

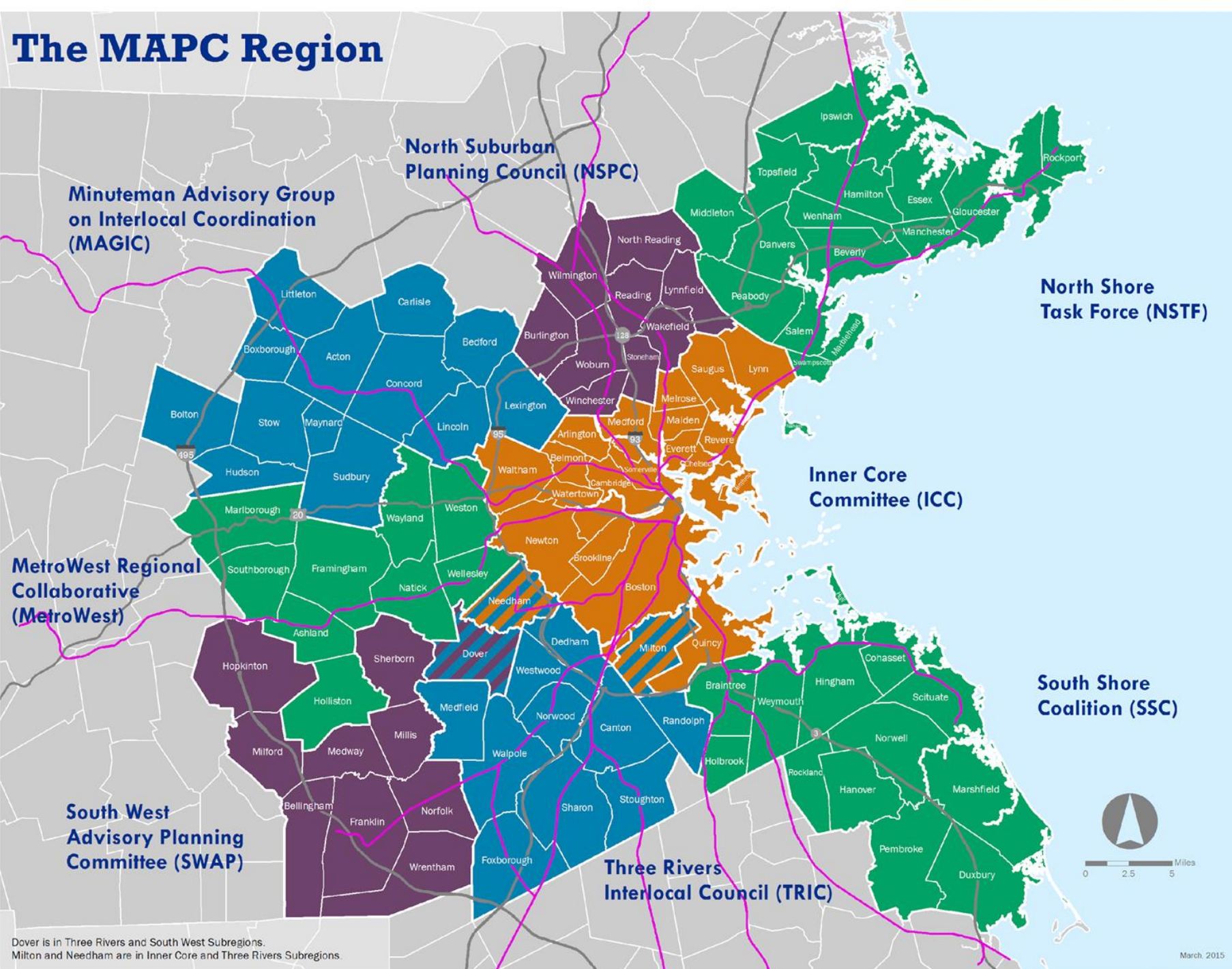


MA Cities and Towns: Finalizing Your IECC Voter Roster

*MAPC's Codes for Climate Webinar Series
and Zero to 101 Initiative*

August 20, 2019

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



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
- Codes for Climate



Agenda

- 1 Local Codes Update
- 2 Registration Results and Next Steps
- 3 How To: Completing Voter Validation
- 4 Nationwide Efforts and Expected Code Proposals
- 5 Q & A

