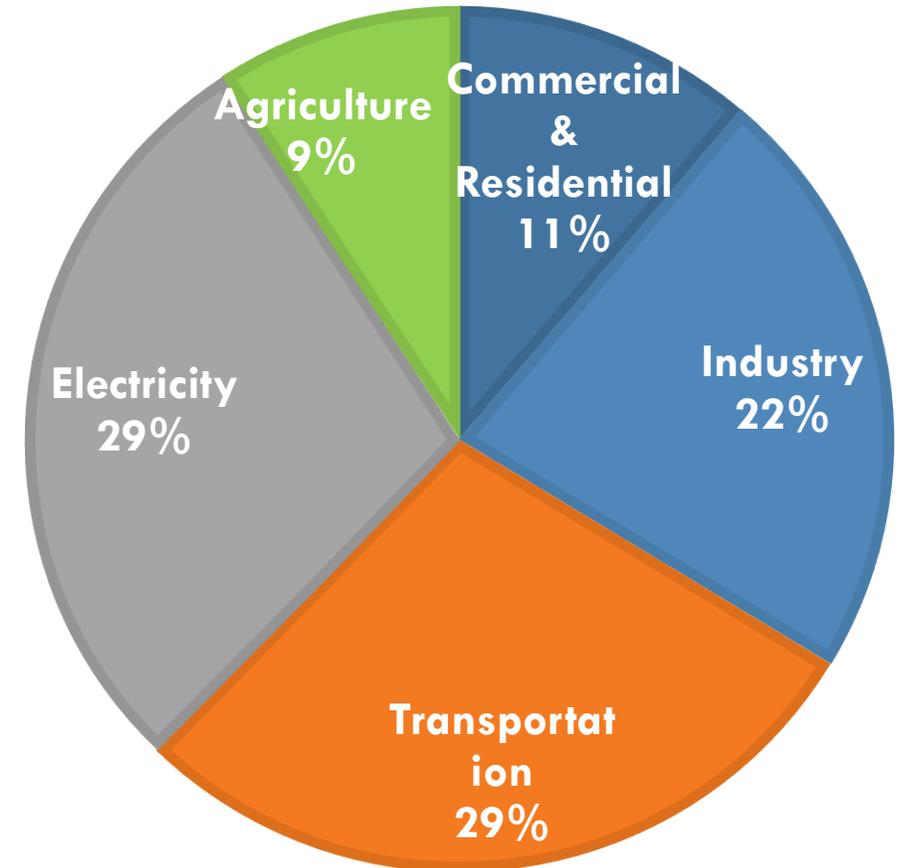
## MASSACHUSETTS GHG BY SECTOR

■ Buildings ■ Transportation ■ Electricity ■ Other



## U.S. GHG BY SECTOR

■ Commercial & Residential ■ Industry ■ Transportation ■ Electricity ■ Agriculture



# IECC Partners



Energy Efficient Codes Coalition



**SIERRA  
CLUB**



# 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?**

**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.”  
– FEMA**



# State Building Code

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

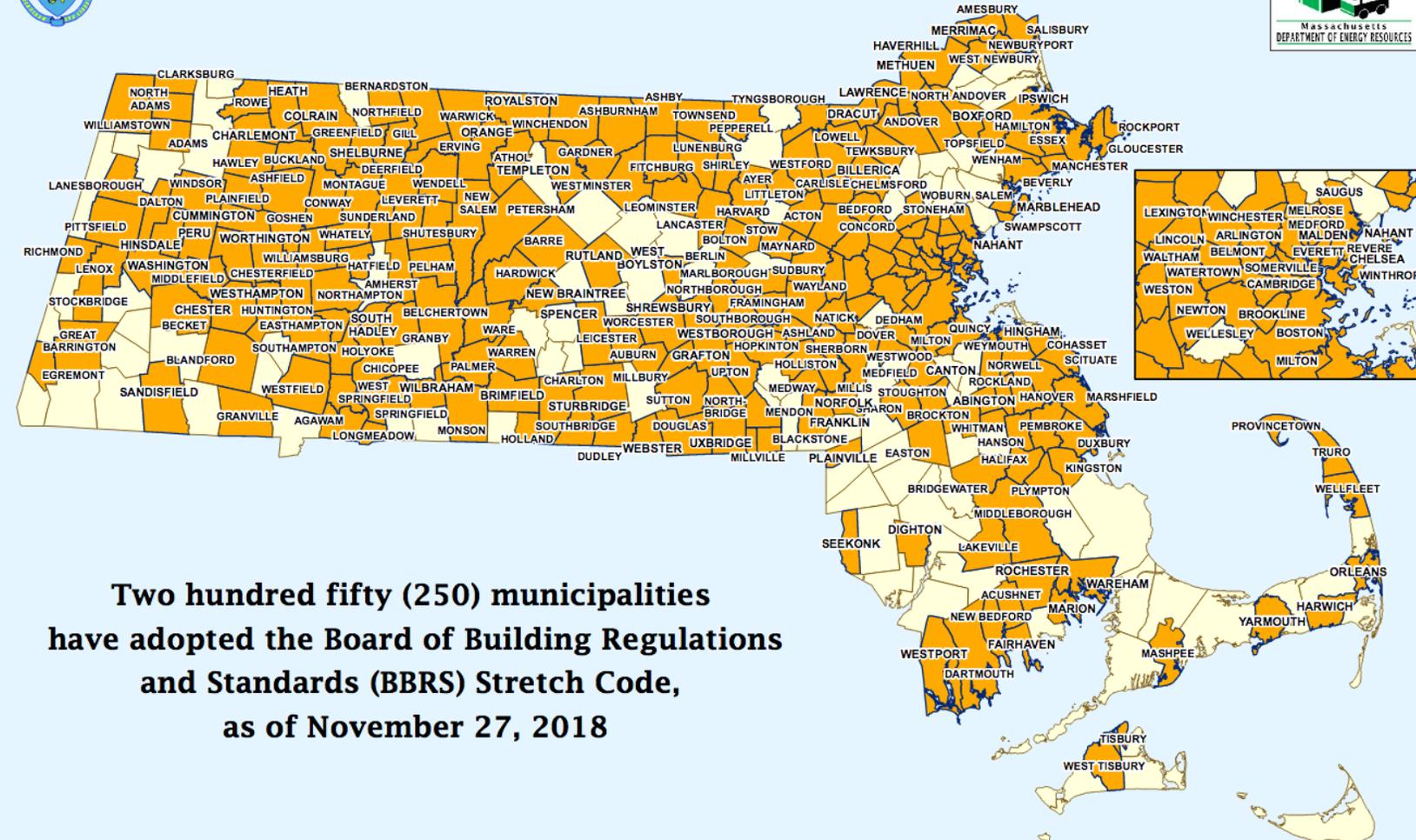
**“To adopt and fully integrate the latest International Energy Conservation Code as part of the state building code, together with any more stringent energy-efficiency provisions that the board, in consultation with the Department of Energy Resources, concludes are warranted.”**



