

SENATE No. 473

The Commonwealth of Massachusetts

PRESENTED BY:

Lydia Edwards

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act promoting climate safe buildings.

PETITION OF:

| NAME: | DISTRICT/ADDRESS: | |
|---------------------------|--------------------------------|------------------|
| <i>Lydia Edwards</i> | <i>Third Suffolk</i> | |
| <i>Jack Patrick Lewis</i> | <i>7th Middlesex</i> | <i>2/7/2023</i> |
| <i>James B. Eldridge</i> | <i>Middlesex and Worcester</i> | <i>2/11/2023</i> |
| <i>Sal N. DiDomenico</i> | <i>Middlesex and Suffolk</i> | <i>2/11/2023</i> |
| <i>Michael O. Moore</i> | <i>Second Worcester</i> | <i>2/15/2023</i> |

SENATE No. 473

By Ms. Edwards, a petition (accompanied by bill, Senate, No. 473) of Lydia Edwards, Jack Patrick Lewis, James B. Eldridge, Sal N. DiDomenico and others for legislation to promote climate safe buildings. Environment and Natural Resources.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Third General Court
(2023-2024)**

An Act promoting climate safe buildings.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Chapter 143 of the General Laws is hereby amended by inserting after
2 section 93 the following section:-

3 Section 93A. Definitions

4 As used in sections ninety-two to one hundred, inclusive, the following words shall,
5 unless the context otherwise requires, have the following meanings:

6 “Expanded floodplain map”, any map adopted by a city or town by ordinance or bylaw
7 that establishes, using the best available science and data, the area at flood risk based on forward-
8 looking climate projections or on past, documented flood history, to be used in addition to the
9 federal emergency management agency’s flood insurance rate maps.

10 “Base flood elevation”, the elevation of surface water resulting from a flood that has a 1
11 percent chance of equaling or exceeding that level in any given year.

12 “Climate resilience”, the ability to prepare and plan for, absorb, and recover from, and
13 more successfully adapt to adverse events resulting from increased climate risks.

14 “Climate risks”, the reasonably foreseeable risks to the economy, public services and
15 infrastructure, and public health and safety based on best available data and current science, that
16 are attributable to current and reasonably foreseeable climate conditions, including but not
17 limited to changes in sea level, storm frequency or intensity, drought, wind, extreme
18 precipitation, and extreme temperature changes projected to occur as a result of climate change.

19 “Environmental justice population” as defined in Section 62 of chapter 30 of the General
20 Laws.

21 “Exceptional non-financial hardship”, a non-financial hardship that would result from the
22 failure to grant a requested variance and which is unusual and specific to the property involved.
23 Exceptional non-financial hardship does not include inconvenience, aesthetic considerations,
24 physical disabilities, personal preferences, or the disapproval of neighbors, homeowners
25 associations, or subdivision boards.

26 SECTION 2. Section 93 of chapter 143, as so appearing, is hereby amended by striking
27 out the first paragraph and inserting in place thereof the following paragraph:-

28 There is hereby established within the division of occupational licensure a board to be
29 known as the state board of building regulations and standards, in this section and in sections
30 ninety-four to one hundred, inclusive, called the board. The board shall adopt and administer a
31 state building code. The board shall consist of 17 members, 1 of whom shall be the state fire
32 marshall or their designee, one of whom shall be the commissioner of the division of
33 occupational licensure or their designee, 1 of whom shall be the commissioner of energy

