



MEMORANDUM

To: Members of BBRS
From: John Nunnari
Date: 01/28/20
Re: SB 2476 – An Act to accelerate the transition of cars, trucks and buses to carbon-free power
SB 2477 – An Act setting next-generation climate policy

As you may or may not be aware, this coming Thursday, January 28, 2020, the Massachusetts Senate plans to take up a far-reaching package of climate bills whose major components include an electric MBTA bus fleet by 2040, carbon-pricing mechanisms for transportation, homes and commercial buildings, and a series of five-year greenhouse gas emissions reduction requirements that ramp up to net-zero emissions in 2050.

The three bills amount to what Senate President Spilka called a "comprehensive plan for the state" to respond to an international issue: global climate change.

The carbon pricing and net-zero emissions provisions are both contained in one piece of legislation, dubbed An Act Setting Next-Generation Climate Policy (SB 2477). The other bills address energy efficiency (SB 2478) and electric vehicles (SB 2476).

Attached to this memo is a breakdown of SB 2476 and 2477 – specifically the sections that relate to proposed changes in the statutory mandates of the BBRS.

In short, the bills propose the following:

- Increases the membership of the BBRS from 11 to 15 members by adding Commissioner of DOER as an ex-officio voting member and three new board members;
 - An expert in commercial building energy efficiency;
 - An expert in residential building energy efficiency and;
 - An expert in advanced building technology
- Requires the Commissioner of Professional Licensure to consult with the Commissioner of DOER in overseeing the BBRS;
- Requires the BBRS to keep and publish meeting minutes within 30 days of each meeting;
- Would require DOER's 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;
- In consultation with DOER, would require BBRS to adopt EV charging requirements for both residential and commercial at a minimum of at least 1 parking space or not less than 5 per cent of the total number of parking spaces, whichever is greater, and would need to be in effect not later than January 1, 2021.
- Would require BBRS to adopt DOER's stretch energy code as a "specialized code" – as is currently done with plumbing, mechanical, electrical, gas, fire, etc...;



- Would require BBRS to send copies of any amendments to all inspector of buildings or building commissioner, along with the Sect of Housing and Economic Development, within 45 days after filing with Sect. of State;
- Requires municipalities to opt into the specialized stretch energy code by January 1, 2028 as part of the Green Communities certification process

While this memo solely focuses on the changes that are proposed to the current statutory mandates of the BBRS, the remainder of these three bills do contain provisions which will have tangential effects on the way we design, construct, operate and maintain our built environment.

These proposals include such items as:

- Allows the Department of Environmental Protection (DEP) monitor and regulate emissions of greenhouse gases with the goal of reducing emissions in order to achieve the new greenhouse gas emissions limits;
- Requires Administration to set greenhouse gas emissions limits for 2020, 2025, 2030, 2035, 2040, 2045 and 2050;
- Requires Administration to adopt sector-based statewide greenhouse gas emissions sublimits as components of each statewide greenhouse gas emissions limit for source or category of sources including, among others, commercial and industrial heating and cooling, residential heating and cooling;
- Would require a statewide greenhouse gas emissions limit of not more than net-zero emissions by 2050;
- Would require Administration to promulgate regulations establishing a market-based compliance mechanisms designed to maximize the ability of the commonwealth to achieve the statewide greenhouse gas emissions limits for sectors including, but not limited to, both commercial and residential buildings;
- Would allow DOER to intervene and advocate on behalf of small commercial and industrial users before the department of public utilities in any dispute between such businesses and generation or distribution companies;
- Would require benchmarking/energy disclosure to DOER for all commercial and residential buildings over 35,000 sq. ft. (public or private)

If you have any questions, comments, concerns, or would like to see a section-by-section breakdown of either of these bills, please feel free to contact me at your earliest convenience.

