

**HOUSE . . . . . No. 832**

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**The Commonwealth of Massachusetts**

PRESENTED BY:

***Joan Meschino***

*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 to create a 2050 roadmap to a clean and thriving commonwealth.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Joan Meschino</i>	<i>3rd Plymouth</i>	<i>1/17/2019</i>
<i>Bruce J. Ayers</i>	<i>1st Norfolk</i>	<i>2/1/2019</i>
<i>Ruth B. Balsler</i>	<i>12th Middlesex</i>	<i>1/25/2019</i>
<i>Christine P. Barber</i>	<i>34th Middlesex</i>	<i>1/25/2019</i>
<i>John Barrett, III</i>	<i>1st Berkshire</i>	<i>1/28/2019</i>
<i>David Biele</i>	<i>4th Suffolk</i>	<i>2/1/2019</i>
<i>Natalie M. Blais</i>	<i>1st Franklin</i>	<i>1/22/2019</i>
<i>Michelle L. Ciccolo</i>	<i>15th Middlesex</i>	<i>1/29/2019</i>
<i>Mike Connolly</i>	<i>26th Middlesex</i>	<i>1/24/2019</i>
<i>Edward F. Coppingier</i>	<i>10th Suffolk</i>	<i>1/31/2019</i>
<i>Daniel R. Cullinane</i>	<i>12th Suffolk</i>	<i>1/29/2019</i>
<i>Julian Cyr</i>	<i>Cape and Islands</i>	<i>2/1/2019</i>
<i>Mindy Domb</i>	<i>3rd Hampshire</i>	<i>1/30/2019</i>
<i>Daniel M. Donahue</i>	<i>16th Worcester</i>	<i>1/28/2019</i>
<i>Michelle M. DuBois</i>	<i>10th Plymouth</i>	<i>1/20/2019</i>
<i>Nika C. Elugardo</i>	<i>15th Suffolk</i>	<i>1/31/2019</i>
<i>Tricia Farley-Bouvier</i>	<i>3rd Berkshire</i>	<i>1/25/2019</i>
<i>Paul R. Feeney</i>	<i>Bristol and Norfolk</i>	<i>1/31/2019</i>