# Stretch Energy Code



## Stretch Code Adoption, by Community



**Two hundred fifty (250) municipalities  
have adopted the Board of Building Regulations  
and Standards (BBRS) Stretch Code,  
as of November 27, 2018**

# How Can We Improve Buildings?



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

## VOTE

International Energy Conservation Code (IECC)

## COMMENT

Base Code (MA Building Code CMR 780)

Stretch Energy Code (780 CMR Ch. 15 AA)

## ADOPT

Zoning and other local ordinances

Stretch Energy Code (780 CMR Ch. 15 AA)

## ENFORCE

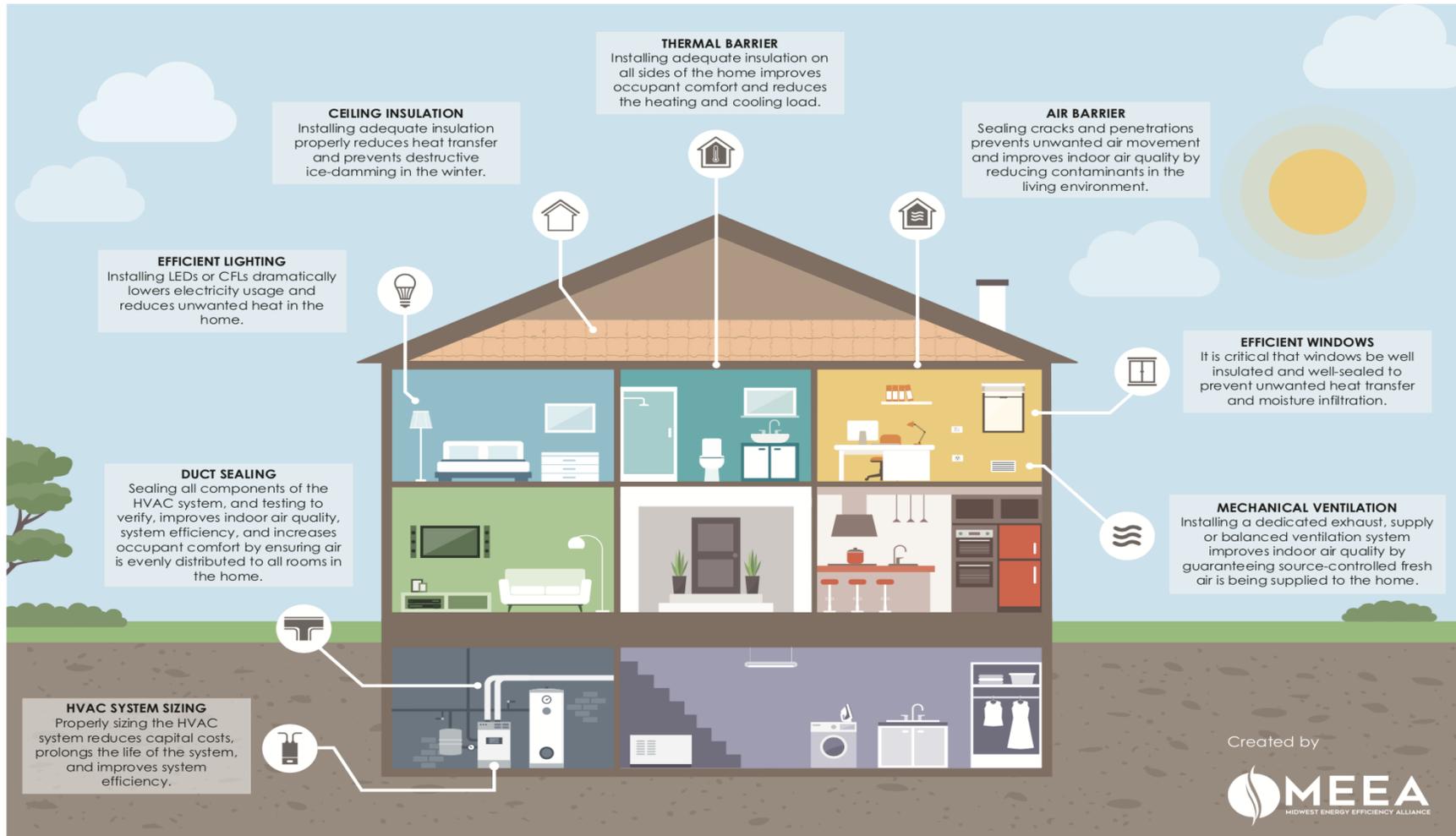
Zoning and other local ordinances

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

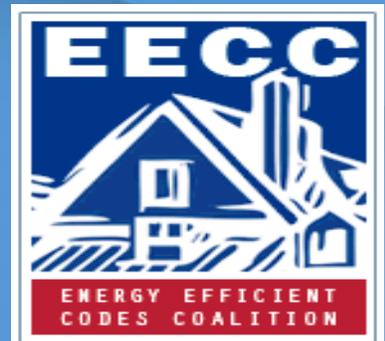


# Big Picture: The IECC as Changemaker

# 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

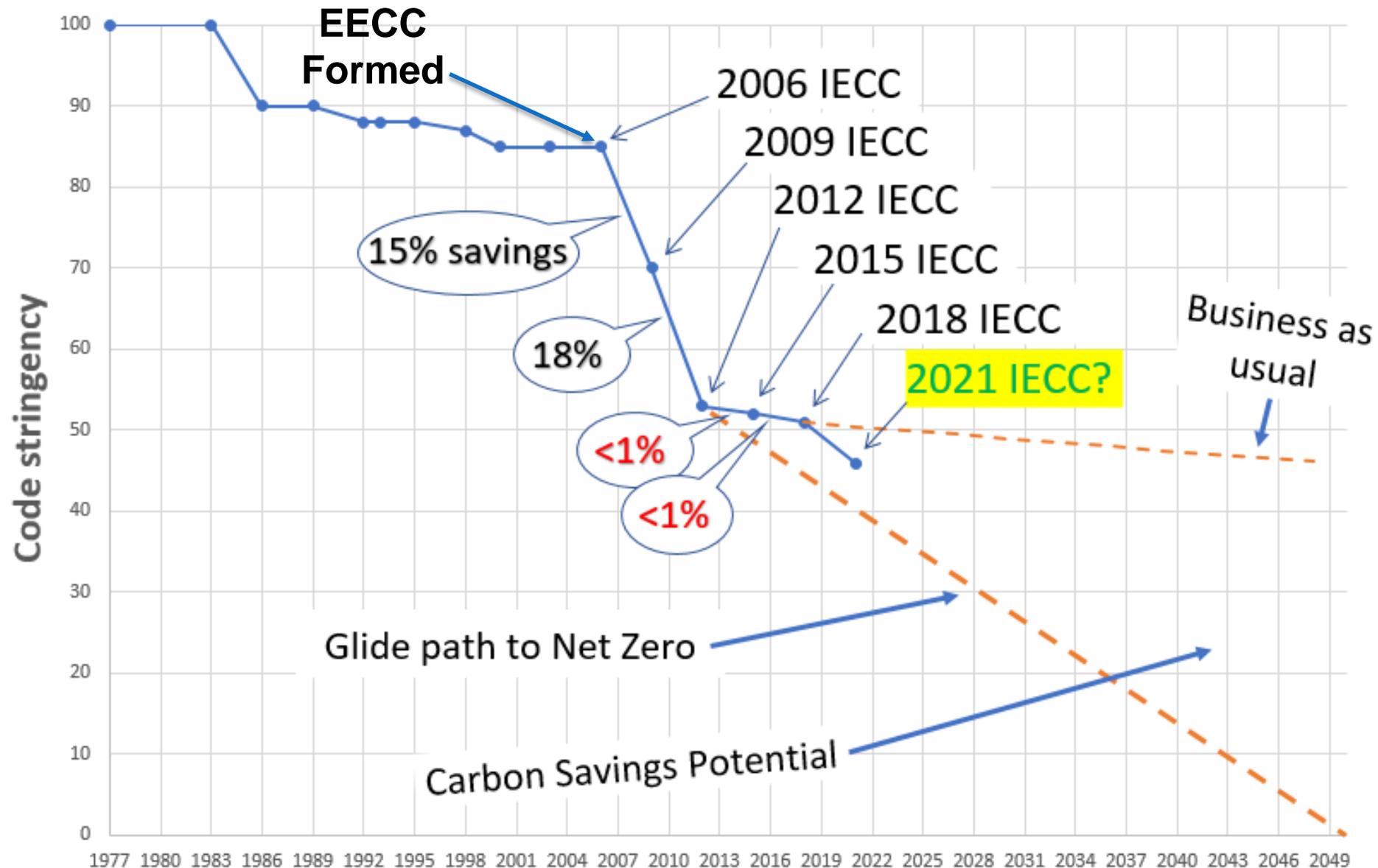
American Public Power Association

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:

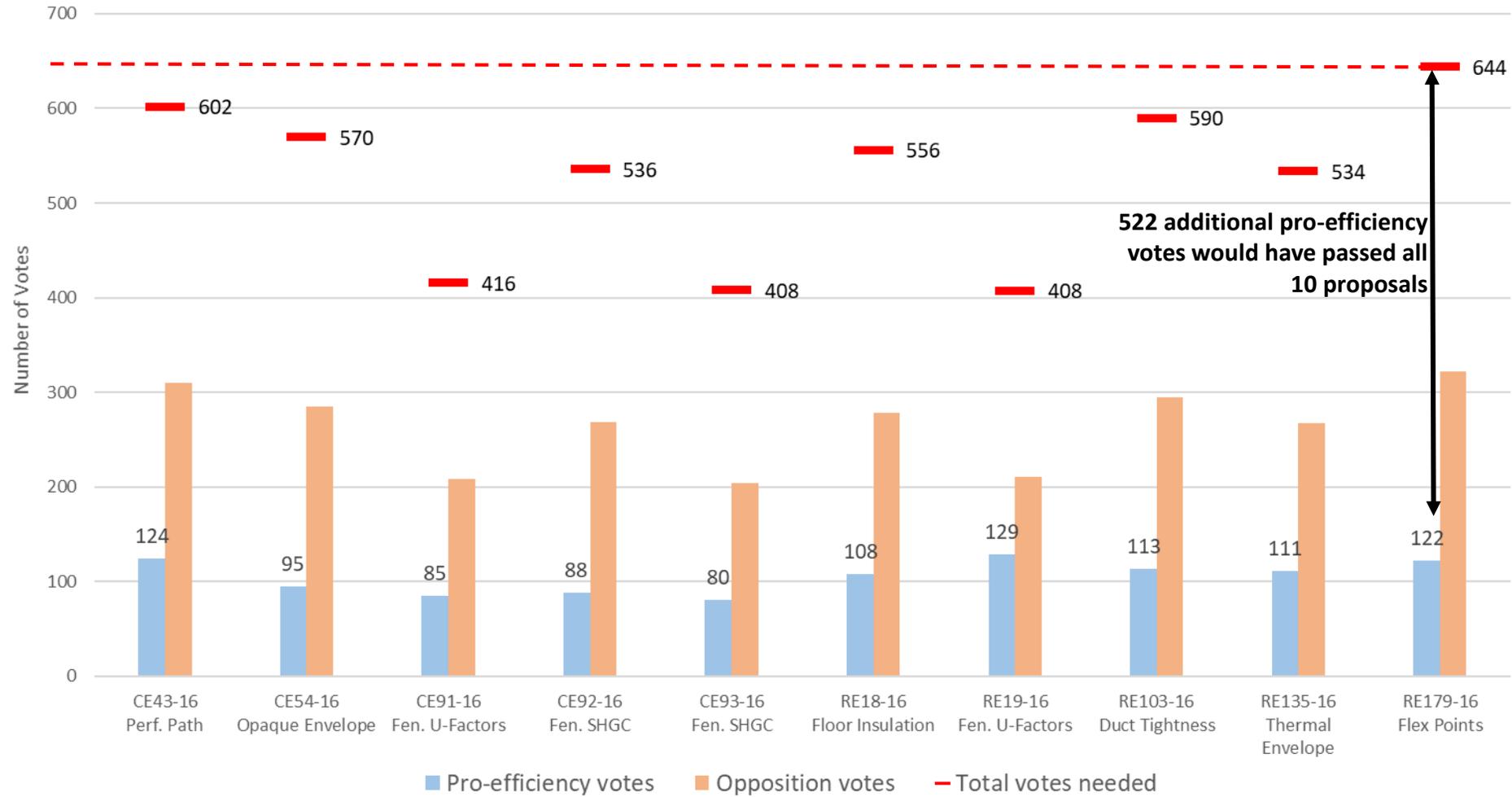
- **Encourage Municipal Support for All Eligible Code Officials to Vote Online**
- **Endorse Endorsed EECC Voting Guide**
- **Oppose Rollbacks and Trade-Offs that Weaken the Stringency of Gains**