34 resources or their designee, 1 of whom shall be the state National Flood Insurance Program
35 Coordinator or their designee, and all 4 of whom shall serve ex-officio and shall be voting
36 members of the board, and 13 persons to be appointed by the governor, one of whom shall be a
37 registered architect, one of whom shall be a registered professional engineer who is a mechanical
38 engineer, one of whom shall be a registered professional engineer who is a structural engineer,
39 one of whom shall be a representative of the building trades, one of whom shall be a general
40 contractor of commercial or industrial buildings, one of whom shall be a building contractor of
41 one or two-family homes, one of whom shall be a head of a local fire department, 1 of whom
42 shall be an expert in commercial building energy efficiency, 1 of whom shall be an expert in
43 residential building energy efficiency, 1 of whom shall be an expert in advanced building
44 technology, 1 of whom shall be an expert in climate resilience and adaptation planning, one of
45 whom shall be an inspector of buildings in a town and one of whom shall be an inspector of
46 buildings in a city. Organizations representing the appropriate constituencies shall submit names
47 of persons for appointment as members to the board. Each member shall be appointed for a term
48 of five years, except that in making initial appointments, the governor shall appoint one member
49 for one year and two members to serve for two, three, four and five years respectively. Any
50 person appointed to fill a vacancy shall serve only for the unexpired term. Any member shall be
51 eligible for reappointment for a second term, but shall not serve more than 10 total years. Any
52 member of the board may be removed by the governor for cause, after being given a written
53 statement of the charges and an opportunity to be heard thereon. No member shall act as a
54 member of the board or vote in connection with any matter as to which their private right,
55 distinct from public interest, is concerned.

56 SECTION 3. The Section 95 of chapter 143 of the General Laws, as appearing in the
57 2020 Official Edition, is hereby amended by striking all text and inserting in place the following:

58 Section 95. The powers and duties of the board set forth in section ninety-four shall be
59 exercised to effect the following objectives:

60 (a) Uniform standards and requirements for construction and construction materials,
61 compatible with accepted standards of engineering and fire prevention practices, energy
62 conservation, climate resilience, and public health and safety. In the formulation of such
63 standards and requirements, performance for the use intended shall be the test of acceptability, in
64 accordance with accredited testing standards.

65 (b) Adoption of modern technical methods, devices and improvements which may reduce
66 the cost of construction and maintenance over the life of the building and reduce the impacts of
67 and damage from climate change without affecting the health, safety, and security of the
68 occupants or users of the buildings.

69 (c) Elimination of restrictive, obsolete, conflicting and unnecessary building regulations
70 and requirements which may increase the cost of construction and maintenance over the life of
71 the building or delay unnecessarily the use of new materials, or which may provide unwarranted
72 preferential treatment of types of classes of materials, products or methods of construction
73 without affecting the health, safety, and security of the occupants or users of the buildings;
74 provided, however, that such building regulations and requirements are not necessary to reduce
75 the impacts of and damage from climate change.

76 SECTION 4. The Section 98 of chapter 143 of the General Laws, as appearing in the
77 2020 Official Edition, is hereby amended by inserting the following after the first paragraph:

78 The board of selectmen in a town or the city council in a city may request the use of
79 expanded floodplain maps, based on best available climate science, including forward-looking
80 projections, and floodplain maps based on past, documented flood history, in addition to the
81 federal emergency management agency flood insurance rate maps for the purposes of
82 determining base flood elevation and mandating the applicability of flood-resistant construction
83 standards as contained in the residential and commercial base building codes where flood hazard
84 areas are referenced. The board of selectmen in a town or the city council in a city shall certify
85 that the city or town has formally adopted the expanded floodplain maps for official use in the
86 city or town by ordinance or bylaw. The expanded floodplain maps shall be made publicly
87 accessible online. If the board finds, in consultation with the executive office of energy and
88 environmental affairs, that the use of expanded floodplain maps is in the interest of public health
89 and safety and in support of climate resilience and adaptation objectives, and with the general
90 purposes of a statewide building code, the board shall, after notice to said board of selectmen or
91 city council, and after a public hearing, adopt rules and regulations, and impose conditions in
92 connection with the adoption thereof. If the board rejects the request, the board shall provide a
93 written explanation of the rejection to the board of selectmen or the city council at which time
94 the board of selectmen or city council may file an appeal within 30 days to the secretary of the
95 executive office of housing and economic development who shall, in consultation with the
96 secretary of the executive office of energy and environmental affairs, reconsider the request and
97 respond to the appeal within 15 days.