Thank you,

John

End

Changes Proposed by SB 2476 and SB 2477

Key:

Black & Grey Text = Base statutory language

Red strikethrough text = Base statutory language being removed

Red underlined text = Proposed new statutory language

MGL c.25a are statutes pertaining to Division Of Energy Resources

MGL c.143 are statutes pertaining to Inspection and Regulation of, and Licenses for, Buildings, Elevators and Cinematographs

SB 2477 – Section 29 – Amend MGL c. 25a§6

Section 6: Powers and duties

Section 6. The department and its appropriate administrative units shall:—

(1) develop and administer programs relating to energy conservation, alternative energy development, non-renewable energy supply and resource development, energy bond authority, energy information, and energy emergencies;

(2) advise, assist, and cooperate with other state, local, regional, and federal agencies in developing appropriate programs and policies relating to energy planning and regulation in the commonwealth including assistance and advice in the preparation of loan or grant applications with respect to energy programs for state, local and regional agencies;

(3) develop energy data and information management capabilities to aid energy planning and decision-making;

(4) promote the development of sound energy education programs;

(5) apply for, receive, expend, represent and act on behalf of the commonwealth in connection with federal grants, grant programs or reimbursements, or private grants, keep accounts, records, personal data, enter into contracts, including contracts for the insurance of vehicles in the alternative fuel vehicle demonstration program, and adjust claims;

(6) accept gifts, grants, funds, monies, bequests, and devises, whether real or personal, from any source, whether public or private, for the purpose of assisting the commissioner in the discharge of his duties;

(7) subject to appropriation, acquire real or personal property;

(8) promulgate rules and regulations necessary to carry out their statutory responsibilities;

(9) seek the laboratory, technical, educational, and research skills of state institutions of higher education in order to carry out the provisions of this chapter;

(10) plan, develop, oversee, and operate programs to help consumers understand, evaluate, and select retail energy supplies and related services offered as a consequence of electric and gas utility restructuring, in accordance with the provisions of section 11D;

(11) provide technical assistance to municipalities and governmental bodies seeking assistance during the transition to a competitive market, including, but not limited to, the voluntary aggregation of their citizens' demand for electricity pursuant to section 134 of chapter 164; and

~~(12) intervene and advocate on behalf of small commercial and industrial users before the department of public utilities in any dispute between such businesses and generation or distribution companies, as defined pursuant to section 1 of chapter 164; and~~

~~(13) plan, develop, oversee and operate the commercial sustainable energy program, with the Massachusetts Development Finance Agency, in accordance with the provisions of chapter 23M. In accordance with this~~

section, the department shall approve each commercial PACE project prior to the issuance of a PACE bond under chapter 23M and in so doing shall consider whether the energy cost savings of the commercial energy improvements over the useful life of such improvements exceed the costs of such improvements

(12) intervene and advocate on behalf of small commercial and industrial users before the department of public utilities in any dispute between such businesses and generation or distribution companies, as defined pursuant to section 1 of chapter 164;

(13) plan, develop, oversee and operate the commercial sustainable energy program, with the Massachusetts Development Finance Agency, in accordance with the provisions of chapter 23M. In accordance with this section, the department shall approve each commercial PACE project prior to the issuance of a PACE bond under chapter 23M and in so doing shall consider whether the energy cost savings of the commercial energy improvements over the useful life of such improvements exceed the costs of such improvements; and

(14) develop and adopt, as an appendix to the state building code, in consultation with the board of building regulations and standards, a municipal opt-in specialized stretch energy code that includes, but is not limited to, a definition of net-zero building.

SB 2477 – Section 30 – Amend MGL c. 25A§10

Section 10: Division of green communities; duties of director; program; qualification as a green community; funding; rules; annual report

Section 10. (a) The division of green communities shall assist the commonwealth's municipalities and other local governmental bodies to: reduce energy consumption and costs, reduce pollution, facilitate the development of renewable and alternative energy resources, and create local jobs related to the building of renewable and alternative energy facilities and the installation of energy-efficient equipment. The director of the division shall be responsible for the administration and oversight of the green communities program and shall apply and disburse monies and revenues as provided in this section.

