

**HOUSE . . . . . No. 841**

**The Commonwealth of Massachusetts**

PRESENTED BY:

***Sarah K. Peake***

*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 sustainable investment, economic security and fiscal responsibility with respect to climate risks.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Sarah K. Peake</i>	<i>4th Barnstable</i>	<i>1/10/2019</i>
<i>Carolyn C. Dykema</i>	<i>8th Middlesex</i>	<i>1/24/2019</i>
<i>Mike Connolly</i>	<i>26th Middlesex</i>	<i>1/28/2019</i>
<i>Tram T. Nguyen</i>	<i>18th Essex</i>	<i>1/28/2019</i>
<i>David M. Rogers</i>	<i>24th Middlesex</i>	<i>1/30/2019</i>
<i>Joan Meschino</i>	<i>3rd Plymouth</i>	<i>1/30/2019</i>
<i>Natalie M. Higgins</i>	<i>4th Worcester</i>	<i>1/30/2019</i>
<i>RoseLee Vincent</i>	<i>16th Suffolk</i>	<i>1/30/2019</i>
<i>Daniel J. Ryan</i>	<i>2nd Suffolk</i>	<i>1/30/2019</i>
<i>Anne M. Gobi</i>	<i>Worcester, Hampden, Hampshire and Middlesex</i>	<i>1/30/2019</i>
<i>Stephan Hay</i>	<i>3rd Worcester</i>	<i>1/31/2019</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>	<i>1/31/2019</i>
<i>Jack Patrick Lewis</i>	<i>7th Middlesex</i>	<i>1/31/2019</i>
<i>Harold P. Naughton, Jr.</i>	<i>12th Worcester</i>	<i>1/31/2019</i>
<i>Julian Cyr</i>	<i>Cape and Islands</i>	<i>2/1/2019</i>
<i>Dylan A. Fernandes</i>	<i>Barnstable, Dukes and Nantucket</i>	<i>2/1/2019</i>

<i>Denise C. Garlick</i>	<i>13th Norfolk</i>	<i>2/1/2019</i>
<i>Patrick M. O'Connor</i>	<i>Plymouth and Norfolk</i>	<i>2/1/2019</i>
<i>Jonathan Hecht</i>	<i>29th Middlesex</i>	<i>2/1/2019</i>
<i>Joseph A. Boncore</i>	<i>First Suffolk and Middlesex</i>	<i>2/1/2019</i>
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>	<i>2/1/2019</i>
<i>Adrian C. Madaro</i>	<i>1st Suffolk</i>	<i>2/1/2019</i>
<i>David Biele</i>	<i>4th Suffolk</i>	<i>2/1/2019</i>

**HOUSE . . . . . No. 841**

By Ms. Peake of Provincetown, a petition (accompanied by bill, House, No. 841) of Sarah K. Peake and others promoting sustainable investment, economic security and fiscal responsibility with respect to climate risks. Environment, Natural Resources and Agriculture.

**The Commonwealth of Massachusetts**

**In the One Hundred and Ninety-First General Court  
(2019-2020)**

An Act promoting sustainable investment, economic security and fiscal responsibility with respect to climate risks.

*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. The General Laws are hereby amended by inserting after chapter 21O the  
2 following chapter:-

3 CHAPTER 21P.

4 CLIMATE RISK AND FISCAL RESPONSIBILITY

5 Section 1. As used in this chapter, the following words shall have the following meanings  
6 unless the context clearly requires otherwise:

7 “Adaptation”, a response and process of adjustment to actual or expected climate change  
8 and its effects that seeks to reduce the vulnerability, and increase capacity to recover rapidly of  
9 the commonwealth’s built and natural environments and seeks to moderate or avoid harm or  
10 exploit beneficial opportunities to reduce the safety and health risks that vulnerable human  
11 populations and resources may encounter due to climate change.

12           “Adaptation measures,” location, design, engineering, construction, landscaping or other  
13 creation or modification of natural or non-structural features, ecological design, and other  
14 elements of a structure, operation, system, activity, or process that (a) eliminate or reduce loss,  
15 damage, or interruption of function due to climate risk, or (b) facilitate rapid restoration or  
16 recovery following loss, damage, or interruption of function due to climate risk.

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

22           "Electric power company", as defined in section 1 of chapter 164 of the General Laws.

23           "Natural gas company", as defined in section 1 of chapter 164 of the General Laws.

24           "Regulation" includes the whole or any part of every rule, regulation, standard or other  
25 requirement of general application and future effect, including the amendment or repeal thereof,  
26 adopted by an agency to implement or interpret the law enforced or administered by it, but does  
27 not include (a) regulations concerning only the internal management or discipline of the adopting  
28 agency or any other agency, and not substantially affecting the rights of or the procedures  
29 available to the public or that portion of the public affected by the agency's activities; or (b)  
30 decisions issued in adjudicatory proceedings.

31           "Secretary", the officer in charge of each executive office established by chapter 6A or  
32 chapter 7 and the supreme judicial court.