<i>Dylan A. Fernandes</i>	<i>Barnstable, Dukes and Nantucket</i>	<i>1/31/2019</i>
<i>Denise C. Garlick</i>	<i>13th Norfolk</i>	<i>1/29/2019</i>
<i>Carmine Lawrence Gentile</i>	<i>13th Middlesex</i>	<i>1/27/2019</i>
<i>Carlos González</i>	<i>10th Hampden</i>	<i>1/29/2019</i>
<i>Kenneth I. Gordon</i>	<i>21st Middlesex</i>	<i>1/25/2019</i>
<i>Tami L. Gouveia</i>	<i>14th Middlesex</i>	<i>1/29/2019</i>
<i>James K. Hawkins</i>	<i>2nd Bristol</i>	<i>2/1/2019</i>
<i>Jonathan Hecht</i>	<i>29th Middlesex</i>	<i>1/18/2019</i>
<i>Natalie M. Higgins</i>	<i>4th Worcester</i>	<i>1/30/2019</i>
<i>Kate Hogan</i>	<i>3rd Middlesex</i>	<i>1/30/2019</i>
<i>Patrick Joseph Kearney</i>	<i>4th Plymouth</i>	<i>1/18/2019</i>
<i>Mary S. Keefe</i>	<i>15th Worcester</i>	<i>1/28/2019</i>
<i>Kay Khan</i>	<i>11th Middlesex</i>	<i>1/29/2019</i>
<i>Kathleen R. LaNatra</i>	<i>12th Plymouth</i>	<i>1/30/2019</i>
<i>David Henry Argosky LeBoeuf</i>	<i>17th Worcester</i>	<i>1/23/2019</i>
<i>Jack Patrick Lewis</i>	<i>7th Middlesex</i>	<i>1/18/2019</i>
<i>David Paul Linsky</i>	<i>5th Middlesex</i>	<i>1/29/2019</i>
<i>Jay D. Livingstone</i>	<i>8th Suffolk</i>	<i>1/31/2019</i>
<i>Adrian C. Madaro</i>	<i>1st Suffolk</i>	<i>1/28/2019</i>
<i>Paul McMurtry</i>	<i>11th Norfolk</i>	<i>1/30/2019</i>
<i>Christina A. Minicucci</i>	<i>14th Essex</i>	<i>1/29/2019</i>
<i>Liz Miranda</i>	<i>5th Suffolk</i>	<i>1/31/2019</i>
<i>Frank A. Moran</i>	<i>17th Essex</i>	<i>1/28/2019</i>
<i>Mathew J. Muratore</i>	<i>1st Plymouth</i>	<i>1/31/2019</i>
<i>Brian W. Murray</i>	<i>10th Worcester</i>	<i>1/30/2019</i>
<i>Harold P. Naughton, Jr.</i>	<i>12th Worcester</i>	<i>1/31/2019</i>
<i>Tram T. Nguyen</i>	<i>18th Essex</i>	<i>1/25/2019</i>
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>	<i>2/1/2019</i>
<i>Alice Hanlon Peisch</i>	<i>14th Norfolk</i>	<i>1/31/2019</i>
<i>Smitty Pignatelli</i>	<i>4th Berkshire</i>	<i>1/25/2019</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>	<i>1/28/2019</i>
<i>Rebecca L. Rausch</i>	<i>Norfolk, Bristol and Middlesex</i>	<i>2/1/2019</i>
<i>David Allen Robertson</i>	<i>19th Middlesex</i>	<i>2/1/2019</i>
<i>Maria Duaiame Robinson</i>	<i>6th Middlesex</i>	<i>1/29/2019</i>
<i>David M. Rogers</i>	<i>24th Middlesex</i>	<i>1/28/2019</i>
<i>Jeffrey N. Roy</i>	<i>10th Norfolk</i>	<i>1/28/2019</i>
<i>Daniel J. Ryan</i>	<i>2nd Suffolk</i>	<i>1/28/2019</i>
<i>Thomas M. Stanley</i>	<i>9th Middlesex</i>	<i>2/1/2019</i>
<i>Andres X. Vargas</i>	<i>3rd Essex</i>	<i>1/31/2019</i>

*RoseLee Vincent*  
*Tommy Vitolo*

*16th Suffolk*  
*15th Norfolk*

*1/28/2019*  
*1/30/2019*

**HOUSE . . . . . No. 832**

By Ms. Meschino of Hull, a petition (accompanied by bill, House, No. 832) of Joan Meschino and others for legislation to address climate protection, green economy and global warming solutions. Environment, Natural Resources and Agriculture.

**The Commonwealth of Massachusetts**

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

An Act to create a 2050 roadmap to a clean and thriving commonwealth.

*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. Section 1 of chapter 21N of the General Laws, as appearing in the 2016  
2 Official Edition, is hereby amended by striking out the definition of “Direct emissions”, in lines  
3 17 to 20, inclusive, and inserting in place thereof the following definition:-

4 “Direct emissions”, emissions from sources that are owned or operated, in whole or in  
5 part, by any person, entity, or facility including, but not limited to, emissions from any  
6 transportation vehicle, any building or structure, or any residential, commercial, institutional,  
7 industrial or manufacturing process.

8 SECTION 2. Section 1 of chapter 21N of the General Laws, as appearing in the 2016  
9 Official Edition, is hereby amended by inserting after the definition of “Greenhouse gas  
10 emissions source”, in lines 44 to 49, inclusive, the following definition:-

11 “Greenhouse gas-emitting priority”, matter that emits or is capable of emitting a  
12 greenhouse gas when burned including, without exception, natural gas, petroleum, coal, and any

13 solid, liquid or gaseous fuel derived therefrom as well as all others identified as such by the  
14 department.

15

16 SECTION 3. Section 1 of chapter 21N of the General Laws, as appearing in the 2016  
17 Official Edition, is hereby amended by striking out the definition of “Indirect emissions”, in lines  
18 50 to 52, inclusive, and inserting in place thereof the following definition:-

19 “Indirect emissions”, emissions associated with the consumption of any greenhouse gas-  
20 emitting priority or purchased electricity, steam and heating or cooling by an entity or facility.