(b) The division shall establish a green communities program. The purpose of the program shall be to provide technical and financial assistance, in the form of grants and loans, to municipalities and other local governmental bodies that qualify as green communities under this section. These loans and grants shall be used to finance all or a portion of the costs of studying, designing, constructing and implementing energy efficiency activities, including but not limited to, energy conservation measures and projects; procurement of energy management services; installation of energy management systems; adoption of demand side reduction initiatives; and the adoption of energy efficiency policies. They shall also be used to finance the siting and construction of renewable and alternative energy projects on municipally-owned land.

(c) To qualify as a green community, a municipality or other local governmental body shall: (1) file an application with the division in a form and manner to be prescribed by the division; (2) provide for the as-of-right siting of renewable or alternative energy generating facilities, renewable or alternative energy research and development facilities, or renewable or alternative energy manufacturing facilities in designated locations; (3) adopt an expedited application and permitting process under which these energy facilities may be sited within the municipality and which shall not exceed 1 year from the date of initial application to the date of final approval; (4) establish an energy use baseline inventory for municipal buildings, vehicles and street and traffic lighting, and put in place a comprehensive program designed to reduce this baseline by 20 per cent within 5 years of initial participation in the program; (5) purchase only fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable; and (6) (6) opt-in to the specialized stretch energy code promulgated pursuant to clause (14) of section 6; and (7) require 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. The secretary may waive these requirements based on a written finding that due to unusual circumstances, a municipality cannot

reasonably meet all of the requirements and the municipality has committed to alternative measures that advance the purposes of the green communities program as effectively as adherence to the requirements.

(d) Funding for the green communities program in any single fiscal year shall be available, without the need for further appropriation, in a total amount of not more than \$20,000,000 from: (1) monies generated by all cap and trade pollution control programs, including, but not limited to, the cap and trade program established under the NOx Allowance Trading Program and the carbon dioxide allowance trading mechanism established under the Regional Greenhouse Gas Initiative, as defined in subsection (a) of section 22 of chapter 164; (2) such amounts as may be directed to municipalities or other governmental bodies under section 19 of chapter 25; (3) amounts from alternative compliance payments established and administered under 225 CMR 14.00 adopted under section 11F; and (4) other funds as the governing board of the Massachusetts Renewable Energy Trust Fund established under section 9 of chapter 23J, may provide.

(e) The division shall adopt rules, regulations and guidelines for the administration and enforcement of this section, including, but not limited to, establishing applicant criteria, funding priority, application forms and procedures, and energy efficiency product requirements. The division shall also adopt regulations providing for a separate green communities program for those communities served by municipal lighting plants that have chosen to adopt the renewable energy charge under section 20 of chapter 25.

(f) The division shall annually, not later than April 1, submit a report to the clerks of the senate and the house of representatives, the joint committee on telecommunications, utilities and energy, the joint committee on state administration and regulatory oversight, and the senate and house committees on ways and means detailing the expenditures and results relative to the green communities program.

SB 2477 - Section 32 - 37 - Amends MGL c. 143§93

Section 93: State board of building regulations and standards; establishment

Section 93. There is hereby established within the division of professional licensure a board to be known as the state board of building regulations and standards, in this section and in sections ninety-four to one hundred, inclusive, called the board. The board shall adopt and administer a state building code. The board shall consist of ~~eleven-15~~ members, one of whom shall be the state fire marshal, or his designee, one of whom shall be the commissioner of the division of professional licensure or his designee, ~~both-1 of whom shall be the commissioner of energy resources or a designee and all 3~~ of whom shall serve ex-officio and shall be voting members of the board, and ~~nine-12~~ persons to be appointed by the governor, one of whom shall be a registered architect, one of whom shall be a registered professional engineer who is a mechanical engineer, one of whom shall be a registered professional engineer who is a structural engineer, one of whom shall be a representative of the building trades, one of whom shall be a general contractor of commercial or industrial buildings, one of whom shall be a building contractor of one or two-family homes, one of whom shall be a head of a local fire department, 1 of whom shall be an expert in commercial building energy efficiency, 1 of whom shall be an expert in residential building energy efficiency, 1 of whom shall be an expert in advanced building technology, one of whom shall be an inspector of buildings in a town and one of whom shall be an inspector of buildings in a city. Organizations representing the appropriate constituencies shall submit names of persons for appointment as members to the board. Each member shall be appointed for a term of five years, except that in making his initial appointments, the governor shall appoint one member for one year and two members to serve for two, three, four and five years respectively, as he may designate. Any person appointed to fill a vacancy shall serve only for the unexpired term. Any member shall be eligible for reappointment. Any member of the board may be removed by the governor for cause, after being given a written statement of the charges and an opportunity to be heard thereon. No member shall act as a member of the board or vote in connection with any matter as to which his private right, distinct from public interest, is concerned.

