



**AIA**  
Massachusetts



August 26, 2020

Representative Thomas A. Golden  
State House, Room 473B  
Boston, MA 02133

Senator Michael Barrett  
State House, Room 109-D  
Boston, MA 02133

Representative Patricia A. Haddad  
State House, Room 370  
Boston, MA 02133

Senator Cynthia Stone Creem  
State House, Room 312A  
Boston, MA 02133

Representative Bradley H. Jones  
State House, Room 124  
Boston, MA 02133

Senator Patrick O'Connor  
State House, Room 419  
Boston, MA 02133

**Re: H. 4933 - An Act creating a 2050 roadmap to a clean and thriving commonwealth /S. 2500 - An Act setting next-generation climate policy**

Dear Conference Committee Members:

As two organizations representing the professions of architecture and engineering, we are very pleased that the House and Senate have now passed climate change bills designed to, among other things, re-envision the way the Commonwealth approaches energy efficiency in the built environment. We look forward to seeing the Legislature put a bill on the Governor's desk.

We respectfully submit our perspective on the issues before this conference committee, and note that for more detailed discussion of our concerns, please refer to the attached 08/26/2020 memorandum regarding **AIA MA and ACEC Detailed Concerns**.

Also, for reference we have attached the following two items: a **Building Code History** appendix chronicling the development of building codes both nationally and here in Massachusetts, and the **780 CMR - 10th Edition Adoption Schedule** outlining the timeline related to the promulgation of the Commonwealth's 10<sup>th</sup> edition of the state building code, which will include net zero energy provisions.

We hope that you can agree promptly to the following:

- Support both the House and Senate addition of four new board members to the BBRS: the Commissioner of Department of Energy Resources (DOER) as an ex-officio, an expert in commercial building energy efficiency, an expert in residential building energy efficiency, and an expert in advanced building technology (H.4933 §15A,B,C/S.2500 §35, 36, 37, 71)
- Support House amendment establishing a 10 year limit on board membership; (H.4933 §15E)
- Support Senate language requiring BBRS meeting minutes to be published within 30 days of meetings; (S.2500 §39)
- Support Senate language that cleans up current statutory language regarding the requirement for the BBRS to work in consultation with DOER on adoption of IECC within one year of ICC's promulgation; (S.2500 §41)

- Reject the Senate language requiring DOER to develop, adopt and incorporate into the state building code a specialized stretch energy code appendix not later than 1 year after the passage of this act; (S.2500 §30, 54)
  - For further information/explanation, please see page 1-2, **Item #1, Adoption Time Frames**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns
- Reject the Senate language requiring municipalities to opt into the specialized stretch energy code by January 1, 2028 as part of the Green Communities certification process (S.2500 §31, 71)
  - For further information/explanation, please see page 1-2, **Item #1, Adoption Time Frames**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns
- Reject Senate language proposing shared administrative oversight of BBRS by the Division of Professional Licensure (DPL) and DOER; (S.2500 §40)
  - For further information/explanation, please see page 2-4, **Item #2, Board Issues and Item #3 Enforcement Issues**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns
- Amend the Senate language requiring DOER to develop and adopt, in consultation with BBRS, a municipal opt-in specialized stretch energy code that includes, but is not limited to, a definition of net-zero building.
  - For further information/explanation, please see page 2-4, **Item #2, Board Issues**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns
- Reject the Senate language requiring an adoption time frame for the BBRS to adopt DOER's municipal opt-in specialized stretch energy as a "specialized code"; (S.2500 §42)
  - For further information/explanation, please see page 2-4, **Item #2, Board Issues**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns
- Review and amend House and Senate proposals pertaining to MGL c.21N requirements that Executive of Energy and Environmental Affairs (EOEEA) promulgate, monitor and enforce regulations pertaining to greenhouse gas emissions (GHG), and to set specific sub-limits for ghg emissions on a per sector basis, with all buildings being called out as a specific sector requiring such sub-limits. (H.4933 §1-11/S.2500 §1-10)
  - For further information/explanation, please see page 4-5, **Item #3, Enforcement Issues**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns
- Support House amendment establishing a (total) four year limit on any Board of Building Regulations and Standards (BBRS) serving as chair or vice chair and, if possible, make it retroactively apply to all current board members; (H.4933 §15F)
  - For further information/explanation, please see page 5, **Item #4, Other Items**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns
- Amend Senate language requiring BBRS to submit copies of any amendments to all inspectors of buildings or building commissioners, along with the Secretary of Housing and Economic Development, within 45 days after filing with the Secretary of State
  - For further information/explanation, please see page 5, **Item #4, Other Items**, in the attached 08/26/2020 memorandum regarding AIA MA and ACEC Detailed Concerns

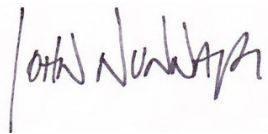
**Conclusion**

We look forward to this committee's work in the coming days. At the same time, we know that you and your colleagues have decided to go beyond the usual time for closing formal sessions because there is more to accomplish, including important bills on police reform and transportation funding.