33 “State agency”, a legal entity of state government established by the legislature as an  
34 agency, board, bureau, department, office or division of the commonwealth with a specific  
35 mission that may either report to an executive office or secretariat or be independent division or  
36 department.

37 “State authority”, a body politic and corporate constituted as a public instrumentality of  
38 the commonwealth and established by an act of the legislature to serve an essential governmental  
39 function; provided, however, that “state authority” shall include energy generation and  
40 transmission, solid waste, drinking water, wastewater and stormwater and telecommunication  
41 utilities serving areas identified by the executive office as subject to material risk of flooding;  
42 provided further, that unless designated as such by the secretary of energy and environmental  
43 affairs, “state authority” shall not include: (i) a state agency; (ii) a city or town; (iii) a body  
44 controlled by a city or town; or (iv) a separate body politic for which the governing body is  
45 elected, in whole or in part, by the general public or by representatives of member cities or towns

46 “Steam distribution company”, as defined in Section 1 of chapter 164 of the General  
47 Laws.

48 “Water Companies”, every person, partnership, association or corporation, other than a  
49 municipal corporation, and other than a landlord supplying his tenant, engaged in the distribution  
50 and sale of water in the commonwealth through its pipes or mains.

51 Section 2. (a) The secretary of the executive office and energy and environmental affairs,  
52 in every application for a permit, authorization, certification, approval, grant, loan, or other  
53 financing within the oversight of the secretary, including every environmental impact report  
54 including draft and final environmental impact reports pursuant to section sixty one of chapter

55 thirty (i) shall require disclosure of climate risk relevant to the application and require the  
56 applicant identify the assumptions, analysis, modeling or projections on which the disclosure is  
57 based; (ii) may require, as a condition of approval, any adaptation measures that the applicant or  
58 the Secretary identifies as reasonable and appropriate; and (iii) may deny as incomplete any  
59 application, DEIR or EIR as to which the Secretary determines that either the climate risk  
60 disclosure or adaptation measures are insufficient, including, without limitation, applications for  
61 a permit or certification or license application pursuant to section forty three of chapter twenty  
62 one, section sixteen of chapter twenty one d, section seven of chapter twenty one g, and section  
63 sixty two d of chapter thirty that does not reasonably identify and address such risks.

64 (b) The secretary of the executive office of energy and environmental affairs shall adopt,  
65 in consultation and concurrence with the executive office of public safety and security and other  
66 affected state agencies and departments, a climate projections dataset based on the best available  
67 climate data using reasonably likely scenarios, to be uniformly applied when considering climate  
68 risks pursuant to section sixty-one of chapter thirty. Prior to adopting a climate projections  
69 dataset, the secretary shall provide public notice and comment in accordance with section three  
70 of chapter 30A. The secretary shall review and, as necessary, revise the adopted dataset at least  
71 every five years to ensure that it reflects the best available climate data.

72 Section 3. Applicants for state grants, loans, or other funding or financing including,  
73 without limitation, tax credit allocations for construction, development, redevelopment, and new  
74 or expanded capital infrastructure projects shall (a) demonstrate to the relevant agency or  
75 authority that the planning, design, engineering and specifications for the project include  
76 adaptation measures sufficient to address climate risks that will arise over the economic life of  
77 the project or the term of financing, whichever is longer; and (b) disclose in all design

78 engineering, architectural, or other drawings and analyses the climate assumptions used in  
79 evaluating and addressing climate risks.

80 Section 4. Requests for proposals for state capital projects shall require that proposals (a)  
81 demonstrate to the relevant agency or authority that the planning, design, engineering and  
82 specifications for the project include adaptation measures sufficient to address climate risks that  
83 will arise over the economic life or service life of the project, whichever is longer; and (b)  
84 disclose in all design engineering, architectural, or other drawings and analyses the climate  
85 assumptions used in evaluating and addressing climate risks. This section shall not apply to  
86 emergency procurements as defined in section eight of chapter 30B.

87 Section 5. The requirements for risk disclosure and adoption of adaptation measures set  
88 forth in this chapter include the requirement that such disclosures and adaptation measures  
89 identify and alleviate any climate risks that disproportionately burden low and moderate income  
90 and minority populations, populations with limited English proficiency or foreign origin, or  
91 populations historically subject to higher rates of exposure to environmental risks than the  
92 general population. Adaptation measures shall further be designed to avoid disparate impacts on  
93 the basis of race, color, national origin, or income.

94 Section 6. The secretary of the executive office of energy and environmental affairs may  
95 promulgate such rules and regulations as are necessary to promptly and effectively enforce the  
96 provisions of sections one through four, inclusive.

97 Section 7.

98 (a) The following shall be exempt from the requirements of this Chapter:

99 (i) Any project for which the Director of the Massachusetts Emergency Management  
100 Agency certifies in writing that the project poses no climate risks and has no potential to result in  
101 an increase in emergency response costs;

102 (ii) Any action or project for the operation, or maintenance of existing infrastructure.