A majority of the members of the board shall constitute a quorum for the purpose of conducting business, but a lesser number may adjourn from time to time. The board shall keep detailed and accurate minutes of its meetings and shall publish such minutes within 30 days of each meeting.

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.

Each member of the board who is not otherwise an employee of the commonwealth shall receive from the commonwealth fifty dollars for each day or portion thereof spent in the performance of his official duties; provided, however, that the total sum paid to any member in any fiscal year shall not exceed three thousand dollars. Each member shall be paid necessary traveling and other expenses incurred in the performance of his duties.

The commissioner of the division of professional licensure or his or her designee, in consultation with the commissioner of energy resources, shall be responsible for the proper administration of the activities of the board and the supervision of the staff thereof. The division may employ such other professional, technical and clerical staff as is deemed necessary to assist the board.

SB 2477 – Section 38 – Amends MGL c. 143§94

Section 94: Powers and duties

Section 94. The board shall have the following powers and duties:

(a) To formulate, propose, adopt and amend rules and regulations relating to (i) the construction, reconstruction, alteration, repair, demolition, removal, inspection, issuance and revocation of permits or licenses, installation of equipment, classification and definition of any building or structure and use or occupancy of all buildings and structures and parts thereof or classes of buildings and structures and parts thereof, except bridges and appurtenant supporting structures which have been or are to be constructed by or are under the custody and control of the department of highways, the Massachusetts Department of Transportation, the Massachusetts Bay Transportation Authority, the metropolitan district commission or the Massachusetts Port Authority or for which said agencies have maintenance responsibility; (ii) the rehabilitation and maintenance of existing buildings; (iii) the standards or requirements for materials to be used in connection therewith, including but not limited to provisions for safety, ingress and egress, energy conservation, and sanitary conditions; (iv) the establishment of reasonable fees for inspections, which fees shall be collected and retained by the city or town conducting such inspections.

Such rules and regulations, together with any penalties for the violation thereof, as hereinafter provided, shall comprise and be collectively known as the state building code.

Whoever violates any provision of the state building code, except any specialized code as described in section ninety-six, shall be punished by a fine of not more than one thousand dollars or by imprisonment for not more than one year, or both, for each such violation. Each day during which a violation exists shall constitute a separate offense.

(b) To subpoena witnesses, take testimony, compel production of books and records and to hold public hearings. The board may designate one or more of its members to hold special public hearings and report on such hearings to the board.

(c) To make a continuing study of the operation of the state building code, and other laws relating to the construction of buildings to ascertain their effect upon the cost of building construction and the effectiveness of their provisions for health, safety, energy conservation and security.

(d) To recommend or require tests and approvals and specify criteria and conditions, of materials, devices, and methods of construction, either upon the initiative of the board or at the request of any interested person including, but not limited to, a manufacturer, builder, architect, engineer, inspector of buildings or building commissioner or local or state inspector, in order to ascertain the acceptability of said materials, devices and methods under the requirements of the state building code. The board shall issue certification of such acceptability, which certification shall be binding on all cities and towns.

(e) To review, on its own initiative or on the application of any inspector of buildings or building commissioner or of any local or state inspector, any interpretation under the state building code, and to reverse, modify or annul, in whole or in part, such interpretations except with respect to the specialized codes as defined in section ninety-six.