Net Zero as a Framework for Holistic Climate Planning

Multi-Benefit Outcomes

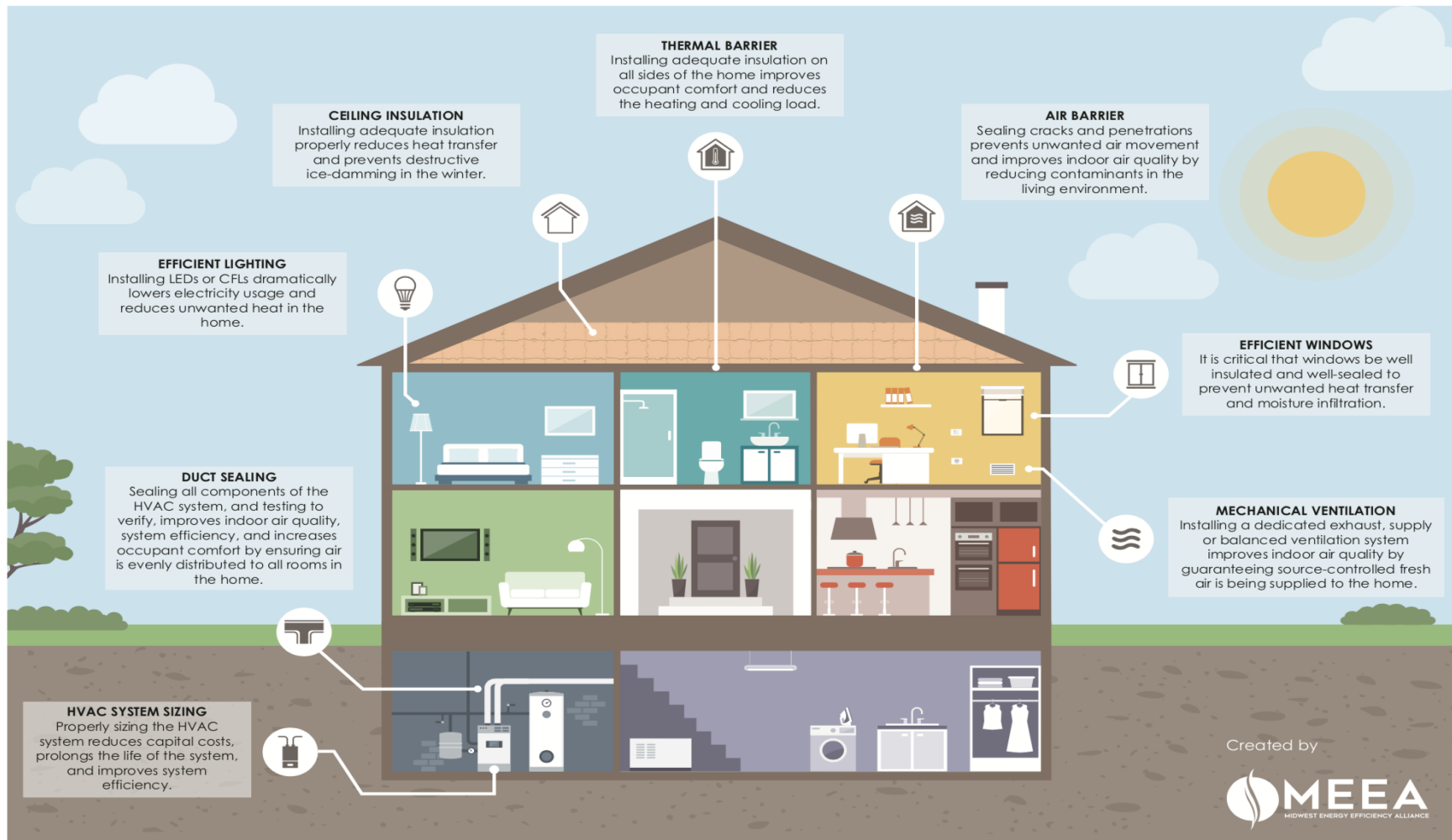
- **Energy**
- **Economic**
- **Environmental**
- **Public Health**
- **Equity**
- **Livability**