21

22 SECTION 4. Section 1 of chapter 21N of the General Laws, as appearing in the 2016  
23 Official Edition, is hereby amended by striking out the definition of “Market-based compliance  
24 mechanism”, in lines 56 to 65, inclusive, and inserting in place thereof the following definition:-

25 “Market-based compliance mechanism”, any form of priced compliance system imposed  
26 on sources or categories of sources, or pricing mechanism imposed directly on greenhouse gas-  
27 emitting priorities or on their the distribution or sale, designed to reduce emissions as required by  
28 this act including, but not limited to (i) a system of market-based declining annual aggregate  
29 emissions limitations for sources or categories of sources that emit greenhouse gases; or (ii)  
30 greenhouse gas emissions exchanges, banking, credits and other transactions governed by rules  
31 and protocols established by the secretary or a regional program that result in the same  
32 greenhouse gas emissions reduction, over the same time period, as direct compliance with a  
33 greenhouse gas emissions limit or emission reduction measure adopted by the executive office

34 pursuant to this chapter; or (iii) a system of charges or exactions imposed in order to reduce  
35 statewide greenhouse gas emissions in whole or in part.

36

37 SECTION 5. Subsection (a) of section 2 of chapter 21N of the General Laws, as  
38 appearing in the 2016 Official Edition, is hereby amended by striking out its first sentence and  
39 inserting in place thereof the following:-

40 The department shall monitor and regulate greenhouse gas-emitting priorities and direct  
41 and indirect emissions of greenhouse gases with the goal of reducing those emissions in order to  
42 achieve greenhouse gas emissions limits established by and pursuant to chapters 21N and  
43 21N1/2.

44

45 SECTION 6. Subpart (4) of subsection (b) of section 3 of chapter 21N of the General  
46 Laws, as appearing in the 2016 Official Edition, is hereby amended by striking it out and  
47 inserting in place thereof the following:-

48 (4) a 2050 statewide emissions limit that achieves at least net zero statewide greenhouse  
49 gas emissions.

50

51 SECTION 7. Chapter 298 of the Acts of 2008 is hereby amended by striking out section  
52 16 in its entirety.

53

54 SECTION 8. The General Laws are hereby amended by inserting after chapter 21N the  
55 following chapter:-

56 Chapter 21N1/2. Global Warming Solutions Implementation Act.

57 Section 1. Unless otherwise defined herein, terms defined in section 1 of chapter 21N  
58 have the same meaning when used in this chapter.

59 Section 2. No later than December 31, 2020, the secretary shall conduct and publish the  
60 results of detailed, quantitative modeling and analysis of the commonwealth's energy economy  
61 and emissions in their regional context, to include the regional electric grid, sufficient to identify  
62 multiple technically and economically feasible pathways of reducing statewide emissions  
63 consistent with the 2050 emissions limit required by section 3(b) of chapter 21N. Such modeling  
64 and analysis shall employ back-casting methodology, shall be comparable to that conducted by  
65 the European Union in support of its Roadmap 2050 effort, may be conducted in conjunction  
66 with other states or regional entities as part of an analysis of reducing regional emissions in 2050  
67 to a level consistent with those required by chapter 21N for the commonwealth, and shall include  
68 or be accompanied by analysis quantitatively assessing for each pathway economic,  
69 environmental, and public health impacts particularly those that may benefit or burden low or  
70 moderate income people or any environmental justice populations. The secretary shall publish  
71 the results of the modeling and analysis required by this section, and shall also make available  
72 for public inspection and use the model, all model assumptions, and all input and output data.

73 Section 3. In conjunction with the modeling and analysis required in section 2, and in any  
74 case no later than December 31, 2020, the secretary shall adopt the interim 2030 and 2040  
75 emissions limits consistent with that analysis and as required by section 3(b) of chapter 21N. The

76 interim 2030 emissions limit shall be at least 50 per cent below the 1990 level, and the interim  
77 2040 emissions limit shall be at least 75 per cent below the 1990 level. In setting the interim  
78 2030 and 2040 emissions limits, the secretary shall comply with the second sentence of  
79 subsection (a) of section 4 chapter 21N and with subsections (b), (c), (d), (e), (f) and (g) of  
80 section 4 chapter 21N.