(f) To establish an advisory board to be known as the technical code council, to assist in and make recommendations relative to formulation, promulgation and administration of the state building code. Said council shall be convened regularly by the chief of inspections and shall establish its own rules for the conduct of its business. Said council shall include a representative from each state department, commission, agency, board, or division concerned with the state building code, including specialized codes referred to in section ninety-six, and such other members as may be determined by the board.

(g) To formulate administrative procedures and promulgate rules and regulations necessary to administer and enforce the state building code.

(h) To revise and amend the state building code exclusive of the specialized codes referred to in section ninety-six, at least once every five years, and to send notice, by electronic or other means of such revisions or amendments to each inspector of buildings or building commissioner in every city or town and to each state inspector.

(i) To issue licenses to individuals engaged as construction supervisors. Fees for such licenses shall be collected and retained by the commonwealth.

(j) To designate and retain, where advisable, certain qualified third party agents to perform screening, testing, or technical services to the board to carry out its mandates.

(k) To develop requirements and promulgate regulations for the certification of inspectors of buildings, building commissioners and local inspectors pursuant to section three and to issue a certificate to individuals who meet said requirements.

(l) To prepare courses of instruction or approve courses of instruction offered by others for training persons for certification as inspectors of buildings, building commissioners or local inspectors.

(m) To develop requirements and approve courses of instruction to be offered by others relative to the continuing education of individuals licensed as construction supervisors.

(n) To establish a continuing education advisory council to assist and make recommendations to the board relative to the formulation, promulgation and administration of requirements for the continuing education of individuals licensed as construction supervisors. The council shall consist of: the commissioner of the division of professional licensure, or his designee; 2 licensed construction supervisors who shall also be members of the Home Builders Association of Massachusetts; 1 licensed construction supervisor who shall also be a member of the eastern Massachusetts chapter of the National Association of the Remodeling Industry; and 3 members to be appointed by the commissioner, 2 of whom shall be certified building inspectors and 1 of whom shall be an instructor in residential construction technology at a public or private college or university. The commissioner shall be chairperson of the council which shall meet regularly and may establish its own rules for the conduct of its business. The members of the council shall not be compensated for their services but shall be reimbursed for travel and other expenses necessary for the performance of their duties. The board may provide technical and clerical assistance to the council.

(o) 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~~ and any amendments thereto as part of the state building code, in consultation with the department of energy resources. The energy provisions of the state building code shall be updated within 1 year of any revision to the International Energy Conservation Code.

(p) In consultation with the department of energy resources, to develop requirements and promulgate regulations as part of the state building code for the training and certification of city and town inspectors of

buildings, building commissioners and local inspectors regarding the energy provisions of the state building code, and to require that all new construction and any major reconstruction, alteration or repair of residential and non-residential buildings pass inspection by inspectors who have been trained and certified, demonstrating full compliance with the energy provisions of the state building code.

(q) In consultation with the department of energy resources, to develop requirements and promulgate regulations as part of the state building code, in addition to the requirements of the latest International Energy Conservation Code, requiring a process to ensure that all new non-residential buildings larger than 10,000 square feet and any major reconstruction, alteration or repair of all such buildings perform as designed with respect to energy consumption by undergoing building commissioning or acceptance testing. Such commissioning must be completed before the issuance of a certificate of occupancy.

(r) In consultation with the department of energy resources, professional organizations and other stakeholders, to prepare a report evaluating the advisability of a requirement of periodic commissioning for large non-residential buildings and, if such a requirement is deemed advisable, evaluating possible approaches to periodic commissioning.

(p) In consultation with the department of energy resources, to develop requirements and promulgate regulations as part of the state building code for the training and certification of city and town inspectors of buildings, building commissioners and local inspectors regarding the energy provisions of the state building code, and to require that all new construction and any major reconstruction, alteration or repair of residential and non-residential buildings pass inspection by inspectors who have been trained and certified, demonstrating full compliance with the energy provisions of the state building code.