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

Codes for Climate

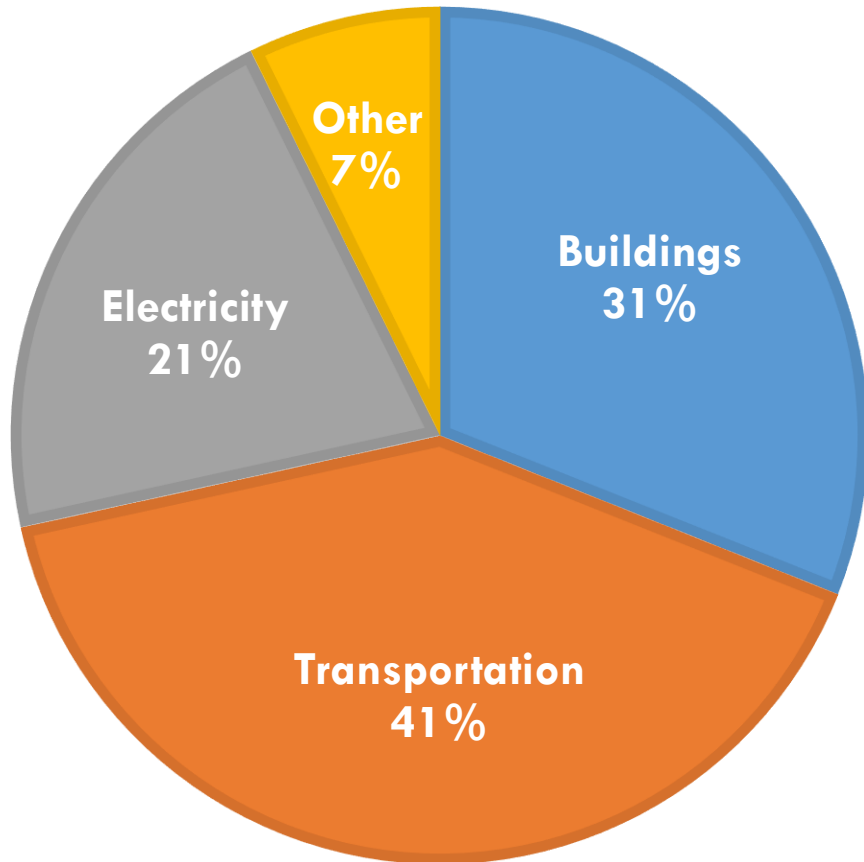
How the Energy Code Improves a Home



Codes for Climate

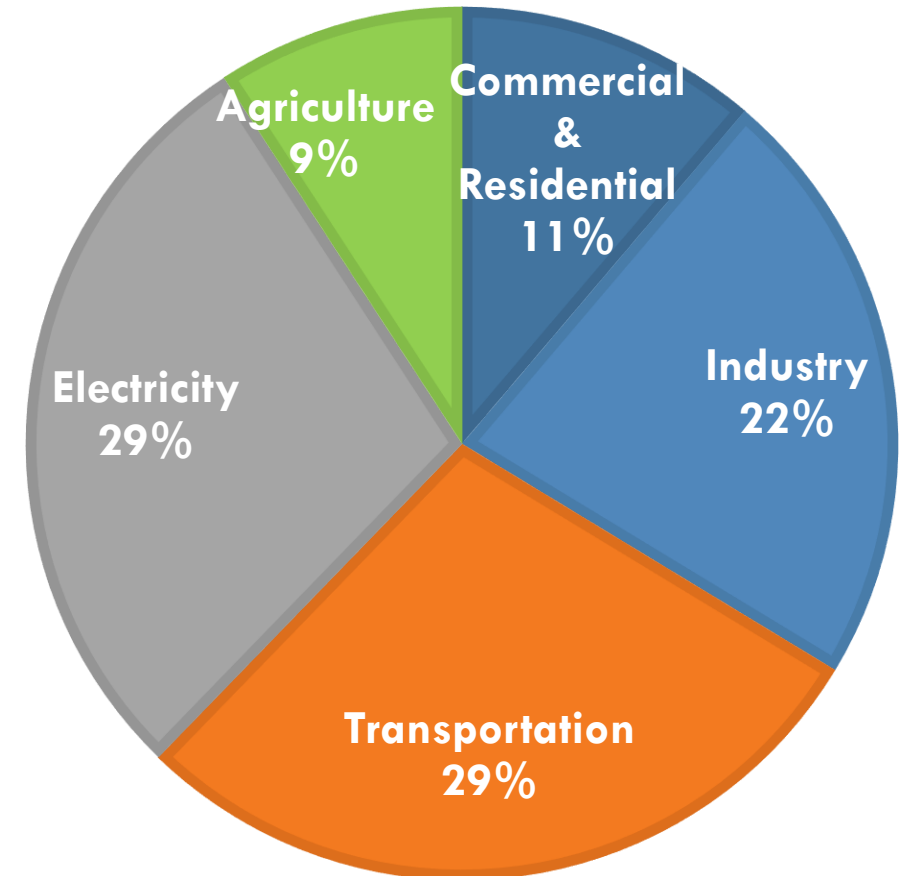
MASSACHUSETTS GHG BY SECTOR

■ Buildings ■ Transportation ■ Electricity ■ Other

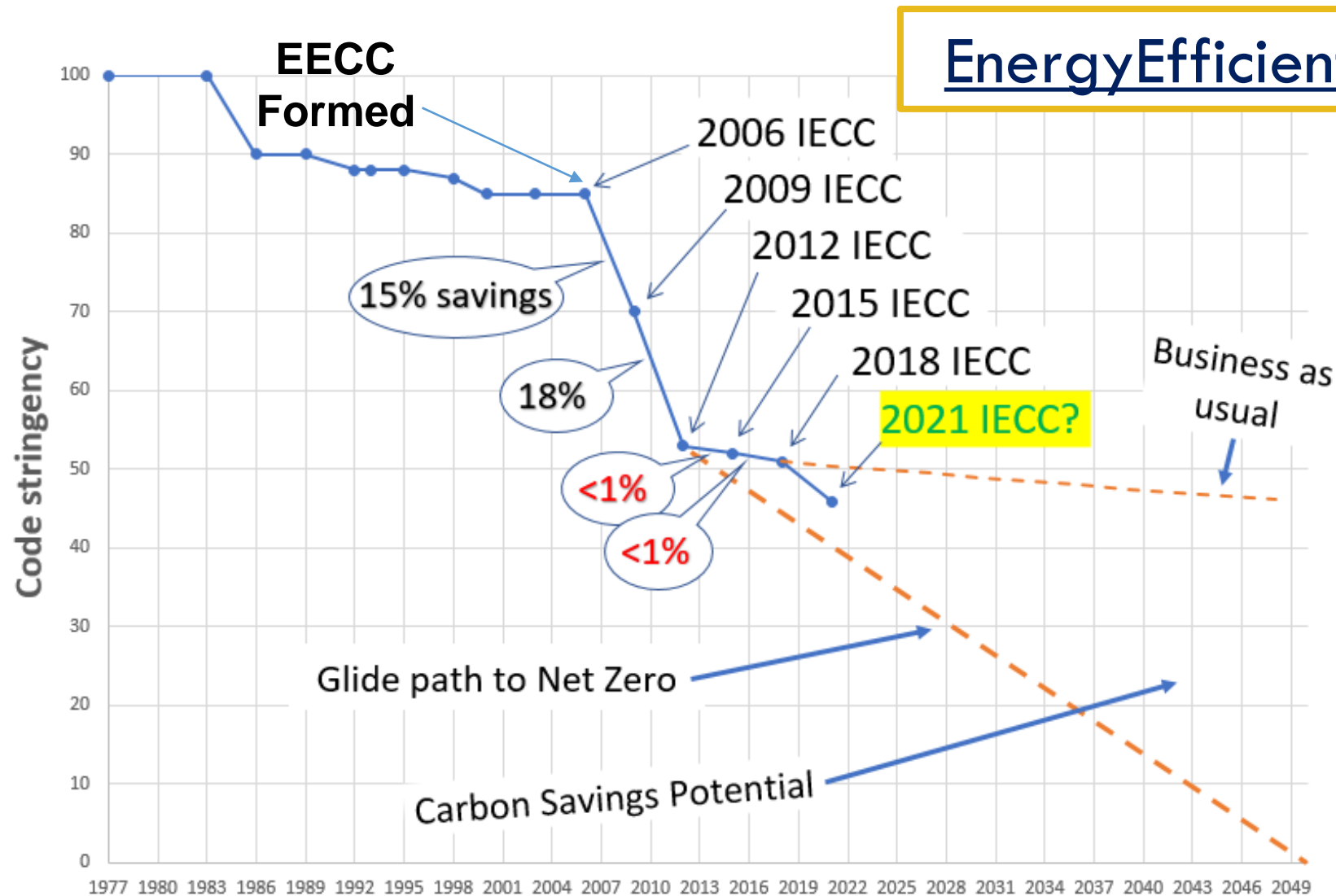


U.S. GHG BY SECTOR

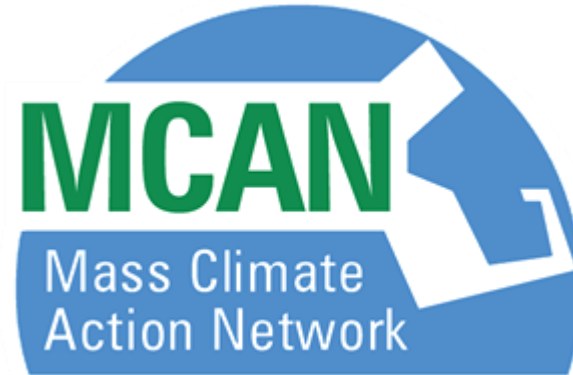
■ Commercial & Residential ■ Industry ■ Transportation ■ Electricity ■ Agriculture



Efficiency Improvements of IECC



IECC Partners



Energy Efficient Codes Coalition



**SIERRA
CLUB**



Local Codes Update