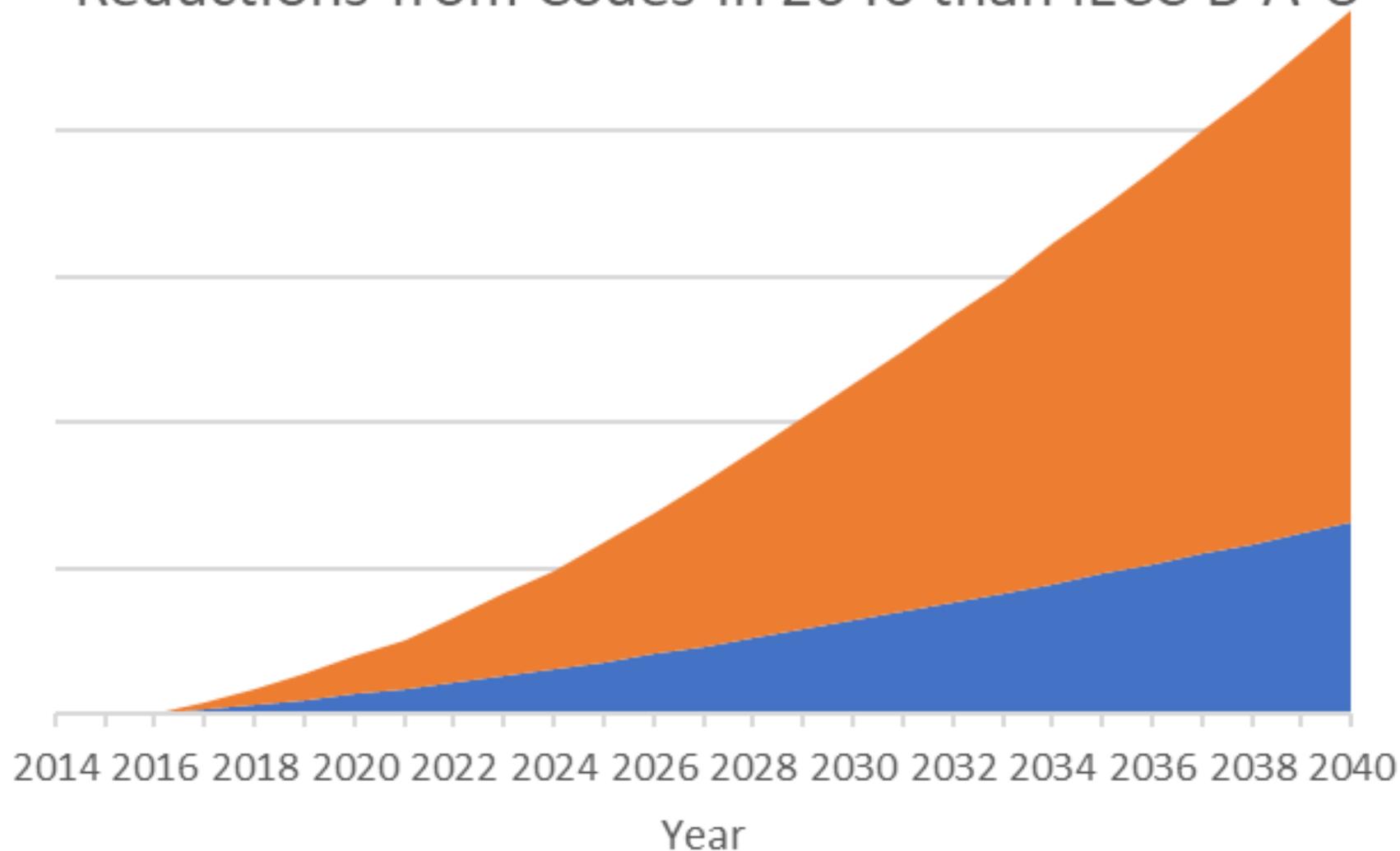
**THE UNITED STATES CONFERENCE OF MAYORS**