Thank you for the hard work you are doing in reconciling the many competing demands in this extraordinary crisis. If our organizations can provide any additional information, please do not hesitate to contact us.

Thank you for your consideration.

Very truly yours;



Executive Director  
Massachusetts Chapter of the  
American Institute of Architects



Executive Director  
American Council of Engineering  
Companies of Massachusetts



MEMORANDUM

To: Reps. Golden, Haddad, Jones and Sens. Barrett, Creem, O'Connor  
From: Massachusetts Chapter of the American Institute of Architects & the American Council of Engineering Companies of Massachusetts  
Date: 08/26/20  
Re: **AIA MA and ACEC Detailed Concerns**

We wish to submit for your consideration our observations about the operational implications of some of these provisions so that your decisions are fully informed.

With the exception of some portions of both bills pertaining to MGL c.21N statutes, our focus is on the existing and proposed relationship between the BBRS and DOER (H. 4933, Sections 15A – F/S. 2500, Sections 30-33, 35-43, 54, 71 & 72) and what the proposed changes to their relationship would mean for the implementation of energy efficiency measures in the Commonwealth's built environment.

**I. Adoption times frames**

Per the attached schedule titled, *780 CMR – 10<sup>th</sup> Edition Adoption*, the BBRS is currently on track to implement net-zero code provisions for the upcoming 10<sup>th</sup> edition of the Commonwealth's state building code (780 CMR) for new commercial construction by Fall 2022.

Other portions of both bills pertaining to MGL c.21N statutes (H.4933 §1-11/S.2500 §1-10) would require the Executive of Energy and Environmental Affairs (EOEEA) to promulgate, monitor and enforce regulations pertaining to greenhouse gas emissions (GHG), and to set specific sub-limits for GHG emissions on a per sector basis, with all buildings being called out as a specific sector requiring such sub-limits.

**Observation/Question:** Is it realistic to expect that EOEEA will have completed their work in creating sector sub-limits and coordinated that work in such a way as to provide DOER with enough time, after not less than 5 public hearings (S.2500 §30, 54), to promulgate a municipal opt-in specialized stretch energy code that moves buildings to net-zero within one year of passage of the requirements into law?

**Observation/Question:** If the BBRS is currently on track to promulgate net-zero energy building code provisions by the Fall of 2022, is it realistic to expect, regardless of any statutory mandate to do so, that another state agency could, from scratch, meet or beat the 2022 timeframe?

To illustrate our concerns around timeframes, and by way of example, on July 2, 2008, MGL c. 143 §94(o) was enacted requiring that the International Energy Conservation Code (IECC) be adopted within one year of promulgation by International Code Council (ICC) . At that time, the 7<sup>th</sup> edition of the Commonwealth's 780 CMR was in effect and made no reference to the IECC. It was not until August 6, 2010, almost a full two years after the passage of the c. 143 §94(o) requirement, that the Commonwealth first referenced the 2009 IECC via adoption of the 8<sup>th</sup> edition of the 780 CMR. On August 16, 2013, the 2009 IECC reference was updated to the 2012 IECC, and again on August 12, 2016 the reference was updated to 2015 IECC. When our current 9<sup>th</sup> edition was promulgated on October 20, 2017, it again made reference to the 2015 IECC, but on February 7, 2020 it was updated to reference the 2018 IECC. In all, since 2010, the IECC has been updated four times – twice within the one year statutory requirement, and twice not.

This comparison highlights the difficulty state boards, commissions, and agencies can have in attempting to meet even the best-intentioned statutorily mandated timeframes.

**Suggestion:** As the BBRS is currently on track to promulgate net-zero energy code requirements as part of the upcoming 10<sup>th</sup> edition of the Commonwealth's state building code, which is expected to be promulgated in the Fall of 2022, we ask that you reject the Senate language requiring DOER to develop, adopt and incorporate into the state building code a specialized stretch energy code appendix not later than 1 year after the passage of this act

**Observation/Question:** The Senate language would require municipalities to opt into the specialized stretch energy code by January 1, 2028 as part of the Green Communities certification process. What happens to communities who want to opt-in to this proposed new specialized stretch energy code after 2028? Can they, or would they be barred?