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)

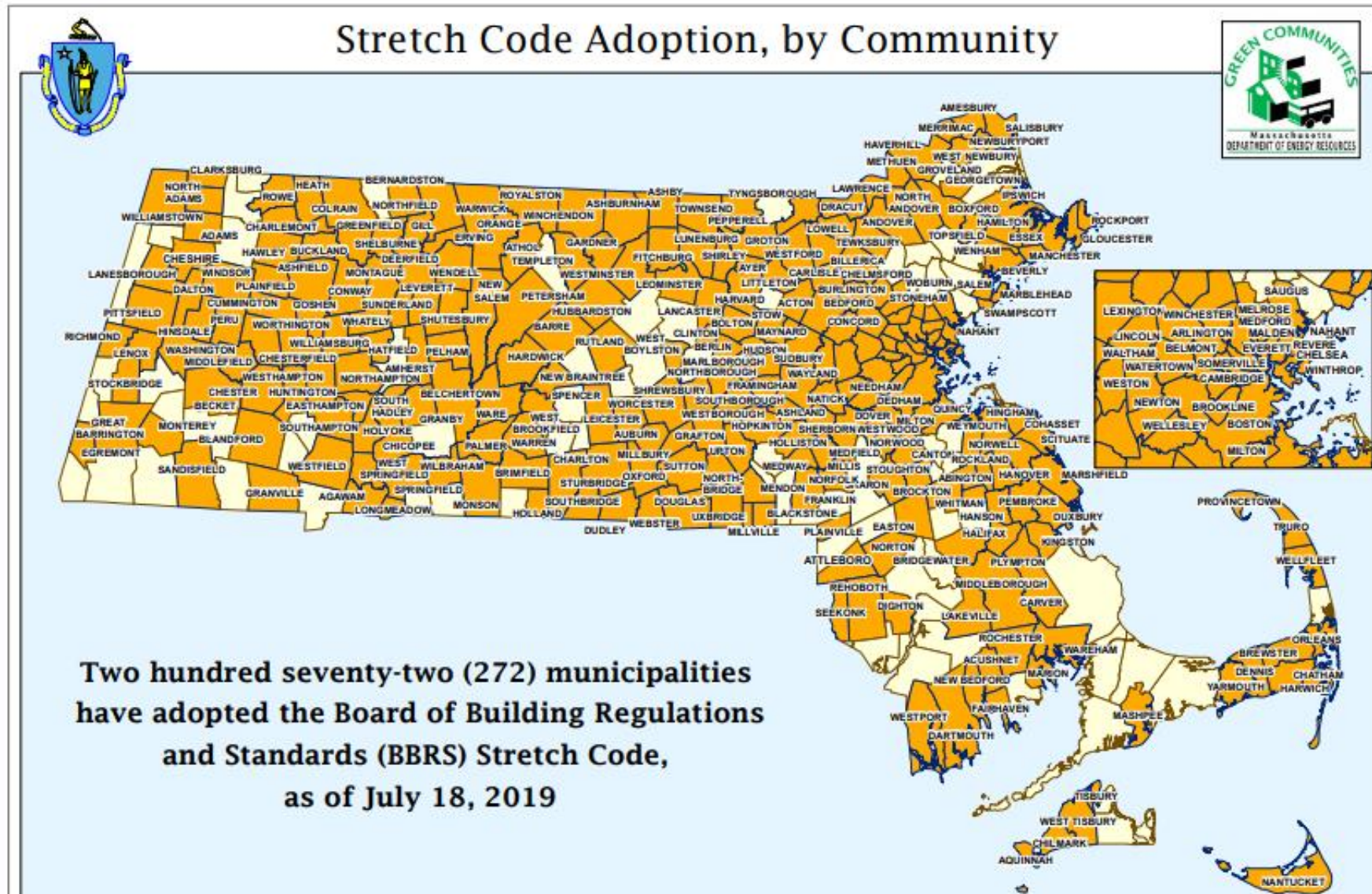
Massachusetts State Building Energy Code

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



Efforts to Update the Stretch Code

THE 191ST GENERAL COURT OF THE

Bill H.2865 / S.1935

★ BILL H.2865
191st (Current)

AN ACT TO ESTABLISH A NET ZERO STRETCH ENERGY CODE

By Representative Gouveia of Acton and Senator Comerford, a joint petition (accompanied by bill, House, No. 2865) of Tami L. Gouveia, Joanne M. Comerford and others for legislation to establish a net zero stretch energy code. Telecommunications, Utilities and Energy.