*The Voice of America's Mayors in Washington, DC*

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



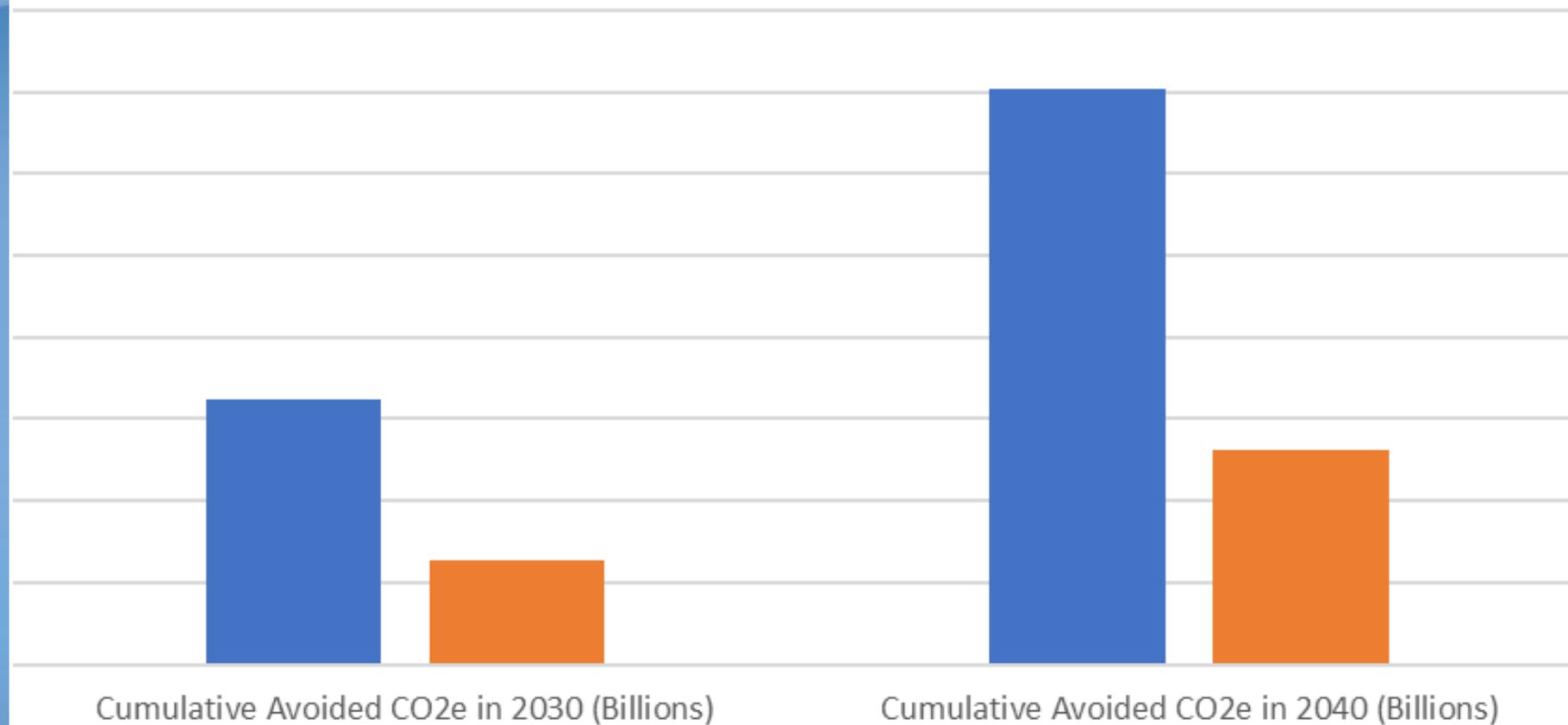
## Glide Path Could Produce More Carbon Reductions from Codes in 2040 than IECC B-A-U



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

■ Glide Path: 5% EE Gains/Cycle

## Residential IECC Cumulative Avoided CO<sub>2</sub>e Savings Scenarios



Cumulative Avoided CO<sub>2</sub>e in 2030 (Billions)

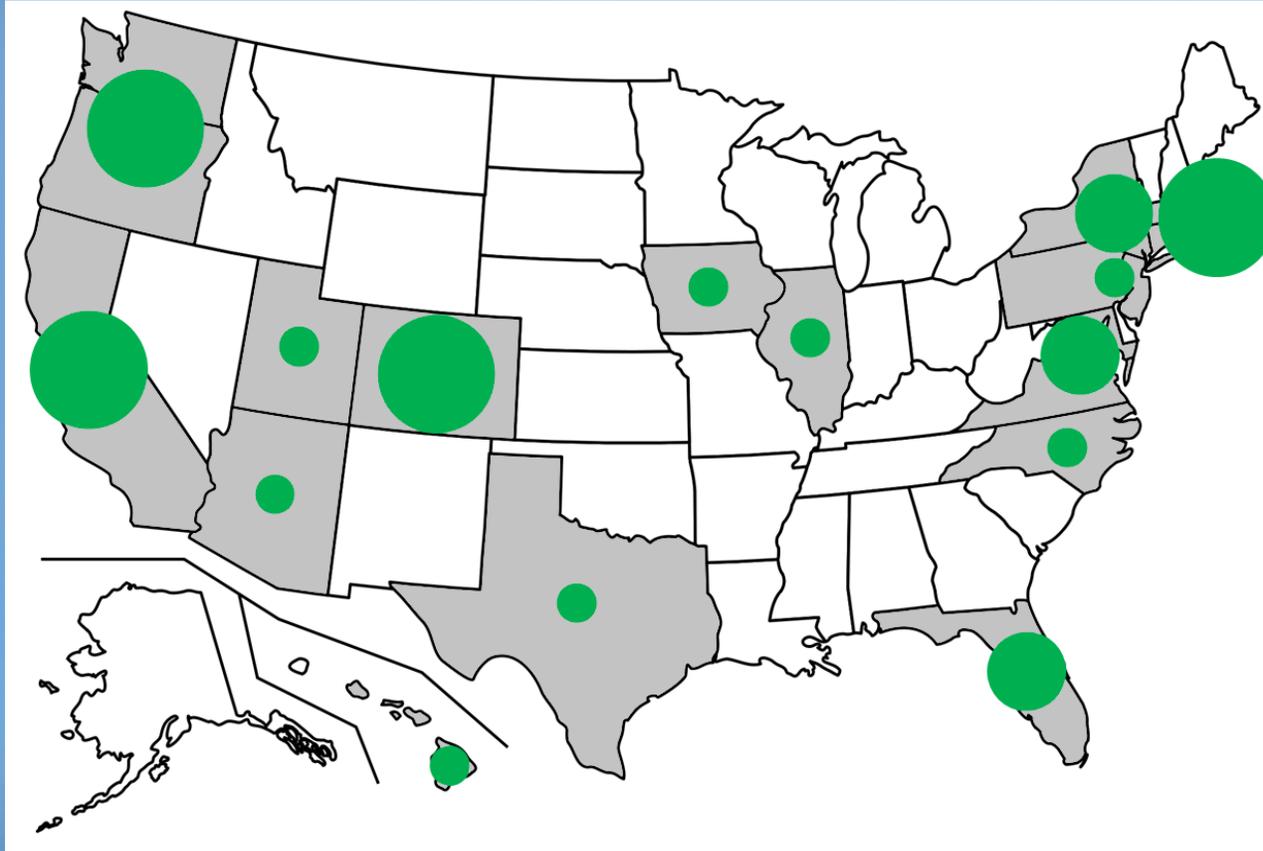
Cumulative Avoided CO<sub>2</sub>e in 2040 (Billions)