103 (iii) Any grant or financing by the commonwealth in an amount less than \$100,000,  
104 which threshold is subject to revision by regulation promulgated by the Secretary of the  
105 Executive Office of Energy and Environmental Affairs;

106 (iv) Any category of actions or activities for which a state agency or state authority  
107 establishes by regulation, with the concurrence of Director of the Massachusetts Emergency  
108 Management Agency, pose no climate risks and have no potential to result in an increase in  
109 emergency response costs.

110 Section 8. (a) The Department of Public Utilities shall require, in any ratemaking  
111 proceeding pursuant to sections seventy-six, nintety-three, and ninety-four of chapter one  
112 hundred and sixty-four and sections two and four of chapter one hundred and sixty-five, that  
113 investor-owned electric power, natural gas, steam distribution, and water companies identify in  
114 priority order the climate risks to its facilities, that will arise over the projected economic life of  
115 such facilities or fifty years, whichever is greater. The companies shall present evidence  
116 documenting their evaluation of climate risks and measures addressing such climate risks based  
117 on the best available data and other evidence in the record before the agency and shall identify  
118 how their operating and capital budgets address such climate risks. The companies shall also (a)  
119 consider and present evidence addressing likely climate change risk scenarios in relation to the  
120 risk tolerance of the infrastructure and (b) disclose in all design engineering, architectural, or



121 other drawings and analyses the climate assumptions used in evaluating and addressing climate  
122 risks

123 (b) Investor-owned electric, gas, steam distribution, and water companies shall prioritize,  
124 where feasible, adaptation measures that (i) promote the preservation, protection, restoration and  
125 enhancement of the commonwealth’s natural infrastructure, (ii) account for the existing natural,  
126 built, and economic characteristics of the commonwealth’s most vulnerable areas and human  
127 populations. Adaptation measures that include the use of hard-engineered, hardscape, or gray  
128 infrastructure features shall be supported by evidence the measures will not cause of exacerbate  
129 negative environmental impacts and that alternative green or green and gray hybrid solutions are  
130 not feasible.

131 (c) In adjudicating ratemaking proceedings pursuant to sections seventy-six, ninety-three,  
132 and ninety-four of chapter one hundred and sixty-four and sections two and four of chapter one  
133 hundred and sixty-five, the Department of Public Utilities shall determine whether the  
134 applicant’s costs proposed or incurred for capital investment projects included consideration and  
135 minimization of climate risks for the economic life of the proposed investment or fifty years,  
136 whichever is greater. In considering climate risks, the Department of Public Utilities shall  
137 analyze likely climate change risk scenarios and shall conclude in writing that those scenarios are  
138 appropriate based on the risk tolerance of the project or facility.

139 (d) The Department of Public Utilities shall promulgate such rules and regulations as are  
140 necessary to promptly and effectively enforce the provisions of section eight.

141 Section 9. In the interest of public health and safety, the Board of Building Regulations  
142 and Standards shall undertake in one year a study of the feasibility, impact, economics, and merit

143 of code improvements that would require that buildings be designed, sited and constructed in a  
144 manner that addresses and protects against climate risks. The study shall be based on the best  
145 available data and science and shall include at least consideration of structural strength, means of  
146 egress facilities, stability, light and ventilation, energy conservation, and safety to life and  
147 property. It shall also consider public health implications like human stress thresholds associated  
148 with heat and cold. The study findings shall be published for public comment within 45 days of  
149 its completion and the Board of Building Regulations and Standards shall hold a public hearing.

150 SECTION 2. Section 69J1/4 of chapter 164 of the General Laws, as appearing in the  
151 2014 Official Edition, is hereby amended by inserting the following:

152 All petitions shall a) demonstrate to the board that the planning, design, engineering and  
153 specifications for the project include adaptation measures sufficient to address climate risks that  
154 will arise over the economic life of the project or the term of financing, whichever is longer; and  
155 (b) disclose in all design engineering, architectural, or other drawings and analyses the climate  
156 assumptions used in evaluating and addressing climate risks.

157 SECTION 3. Section 2 of chapter 21A of the General Laws, as appearing in the  
158 2014 Official Edition, is hereby amended by inserting after clause (30) the following  
159 subsections:

160 (31) Establish, conduct, and maintain an annual program of education and training for  
161 members of local planning boards, zoning boards, and commissions on climate science and the  
162 physical effects of climate change including but not limited to sea level rise, storm surge,  
163 drought, wind, extreme precipitation, and extreme high and low temperature changes including  
164 heat waves and based on the best available data. Each member of a planning board, health board,

165 or commission shall participate in training and education classes concerning the effects of  
166 climate change once every two (2) years. Each member shall complete a minimum of five (5)  
167 hours of training in order to be certified for the two (2) years required by this subsection. Upon  
168 completion of the training, the planning board or commission member shall file with the  
169 municipal clerk a statement asserting that the training course has been completed.

170 (32) The Secretary may, in establishing, conducting and maintaining this program of  
171 education and training, confer with and, if necessary, consolidate efforts with other mandatory  
172 board training programs as appropriate. Any consolidated training program must retain the  
173 requirement that members complete a minimum of five (5) hours of training on climate science  
174 and the physical effects of climate change.