View Text

Print Preview

Download PDF

Presenters: Tami L. Gouveia , Joanne M. Comerford

Status: Referred to Joint Committee on
Telecommunications, Utilities and Energy

Bill History

Petitioners

Displaying 3 actions for Bill H.2865

Date	Branch	Action
1/22/2019	House	Referred to the committee on Telecommunications, Utilities and Energy
1/22/2019	Senate	Senate concurred
7/17/2019	Joint	Hearing scheduled for 07/23/2019 from 01:00 PM-05:00 PM in B-1

<https://malegislature.gov/Bills/191/H2865>

Board of Building Regulation and Standards (BBRS)

I want to... Contact us Events

The Board of Building Regulations and Standards (BBRS) monitors Massachusetts building codes and construction supervisor licensing. The Board also licenses concrete testing labs and technicians, approves manufactured buildings and related inspection procedures, approves native lumber producers, and certifies municipal building inspectors.

Contact Us

Address

1000 Washington St, Suite 710, Boston, MA 02118

[directions](#)

Tewksbury Office, Tewksbury Hospital - Old Anne Sullivan Building

365 East Street , Tewksbury, MA 01876

[directions](#)

Springfield Office

One Armory Square , Building 15, 2nd Floor, Springfield,

<https://www.mass.gov/service-details/board-of-building-regulation-and-standards-bbbs-members-advisory-committees-and>

Phone

Boston Office (617) 727-3200

Tewksbury (978) 513-9660

Board of Building Regulations and Standards (BBRS)



Public Hearing May 7, 2019	MAPC, Cambridge, Somerville, Boston, MCAN, and state representatives provided testimony to the Board on updating and accelerating the stretch code and integrating energy efficiency measures into the 2018 IECC update.
Monthly Board Meeting June 11, 2019	Cambridge, Somerville, and Boston presented to the BBRS. The Board agreed to have their Energy Advisory Council review a Net Zero Stretch Code
Public Hearing November 5, 2019	Div. Of Professional Licensure – 1000 Washington St. Boston

<https://www.mass.gov/board-of-building-regulation-and-standards-bbbs-monthly-meetings>

Examples of Net Zero Codes

District of Columbia



- Clean Energy DC Omnibus Amendment Act
- Title III: Benchmarking and Building Energy Performance Standards for existing buildings based on Energy Star Ratings. 20% EUI reduction.
- 100% RPS by 2032

https://doee.dc.gov/sites/default/files/dc/sites/ddoe/page_content/attachments/Clean%20Energy%20DC%20-%20Full%20Report_0.pdf

New York City



- Stretch-To-Zero optional stretch code pathway
- Part of 2020 stretch code update
- NYC Climate Mobilization Act: Sets emissions caps for buildings over 25,000 SQFT. Requires 40% reduction by 2030 and 80% by 2050.

<https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020>
<https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3761078&GUID=B938F26C-E9B9-4B9F-B981-1BB2BB52A486>

Examples of Net Zero Codes



- Roadmap to the 2031 Energy Code
- Residential and Nonresidential new construction must achieve a 70 % reduction in energy over 2006 code (RCW 19.27A.160)
- Goal to construct increasingly efficient homes and buildings that help achieve the broader goal of building zero fossil-fuel greenhouse gas emission homes and buildings by the year 2031 (RCW 19.27A.020)

https://newbuildings.org/code_policy/washington-state-energy-code/
<https://newbuildings.org/wp-content/uploads/2015/11/WashingtonEnergyCodeRoadmap2015091.pdf>



- Multi-Tier green building standards code
- Optional tier for Net Zero buildings
- Requires whole building HERS modeling
- 2019 CA building code, all new buildings will use net-zero electricity
- As of 2020, all new homes under 3 stories must install solar on their rooftops; storage, heat pumps, and thicker building envelopes encouraged

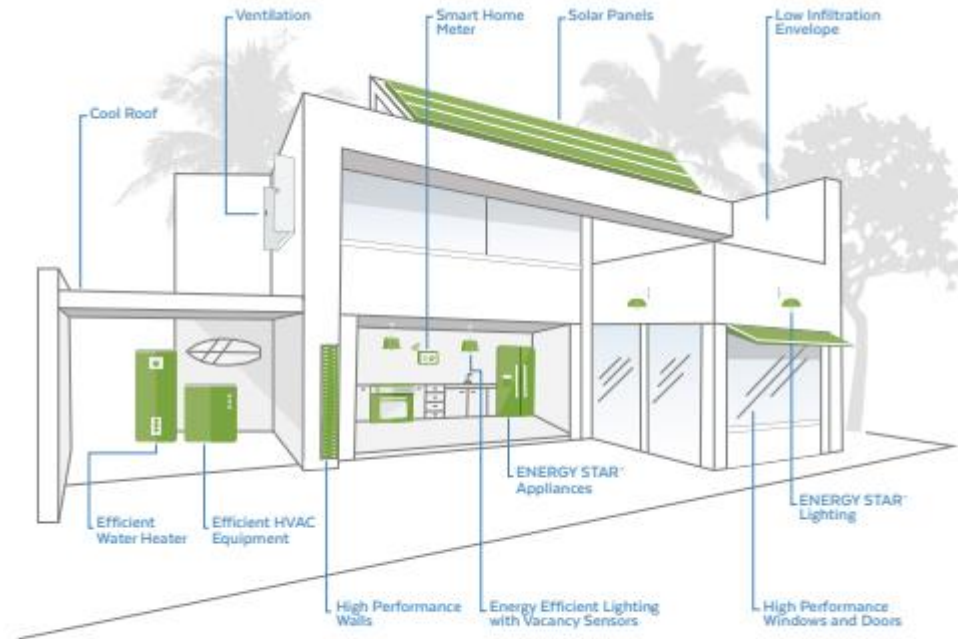
<https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen>

Zero Energy Appendix Proposal

2021 IECC Code Proposal

New Buildings Institute (NBI)