Snapshot Years: 2030 and 2040

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

# Work Plan Status Update

## 15 Priority Venues



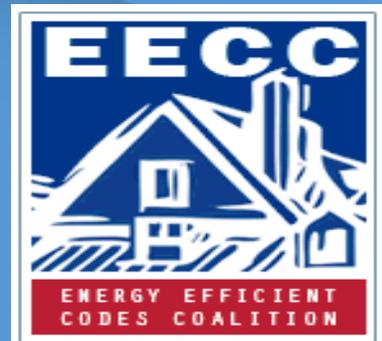
# With Massachusetts Help, We Can Put the 2021 IECC on a Glide Path to Net Zero



BILL FAY

[bfay@ase.org](mailto:bfay@ase.org)

(202) 744-4572 (mobile)



# Getting Involved: The IECC and You

# 2019 IECC Code Cycle



## January 1<sup>st</sup> – March 29<sup>th</sup>

Registration of  
Governmental Members  
with ICC

## March 29<sup>th</sup> – September 23<sup>rd</sup>

Voters for each Governmental  
Member ID'd by Primary  
Representative

## November

Voting Guide Released  
Two Week Voting Window  
Tentative: Nov 13 - 27

# Governmental Voting Members

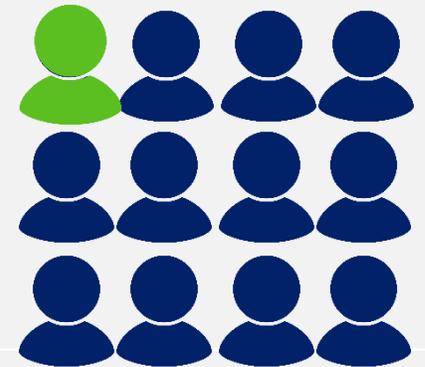
**Population**

**Less than  
50,000**

**50,000 -  
150,000**

**More than  
150,000**

**Voters per  
Governmental  
Member**



**4**

**8**

**12**

# Multiple Governmental Members Per Municipality

**Planning  
Department**



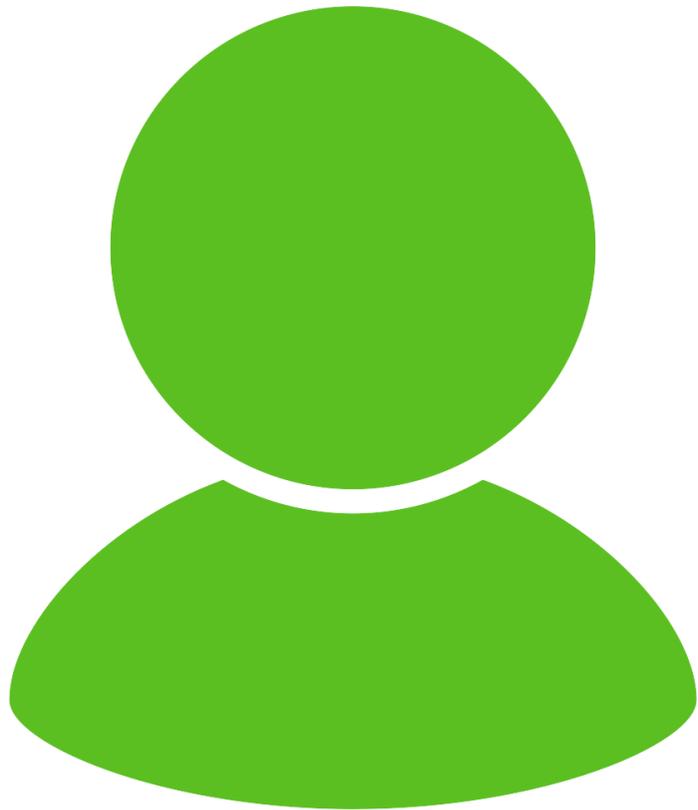
**Sustainability  
Department**



**Inspectional  
Services**

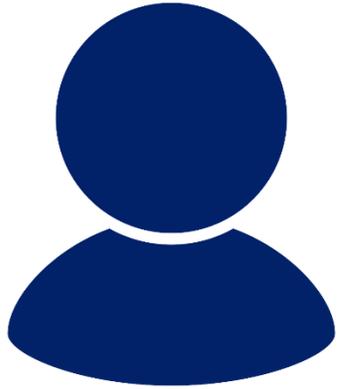


# Primary Voters



- 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 23, 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



<b>Population</b>	<b>Less than 50,000</b>	<b>50,000 -150,000</b>	<b>More than 150,000</b>
<b>Fee per Governmental Member (department)</b>	<b>\$135</b>	<b>\$240</b>	<b>\$370</b>

# How to Register



To **register for the first time**, go to <http://www.iccsafe.org/membership/join-icc> and select the municipal option to apply. Choose your community's population and the code cycle, add the membership to the shopping cart, and check out.