**Suggestion:** We ask that you consider rejecting this amendment because we feel the financial incentives that have allowed for 285 of the Commonwealth's 351 municipalities to already become designated Green Communities should prevail, not a specific date certain;

## 2. Board issues

The Senate language proposes a few items related to BBRS operations. First, it proposes to make the Commissioner of DOER a new ex-officio board member. Second, DOER would now share joint responsibility for the oversight of the BBRS with DPL. Third, it adds three new members to the BBRS – all energy experts.

Building on this proposed new structure, the BBRS would continue with its current statutory requirement to consult with DOER on:

- The promulgation of the Commonwealth's base energy code requirements found, respectively, in Chapters 13 and 51 of the commercial portion and residential portions of 780 CMR.
- The promulgation of future editions of the Commonwealth's Appendix 115 AA, stretch energy code, which currently 285 communities in Massachusetts are required to adopt via their Green Community designation (meeting the statutory requirements of existing MGL c. 25a §10(c)(6)).

The Senate language envisions that DOER would now have sole responsibility for the development, adoption and incorporation of a municipal opt-in specialized stretch energy code, that includes, but is not limited to, a definition of net-zero building. The BBRS would be required to incorporate this new "specialized code" in exactly the same way it incorporates the Commonwealth's plumbing code, electrical code, architectural barriers regulations, fire safety code, fire prevention regulations, sheet metal regulations and elevator regulations.

If all of the above were to be enacted, the state would move from two building energy codes to three:

1. The base energy code requirements found in Chapter 13 and 51
2. The stretch energy code requirement that are mandatory for 285 communities and optional for the rest
3. A new municipal opt-in specialized stretch energy code that looks to define how to construct net-zero energy buildings.

**Observation/Question:** In the arena of building design and construction the public policy debate has focused on our response to climate change and sustainability. In contrast, the building code has always had as its principal purpose the protection of the public's health, safety, and welfare, not energy use or energy efficiency. The great majority of 780 CMR's 114 chapters and 14 appendices do not pertain to energy. Both the House and Senate proposals add four new board members to the BBRS: the Commissioner of DOER and three energy experts. It is reasonable to assume that the addition of these four new board members to the existing eleven would weight any board decision on energy efficiency matters toward the inclinations of the four new members. While the Senate proposal would now require DPL to share administrative oversight of the BBRS with DOER, the BBRS would still have control over the development, adoption and promulgation of the Massachusetts amendments to the base energy code (chapters 13 and 51) and stretch energy code (appendix 115 AA) while DOER would have sole control over the new municipal opt-in specialized stretch energy code containing net zero energy provisions. If the BBRS membership now contains four new members whose primary purpose for serving on the board is to ensure better energy efficiency in the code, does it makes sense to give away the responsibility for the development and adoption of any energy codes to a separate agency?

**Suggestions/Recommendations:** We ask that you consider crafting new language that accomplishes the following:

- Provides DOER with sole authority to lead the efforts to develop a municipal opt-in specialized stretch energy code;
- Makes clear that the BBRS is to play a consulting role in the development of the proposed new municipal opt-in specialized stretch energy code;
- Leaves responsibility for adoption and enforcement of the new municipal opt-in specialized stretch energy with the BBRS and DPL;
- Craft new language to make clear that, in addition to providing a definition of a net-zero building, the proposed new municipal opt-in specialized stretch energy code shall also require the inclusion of all necessary language to describe the energy efficiency requirements of a net-zero building.

On January 1, 1975, per c. 802 of the Acts of 1972, as amended, the Massachusetts State Building Code went into effect and superseded all previous codes. But for one exception, MGL c. 25a §10 (c)(6), state law has remained consistent in that the 780 CMR statewide building construction standards preempt local law. On July 2, 2008, MGL c. 25a §10 (c)(6) was enacted as part of S. 2768 - An Act Relative To Green Communities. MGL c. 25a §10 (c) laid out six criteria a community must meet in order to qualify as a Green Community. Section 10 (c)(6) specifically required the following,

*"... all new residential construction over 3,000 square feet and all new commercial and industrial real estate construction to minimize, to the extent feasible, the life-cycle cost of the facility by utilizing energy efficiency, water conservation and other renewable or alternative energy technologies."*

While the intention behind this language was well meaning, it nonetheless brought to light a concern within the design and construction industry and those that regulated it. The concern was the local preemption question. How was the state going to tell certain communities to build to a minimum standard, but require those seeking the Green Communities designation to build to a higher standard? The answer became the creation of Appendix 115 AA of the 780 CMR - the stretch energy code.