- An optional appendix that would codify net zero pathway
- Based on the Energy Rating Index (ERI) compliance path [Section R406 of the 2018 IECC]
- Would require an initial ERI value based on highly efficient buildings before considering on-site generation
- Remaining annual energy use is satisfied with on-site generation

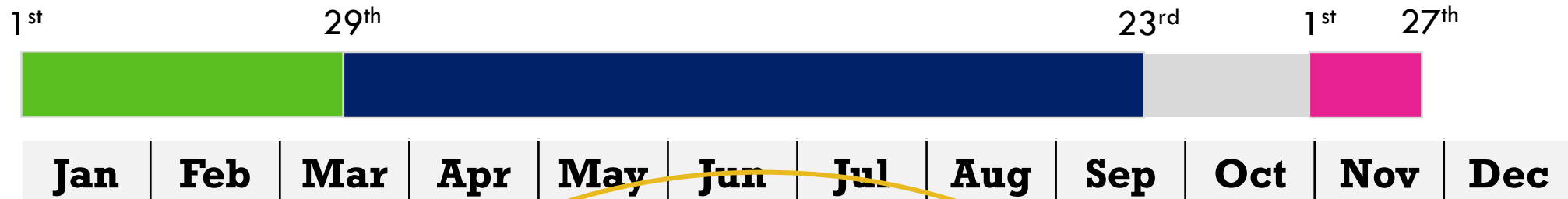


Graphic shows possible components of typical net zero home construction, and is for illustrative purposes only.

https://newbuildings.org/wp-content/uploads/2018/10/nbi_Factsheet_ZEBuilding-Appendix-Factsheet_5.pdf

Registration Summary

2019 IECC Code Cycle



January 1st – March 29th
Registration of
Governmental Members
with ICC

March 29th – September 23rd
Voters for each Governmental
Member ID'd by Primary
Representative

November
Voting Guide in advance
2-Wk Online Voting Window
Tentative: Nov 13 - 27

Results of MAPC Registration Efforts

Target:

400

votes

**420+ Potential
Voters**

82 Govt Members



Voter Validation

MCAN Voter Validation Tutorial Video



<https://www.youtube.com/watch?v=Xa1jBRwO54U>



IECC Voter Validation Tutorial

61 views

1 0 SHARE SAVE ...



Massachusetts Climate Action Network
Published on Jun 27, 2019

SUBSCRIBE

Join our easy tutorial on how you can fill up your full roster of voters to improve the 2021 International Energy Conservation Code, featuring special guest Boston City Councilor Matt O'Malley!

SHOW MORE

Voter Validation

- 1 To start, go to: <http://www.iccsafe.org/> and **log in** using the email and password you created. If you don't have this, look for your membership confirmation email from the ICC.
- 2 Navigate to **My ICC** in the top right hand corner of the site.
- 3 Select **Voter Validation** within the My ICC portal (left hand column). Scroll down and click **add representative**
- 4 Enter a voter's contact information, and how they meet ICC eligibility (from dropdown menus), and click save. Do this for each voter, up to 4, 8, or 12. **Don't forget to include yourself if you plan to vote!**

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NTA joins the Code Council solutions

The acquisition of NTA adds... and fosters innovation by strengthening product manufacturers.

LEARN MORE →



Trusted Source for Codes & Standards

Our model building codes and standards provide the highest level of safety in the world.

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8 minus three

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Can We Help?

[Reset My Password](#)
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Annual Conference

Join us in Las Vegas for the Code Council's 2019 Annual Conference, Code Hearings & Expo, October 20 – 30. Register now and save.

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NTA joins the Code Council family of solutions

The acquisition of NTA adds lab and testing capabilities, and fosters innovation by streamlining time-to-market for product manufacturers.



LEARN MORE →



Trusted Source for Codes & Standards

Our model building codes and standards provide the highest level of safety in the world.



Building Safety Experts

Our Family of Companies delivers a wide array of building safety services, including evaluation, accreditation, certification, codification,



Professional Development

We support the building industry with the latest training, mentoring and education resources.




Annual Conference

Join us in Las Vegas for the Code Council's 2019 Annual Conference, Code Hearings & Expo, October 20 – 30. Register now and save.

myICC - ICC

https://www.iccsafe.org/myicc/

INTERNATIONAL
CODE
COUNCIL®


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Membership


Professional Development


Products & Services


CITIES


CERTIFICATIONS

PURCHASES

MEMBERSHIP

COURSES

EXAMS

CONTRACTORS

Member Type:
Organization through Boston
City Council

Receives Member Benefits:
Yes

myICC

My Information

Member Directory

Member Recognition

My Chapters

Chapter Meeting Request

Local Chapters

My eCodes

My PRONTO Exams

Local Representatives

Voter Validation

View Proposed Committee
Interpretations

MY CEUs

0

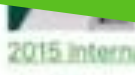
AVAILABLE CEUs


USED CEUs

PROVIDER	TYPE	DATE	QUANTITY	CEUs	ACTION
No recent activities found.					

Re...

Products

2015 International Mechanical
Code®

2015 International Energy
Conservation Code®

Upcoming Events Near Boston, MA

ACCESS

LIVE CHAT

https://www.iccsafe.org/web/DynamicPage.aspx?WebCode=OrgVoterReg&ICCTake...



Code Council Voter Validation

Welcome to the Code Council's improved electronic voter validation system. Here you may designate your jurisdiction's Governmental Member Voting Representatives.

All validated ICC Governmental Member Voting Representatives now remain active for the course of a three-year Code Development Cycle. Any credentials validated and approved on or after January 1, 2018 are active through December 31, 2020 **as long as the Governmental Member account is kept fully paid and current***. The Primary Contact may edit the voting roster from time to time throughout the cycle, but if no changes occur to an approved voter's status, the credentials need not be revalidated until the next code development cycle.