To **reinstate your ICC membership**, go to [www.iccsafe.org/membership/membership-renewal](http://www.iccsafe.org/membership/membership-renewal).

To **confirm your registration**, go to: [www.iccsafe.org/membership/membership-directory](http://www.iccsafe.org/membership/membership-directory).

## Government

Starting At

\$ **135** / yr

Population

Select One

Government/Municipality  
(includes agencies,  
departments & units)  
engaged in administration,  
formulation or enforcement  
of laws, regulations or  
ordinances relating to public  
health, safety and welfare.

Apply

## Governmental Member

Quantity	Format	Price	Member Price	Member Savings
0	Governmental Member (population <50,000) Item #:2947M Duration	\$--.	\$---.	\$--.
1	Governmental Member (population 50,001-150.000) Item #:2948M1 1 Year	\$240.00	<b>\$240.00</b>	\$0.00
0	Governmental Member (population >150,000) Item #:2949M Duration	\$--.	\$---.	\$--.

Complimentary Book (please select one)\*

Choose a selection...

0

Add to Wishlist

Add to Cart

## Shopping Cart

1 product(s) have been added to shopping cart: Governmental Member (population 50,001-150.000).

	Product Name	Unit Price	Qty	Subtotal	
	Governmental Member (population 50,001-150.000) Item #: 2948M1	\$240.00	1	\$240.00	

Continue Shopping

Update Shopping Cart

## DISCOUNT CODES

ENTER YOUR DISCOUNT CODE(S) 

Apply Coupon

TAX EXEMPTION FORM

SUBTOTAL \$240.00

GRAND TOTAL \$240.00

Proceed to Checkout

[Checkout with Multiple Addresses](#)

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

ICC / Overview / Benefits / Fees & Information / Resources / Renewal AAA

## Renew Your Membership

Members whose memberships are current can renew their ICC Membership online.

[Renew Now](#)

## Reinstate Your Membership

Members whose memberships have been canceled can reinstate their memberships. Please download the application for your specific category. Mail or fax your application as stated on the application.

[Government](#) [Corporate](#) [Individual](#)

Questions? Call toll free 888-ICC-SAFE (888-422-7233), ext. 33804

*If you have had an active membership within 5 years, you may purchase a new membership [online](#), but you will not be eligible for a complimentary code book, even if one is chosen.*



February 1<sup>st</sup>

**Identify a community champion** (maybe you!) to coordinate this effort. Ask around in your municipality to see who is registered with the ICC and who may have registered/voted last time in 2016

February 15<sup>th</sup>

**Identify which departments** or other “governmental members” might be eligible and interested in advancing energy efficiency

March 1<sup>st</sup>

**Identify the funds** for each department to register and **determine the point person** who will register as the “primary representative” for each department

March 15<sup>th</sup>

**Register each identified department and “primary representative”**. You have until March 29<sup>th</sup>, but aim for the 15<sup>th</sup> so that if you run into any challenges, we can help you figure it out!

# Next Steps:



Visit our website to stay up to date on our IECC code efforts

<https://www.mapc.org/resource-library/building-codes-climate>

Schedule a 1/2 hour check in with us on the IECC

If you would like to get involved, but not sure where to start, we are providing free technical assistance to municipalities to help determine eligibility and to register for the IECC.

**Nicole Sanches**

Clean Energy Coordinator

[nsanches@mapc.org](mailto:nsanches@mapc.org)

(617) 933-0761

Questions?

# Contact

**Nicole Sanches**  
**Clean Energy Coordinator**  
[nsanches@mapc.org](mailto:nsanches@mapc.org)  
**(617) 933-0761**

**Cammy Peterson**  
**Clean Energy Director**  
[cpeterson@mapc.org](mailto:cpeterson@mapc.org)  
**(617) 933-0791**



- Governmental Membership Reinstatement Application: [https://cdn-web.iccsafe.org/wp-content/uploads/reinstate\\_gov.pdf](https://cdn-web.iccsafe.org/wp-content/uploads/reinstate_gov.pdf)
- Voter Validation Process FAQ's: <https://www.iccsafe.org/voter-validation-process-faqs/>
- ICC Code Development Process: <https://www.iccsafe.org/codes-tech-support/codes/code-development/>
- Primary Voter Log-In: <https://av.iccsafe.org/eweb/DynamicPage.aspx?WebCode=LoginRequired&expires=yes&Site=icc>

# Governmental Membership



## Governmental Memberships

*Submit ICC Governmental Member Voter Designation*

Deadline to join as a new Governmental Member or to reinstate an expired Governmental Member to be eligible to participate in this year's code development cycle and Annual Business meeting is **March 16, 2018**.

Governmental ICC Members have the ability to designate 4 to 12 voting representatives (total is based on jurisdiction population). These 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.

*Be sure you know the upcoming Governmental Member voting deadlines.*

[? Learn More](#)

Governmental Members have voting rights. Read the [ICC By-Laws, Articles II and III](#) to learn more.