98 SECTION 5. Section 100 of chapter 143 of the General Laws, as so appearing, is hereby
99 amended by striking out the ninth paragraph and inserting in place thereof the following
100 paragraph:-

101 The appeals board may grant a variance from any provision of this code in any particular
102 case, may determine the suitability of alternate materials and methods of construction, and may
103 provide reasonable interpretations of the provisions of this code; provided, however, that appeals
104 board decisions shall not conflict with the general objectives set forth in section ninety-five;
105 provided further, that the board of building standards and regulations shall adopt a standard
106 procedure for considering applications for variances to buildings or construction within a
107 floodplain. Variances for buildings or construction within a floodway shall be granted in
108 accordance with the following criteria, at minimum: (i) a showing of good and sufficient cause,
109 (ii) a determination that failure to grant the variance would result in exceptional non-financial
110 hardship to the applicant, (iii) a determination that the granting of a variance will not result in
111 increased flood heights, additional threats to public safety, extraordinary public offense, create
112 nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or
113 ordinances, and (iv) a determination that the variance is the minimum necessary to afford relief,
114 considering the flood hazard.

115 Upon the decision to grant a variance, the appeals board shall notify the applicant in
116 writing that the issuance of a variance to construct a structure below the base flood elevation may
117 result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of
118 insurance coverage and that such construction below the base flood level increases risks to life
119 and property. Such notification shall be maintained with a record of all variance actions.

120 SECTION 6. Section 2 of chapter 21A of the General Laws, as so appearing, is hereby
121 amended by inserting after clause (30) the following clause:

122 (31) develop and promulgate, in consultation with the executive office of housing and
123 economic development and the board of building regulations and standards, as an appendix to
124 the state building code and to the state residential code, a municipal opt-in specialized stretch
125 resilience code that incorporates forward-looking data on climate risks including, but not limited
126 to, inland and coastal flooding, extreme temperatures, wind, and changes in precipitation patterns
127 and that is more stringent than the most recent edition of the international building code and
128 international residential code. The code shall include, at a minimum, the following provisions
129 that go beyond those in the most recent edition of the state building code: i) requirements as to
130 freeboard and elevation above base flood elevation based on forward-looking climate data and
131 future flood risks, ii) requirements as to the location of utilities and other critical infrastructure
132 within a structure, iii) requirements as to wet and dry flood proofing of a structure, iv)
133 requirements as to habitable space and uses of a structure, v) requirements as to points of ingress
134 and egress, vi) requirements as to the ability to withstand extreme winds, and vii) requirements
135 as to the ability to withstand extreme temperatures. The code shall also include any further
136 language that is required to adequately prepare construction for future climate impacts including
137 wind, extreme temperature, and flooding.

138 The secretary of the executive office of energy and environmental affairs shall form and
139 consult with an advisory committee in the development of the stretch resilience code. The
140 advisory committee shall consist of at least 17 members who shall include: the secretary of
141 energy and environmental affairs or their designee, the chair of the board of building regulations
142 and standards or their designee, the secretary of the executive office of housing and economic
143 development or their designee, the commissioner of public health or their designee, the director
144 of the Massachusetts emergency management agency or their designee, the director of the office

145 of coastal zone management or their designee, 1 representative from an organization that
146 represents or serves an environmental justice community, 1 representative from an affordable
147 housing organization, 1 representative from a regional planning organization, 1 member with
148 professional expertise in climate science and data, 1 member who is a professional planner with
149 experience in climate adaptation and resilience, 1 member who is a certified building inspector in
150 a city or town, 1 member who is a municipal planner, 1 member who is a certified civil engineer,
151 1 member who is a certified coastal engineer, 1 representative from the insurance industry, and 1
152 representative from the real estate development industry. The advisory committee shall be
153 formed within six months of the bill being enacted and shall produce recommendations on
154 requirements for the code within eighteen months of the bill being enacted. The stretch resilience
155 code shall be promulgated no later than twenty-four months of the bill being enacted.

156 The secretary shall, in consultation with the board of building regulations and standards,
157 review and update the stretch resilience code every three years, in accordance with Section 94 of
158 chapter 143.

159 SECTION 7. Section 96 of chapter 143 of the General Laws, as so appearing, is hereby
160 amended by inserting after the word “resources” in the second paragraph, the following words:-,
161 the specialized stretch resilience code developed and promulgated by the executive office
162 of energy and environmental affairs,

163 SECTION 8. Section 100 of chapter 143 of the General Laws, as so appearing, is hereby
164 amended by inserting after the word “resources” in the second paragraph, the following words:-,
165 and the specialized stretch resilience code developed and promulgated by the executive
166 office of energy and environmental affairs,