New or revised applications for voting representatives must be submitted 30 days prior to a voting event (committee action hearings, public comment hearings, or Annual Business Meeting) in order to be eligible to vote at that event.

*Consider purchasing a three-year Governmental Membership. Contact Member Services at 888-422-7233 x33804 to extend your current Membership account.

Governmental Member:

Boston City Council

Maximum Voting Representatives: 12

Previously Validated Voting Representatives:

[+] Add Representative

Add - Organization Voter Candidates

Organization Information

Organization Name:
Organization Member Number:
Address Line 1:
Address Line 2:
City, State, Post Code:
Phone Number:

Voting Candidate

First Name:
Last Name:
Title:
E-mail:

Question 1: The ICC Bylaws require that all members of the ICC shall be an employee or a public servant of the City of Boston, or shall be an employee or a public servant of a department of the Government of the Commonwealth, or shall be an employee or a public servant of a public utility, or shall be an employee or a public servant of a public health, safety and welfare. Please choose the description that best describes this voter's duties.

Please select

Question 2: This Voter is a(n) (choose one)...

Please select

I hereby affirm that the information I have provided is true and accurate in all respects. I understand that ICC membership and voting status is subject at any time to review by ICC. I also understand that choosing the "Save" button is equivalent to my signature and confers on me the responsibility as to the accuracy of all statements herein.

First Name:

Last Name:

Title:

E-mail:

Question 1: The ICC Bylaws require that all voters “shall be employees or officials of the Governmental Member or departments of the Governmental Member, provided that each of the designated voting representatives shall be an employee or a public official actively engages either full or part time, in the administration, formulation, implementation or enforcement of laws, ordinances, rules, or regulations relating to the public health, safety and welfare.” Please choose the description that best describes the voter’s duties.

Please Select

Administers the laws, ordinances, rules or regulations of this Governmental Member.

Formulates the laws, ordinances, rules or regulations of this Governmental Member.

Implements the laws, ordinances, rules or regulations of this Governmental Member.

Enforces the laws, ordinances, rules or regulations of this Governmental Member.

Question 2: This voter is a(n):

Please Select

Paid Employee of this Governmental Member.

Third-Party Contractor of this Governmental Member.

Elected official of this Governmental Member.



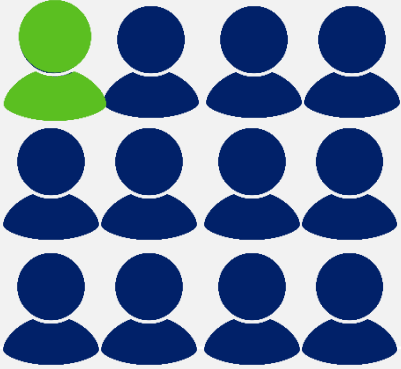
Other – (Please specify)

I hereby affirm that the information I have provided is true and accurate in all respects. I understand that ICC membership and voting status is subject at any time to review by ICC. I also understand that choosing the “Save” button is equivalent to my signature and confers on me the responsibility as to the accuracy of all statements herein.

Save

Cancel

Governmental Voting Members

Population	Less than 50,000	50,000 - 150,000	More than 150,000
Voters per Governmental Member			
	4	8	12

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.**”

Nationwide Efforts and Expected Code Proposals



PUTTING THE 2021 IECC ON A GLIDE PATH TO NET ZERO BUILDINGS IN AMERICA

August 19, 2019

2021 IECC DEVELOPMENT PROCESS

A STRONG START EXCEEDS EXPECTATIONS

- **Strong Slate of Proposals Submitted in January**
 - EECC Proposals Alone Would Save 35 MMT Carbon/Year by 2030; Nearly 50 MMT with EECC Supporter Proposals
 - Package Proposals get 5%, with a 5% booster for Flex Points – Scalable, proven
 - Net Zero Appendix for Residential is Strong; Commercial Appendix has Potential
- **Multiple Governmental Memberships Expand Inter-Jurisdiction Collaboration; Elevate IECC Importance**
- **Outstanding Code Development Committees**
 - Commercial Energy Committee Recommendations Achieve 10% Boost
 - Residential Energy Committee Recommendations Mean Fewer 2/3 Majority Votes; Lots of 5-2, 4-3 Votes

A DESIRE FOR PROGRESS . . . A SENSE OF URGENCY U.S. CONFERENCE OF MAYORS RESOLVE ACTION

Meeting Mayors' Energy and Climate Goals by Start America's Model Energy Code on a Glide Path to Net Zero Energy Buildings by 2050
Sponsored by the Honorable Kirk Caldwell, Mayor of Honolulu

WHEREAS, the International Code Council will complete its year-long development of the 2021 IECC this November with online final action voting by its Governmental Members, who are primarily local officials, and

WHEREAS, since 2008, mayors have endorsed the goals, principles, and efficiency recommendations of the broad-based Energy Efficient Codes Coalition (EECC), whose supporters include government; low-income housing; national efficiency NGOs; regional efficiency organizations; business and labor; consumer and environmental groups; architects; manufacturers; and all forms of utilities, and

WHEREAS, following USCM's presentation to the ICC Board of Directors in support for future IECCs that help mayors achieve their energy and climate goals, EECC supporters submitted proposals that would: 1) achieve a minimum 10% boost in the residential and commercial building efficiency of the 2021 IECC using flexible options, and 2) incorporate flexible and "scalable" approaches, as well as net-zero appendices, that will allow jurisdictions wishing to exceed 10% efficiency gains to do so.

NOW, THEREFORE, BE IT RESOLVED that The U.S. Conference of Mayors realizes the urgency of meeting Paris Accord and energy policy targets by improving the energy efficiency of America's existing and newly constructed residential, multi-family, commercial, and governmental buildings.