(q) In consultation with the department of energy resources, to develop requirements and promulgate regulations as part of the state building code, in addition to the requirements of the latest International Energy Conservation Code, requiring a process to ensure that all new non-residential buildings larger than 10,000 square feet and any major reconstruction, alteration or repair of all such buildings perform as designed with respect to energy consumption by undergoing building commissioning or acceptance testing. Such commissioning must be completed before the issuance of a certificate of occupancy.

(r) In consultation with the department of energy resources, professional organizations and other stakeholders, to prepare a report evaluating the advisability of a requirement of periodic commissioning for large non-residential buildings and, if such a requirement is deemed advisable, evaluating possible approaches to periodic commissioning.

Two New Subsections per Section 4 of SB 2476

(s) In consultation with the department of energy resources, to adopt and fully integrate into the state building code requirements that new construction of commercial and residential buildings with not less than 10 parking spaces, as well as major reconstruction, renovation and repair of such buildings, include building electrical service and conduit systems sufficient to support the minimum number of zero-emission vehicle parking spaces; provided, however, that the minimum number of zero-emission vehicle parking spaces shall be at least 1 parking space or not less than 5 per cent of the total number of parking spaces, whichever is greater. For the purposes of this section, “zero-emission vehicle” shall mean a motor vehicle that produces no engine exhaust emissions.

(t) In consultation with the department of energy resources, to adopt and fully integrate into the state building code requirements that new construction of parking facilities with not less than 10 parking spaces, as well as major reconstruction, renovation and repair of such facilities, include building electrical service and conduit systems sufficient to support the minimum number of zero-emission vehicle parking spaces; provided, however, that the minimum number of zero-emission vehicle parking spaces shall be at least 1 parking space or not less than 5 per cent of the total number of parking spaces, whichever is greater.

SB 2477 – Section 39 – Amends MGL c. 143§96

Section 96: Specialized codes, rules or regulations

Section 96. The state building code shall incorporate any specialized construction codes, rules or regulations pertaining to building construction, reconstruction, alteration, repair or demolition promulgated by and under the authority of the various boards which have been authorized from time to time by the general court.

For the purposes of this section, "specialized codes" shall include, but not be limited to, the specialized stretch energy code developed and adopted by the department of energy resources, the state plumbing code, electrical code, architectural barriers regulations, fire safety code, fire prevention regulations, sheet metal regulations and elevator regulations.

SB 2477 – Section 40 – Amends MGL c. 143§97

Section 97: Amendments to state building code

Section 97. Except for the specialized codes, as defined in section ninety-six, which codes shall be amended only by the respective boards, commissions, departments or agencies authorized to do so by law, any person may propose amendments to the state building code. Public hearings shall be held in the city of Boston in May and November of each year, and at such other times and places as the board may determine, to consider petitions for such amendments. Petitions shall be submitted to the board no less than sixty days prior to the public hearing. The subject matter of a petition to be considered shall be indicated in all the required notices. The petitions shall be available for inspection at the office of the board and at the hearing. Any significant changes to the petition shall be the subject of a further public hearing before adoption. Adoption of an amendment to the state building code shall occur upon an affirmative vote by a majority of the members of the board at a regularly convened meeting within ninety days of the final public hearing on the given amendment.

The board shall send a copy of any amendments to the state building code which are adopted to each inspector of buildings or building commissioner, as defined by section one of chapter one hundred and forty-three, and to the secretary of the executive office of housing and economic development within ~~a reasonable time~~ 45 days after filing said amendments with the state secretary.

SB 2477 – Section 46 – 61 – New Language/Implementation Dates/Etc...

SECTION 47. To develop the specialized stretch energy code required by section 6 of chapter 25A, the department of energy resources shall: (i) hold not less than 3 public hearings, 1 of which shall be held in an underserved community or community with a high percentage of low-income households; and (ii) consider the development of a tiered implementation plan for the adoption of the stretch energy code including, but not limited to, phasing in requirements based on building type or uses

SECTION 60. Section 30 shall take effect on January 1, 2028.