**Observation/Question:** The Senate proposes moving the Commonwealth from two energy codes to three. The base energy code would be a requirement of all communities, the stretch energy code (Appendix 115 AA) is required for only designated Green Communities, and the proposed new municipal opt-in specialized stretch energy code (a net zero energy code) would be required for an unknown, but likely smaller, group of communities. The majority of states only use one energy code (typically ICC's Chapter 13 and 51 for commercial and residential, respectively). From a uniformity of code standpoint, or economic development perspective, it does not make sense for MA to have three energy codes.

**Suggestions/Recommendations:** We ask that you consider crafting new language that accomplishes the following:

- Provides DOER with sole authority to lead the efforts to develop a municipal opt-in specialized stretch energy code as an amendment of Appendix 115 AA of the 780 CMR;
- Makes clear that the BBRS is to play only a consulting role in the development of the proposed new municipal opt-in specialized stretch energy code;
- Leaves responsibility for adoption, adoption time frames and enforcement of the new municipal opt-in specialized stretch energy with the BBRS;
- Craft new language to make clear that, in addition to providing a definition of a net-zero building, the proposed new municipal opt-in specialized stretch energy code shall also require the inclusion of all necessary language to describe the energy efficiency requirements of a net-zero building.

### 3. Enforcement Issues

As previously noted, other portions of both bills pertaining to MGL c.21N statutes (H.4933 §1-11/S.2500 §1-10) would require the Executive of Energy and Environmental Affairs (EOEEA) to promulgate, monitor and enforce regulations pertaining to GHG emissions, and to set specific sub-limits for GHG emissions on a per sector basis, with all buildings being called out as a specific sector requiring such sub-limits.

**Observation/Question:** With regard to enforcement of GHG sub-limits for the building industry sector – who will be responsible for on-the-ground enforcement? Will EOEEA now be required to create a building energy code GHG enforcement division? If so, how will they interact with the state building inspectors who are already charged with enforcing compliance with state building code provisions, including energy? What about municipal building commissioners/inspectors – would their enforcement authority of building code provisions, including energy, be superseded by EOEEA?

**Suggestion/Recommendations:** Either amend proposed House and Senate language or craft new language making clear the following:

- The adoption of all Commonwealth building energy codes shall remain with the BBRS;
- EOEEA is responsible for setting GHG sub-limits for the entirety of the building sector;
- Require BBRS to consult with EOEEA to ensure proper coordination of GHG sub-limits and building energy code requirements;
- Enforcement of EOEEA sub-limits on the building sector shall be the responsibility of existing state and local building commissioners and inspectors.

Lastly, the Senate language would require shared oversight of BBRS.

**Observation/Question:** See Questions and Observations noted above in **Board Issues** and **Enforcement Issues**.

**Suggestion/Recommendations** We ask that you consider rejecting this amendment. Despite the urgent need to address energy-related matters, which we fully share, no other department of government affected by the building code has oversight of the BBRS. We are concerned that sharing oversight will result in procedural inefficiencies or increase the chance for possible inconsistencies in the building code and administration of the code, including enforcement. This could create confusion among regulators and in industry. We do not believe this would be the best way to address climate concerns or support the health of the design and construction industry.

#### 4. Other Items

As noted in the cover letter, we ask the conference committee to consider two additional requests:

- Support House amendment establishing a (total) four year limit on any Board of Building Regulations and Standards (BBRS) serving as chair or vice chair and, if possible, make it retroactively apply to all current board members; (H.4933 §15F)

We suggest the following language be added:

*“The board shall annually elect a chairman and a vice chairman from its members; provided, however, that no member shall serve as chairman or vice chairman for more than two consecutive years or more than 4 years total. ***This provision shall retroactively apply to all board members.***”*

- Amend Senate language requiring BBRS to submit copies of any amendments to all inspectors of buildings or building commissioners, along with the Secretary of Housing and Economic Development, within 45 days after filing with the Secretary of State (S.2500 §43)

We suggest the following language be added:

*“The board shall send a copy, ***or make available electronically, of*** any amendments to the state building code...”*

- END -