BE IT FURTHER RESOLVED, The U.S. Conference of Mayors recognizes the unique opportunity for cities and the critical role mayors can play by working with NGOs and broad-based building efficiency organizations in the development of America's Model Building Energy Code, the IECC.

BE IT FURTHER RESOLVED, that The U.S. Conference of Mayors encourages municipal governments to maximize their jurisdictions' online voting with the International Code Council to improve the 2021 IECC by at least 10% this November and to put future IECC updates on an efficiency glide path of steady progress to net zero building construction by 2050.

EECC'S VOTING GUIDE

- **Our Simple Yardstick to Evaluate IECC Update Proposals:**
 - Does the proposal boost efficiency using readily available technologies? If so, vote for the best proposal available.
 - If the proposal rolls back or trades away efficiency, oppose it.
- **Based on EECC Guiding Principles:**
 - Support a glide path of steady improvements; no pride of authorship
 - Simplicity, ease of enforcement, cost-effectiveness, longevity, comfort & energy/environmental benefits are paramount considerations
 - No backsliding or rollbacks; Trade ups, not trade offs of efficiency; No loopholes
 - No product specific proposals
 - Reasonable # of compliance paths, but each as efficient as prescriptive path

EECC'S VOTING GUIDE CATEGORIES

- **The Biggest Energy Savers (all need 2/3 majorities):**
 - Efficiency Package Options +5
 - Flex Points +5 and +10%; Scalable
 - Stronger ERI Scores
- **Individual Improvements (most residential need 2/3, most commercial only need simple majority)**
- **Hard to Quantify Improvements**
 - Testing requirements; EV Ready; Zero Energy Appendices
- **Rollback and Trade-Off – nearly all need simple majority to beat, 2/3 to pass.**

A Simple, USCM Endorsed Yardstick for EECC Voting Recommendations

SUPPORT Proposals that Boost Efficiency Using Readily Available Technology.

OPPOSE Proposals that Roll Back or Trade Off Efficiency Gains.

Energy Efficient Codes Coalition – Public Comment Hearing RE Recommendations

Prop. #	Standing Motion	EECC Recommended Action	Original Proposal Summary	EECC Evaluation & Summary of Public Comments with Modifications	EECC Notes
RE7	D	Support D	Replaces specific interior design temperatures with a reference to ACCA manual J, allowing additional flexibility in design.		Current code language promotes better equipment sizing than the proposed change.
RE8	D	Oppose D	Requires all new 1- and 2-family and multifamily dwellings with roofs oriented between 110°-270° to have <i>solar ready zone</i> of ≥300 sq ft or ≥150 sq ft for homes under 2000 square feet. Exceptions for buildings with on-site renewables or roof areas shaded >70% of the time. Construction documents must indicate the zone and pathways for conduit, pre-wiring, or plumbing chase and the electrical service panel must reserve space for a breaker. Exception for buildings with installed pre-plumbing or chase from zone to water heating system.	PC – Removes requirement to have solar ready zone and to reserve space in electrical service panel, but maintains requirements to document solar-ready portions of the roof, keep these zones free of obstructions, and document conduit pathways and roof loads.	Agree
		Support AM PC			
RE9	D	Oppose D	Requires all new 1- and 2-family and multifamily dwellings with roofs oriented between 110°-270° to have <i>solar ready zone</i> of ≥300 sq ft or ≥150 sq ft for homes under 2000 square feet. Construction documents must indicate the zone and pathways for conduit, pre-wiring, or plumbing chase and the electrical service panel must reserve space for a breaker. Exceptions for buildings with on-site renewables or roof areas shaded >70% of the time.	PC1 – Moves solar ready provisions into a new appendix; adds an exception for buildings with <600 sq. ft. of solar ready zone that is unshaded for more than 70% of daylight hours. PC2 – Move solar ready provisions into a new appendix; adds a scoping exception for buildings with <600 sq. ft. of solar ready zone.	Agree NR
		Support AM PC1			

2021 IECC DEVELOPMENT PROCESS

WHAT'S AHEAD



**GMVR Roster
Validation
Deadline**



Maximize Governmental Member Voting Clout



**Public Comment
Hearings – Las
Vegas**



Pro-Efficiency Witnesses Set Online Ballot



**Tentative ICC
Online Voting
Window**



GOTV Drive – Pro-Efficiency EECC Voting Guide

Visit EECC Online at energyefficientcodes.org for Everything You Need to Know...

- ✓ Codes-Carbon Calculator – Energy/Carbon Savings from Top 2021 IECC Efficiency Proposals
- ✓ News and blog posts from EECC, NBI, and other energy efficiency allies
- ✓ IECC development process fact sheets
- ✓ Newsletters and sign-up form
- ✓ Deadlines and registration links
- ✓ Official EECC voting guide

William Fay
bfay@ase.org



Questions?

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

CLEAN ENERGY

Building Codes for Climate

Take Action Today to Help Set Higher Efficiency Minimums!

BACKGROUND

Massachusetts municipalities can help support their residents' health and safety through the adoption and enforcement of state building codes. These codes also set forth essential energy policies, setting minimum efficiency requirements for a variety of building practices and technologies used in our cities and towns. With the [Green Communities act of 2008](#), Massachusetts created to option for municipalities to adopt a stretch energy code.

QUESTIONS? NEED HELP?

For more information or for help walking through the process, contact **Nicole Sanches** at nsanches@mapc.org or 617-933-0760.

ON THIS PAGE

Codes for Climate

- [Stretch Energy Code](#)
- [Train Inspectional Services Staff](#)
- [Comment and Vote](#)

Take Action Today

- [Important Dates](#)
- [Register to Vote](#)

Resources

Contact

Nicole Sanches
Clean Energy Coordinator
nsanches@mapc.org
(617) 933-0761

Cammy Peterson
Director of Clean Energy
cpeterson@mapc.org
(617) 933-0791