81           Section 4. After conducting the modeling and analysis required in section 2, and in any  
82 case no later than December 31, 2021, the secretary shall issue a 2050 emissions reduction  
83 roadmap plan in lieu of the plan update required by section 4(h) of chapter 21N. The 2050  
84 emissions reduction roadmap plan shall describe in detail the commonwealth's plan to achieve  
85 the 2050 emissions limit required by section 3(b) of chapter 21N, as well as the interim 2030 and  
86 2040 emissions limits, by means of one or more technically and economically feasible pathways  
87 selected to reduce statewide emissions. The 2050 emissions reduction roadmap plan must  
88 address all sources or categories of sources that emit greenhouse gas emissions and indicate for  
89 each how, to what extent, and when the commonwealth will act to reduce their emissions as part  
90 of a plan achieve the 2050 emissions limit required by section 3(b) of chapter 21N. In developing  
91 the 2050 emissions reduction roadmap plan, the secretary shall comply with section 4 of chapter  
92 21N as described in section 3. The secretary shall update the 2050 emissions reduction roadmap  
93 plan at least once every thirty months. This section 4 reporting requirement supersedes and  
94 replaces that required by subsection (h) of section 4 of chapter 21N.

95           Section 5. Separate from the plan required by section 4, the secretary shall after  
96 conducting the modeling and analysis required in section 2, and no later than December 31,  
97 2021, issue the report required by section 5 of chapter 21N, hereinafter referred to as the Global  
98 Warming Solutions Act implementation assessment report. The report must quantitatively assess



99 the effectiveness of all regulations and programs designed to reduce greenhouse gas emissions  
100 directly or indirectly and must also address all elements required by section 5 of chapter 21N,  
101 except that the secretary shall update and file the Global Warming Solutions Act implementation  
102 assessment report annually.

103           Section 6. No later than December 31, 2022, the commonwealth and its agencies shall  
104 promulgate regulations regarding all sources or categories of sources and all greenhouse gas  
105 emitting priorities sufficient to achieve the 2050 emissions limit required by section 3(b) of  
106 chapter 21N. The development of such regulations shall be coordinated by the secretary, and  
107 shall be consistent with the modeling and analysis required in section 2, with achievement of the  
108 adopted interim 2030 and 2040 emissions limits as required by section 3, and with the plan  
109 required by section 4, and shall be designed to ensure that the commonwealth achieves its  
110 required emissions reductions equitably and in a manner that protects, and where feasible  
111 improves the condition of, low and moderate income persons and environmental justice  
112 populations while creating, where feasible, additional employment and economic development in  
113 the commonwealth. The regulations required by this section 6 may include any market-based  
114 compliance mechanism or other carbon pricing for any greenhouse gas or greenhouse gas-  
115 emitting priority that the Secretary has determined to be likely to contribute to the cost-effective  
116 reduction of direct or indirect emissions as required by chapters 21N and 21N1/2.

117           Section 7. No later than six months after this chapter is enacted, the department may, in  
118 consultation with the secretary, impose a schedule of fees on regulated sources of greenhouse gas  
119 emissions sufficient to recover, for each fiscal year, the costs of implementation of chapters 21N  
120 and 21N1/2. Revenues collected pursuant to this section shall be deposited in a Global Warming

121 Solutions Act Implementation Fund for use, as directed by the legislature or the secretary, solely  
122 for the purpose of carrying out chapters 21N and 21N1/2.

123           Section 8. All municipal electric departments and municipal light boards as defined in  
124 section 1 of chapter 164A are subject to chapters 21N and 21N1/2 and shall be included in all  
125 regulations and programs associated therewith unless the secretary determines their inclusion  
126 will not contribute to the commonwealth's achievement of the greenhouse gas emissions limits  
127 established by those chapters. When including municipal electric departments and municipal  
128 light boards in any such regulation or program, the secretary shall consult with the municipal  
129 electric departments and municipal light boards and shall take into account, where relevant, their  
130 size and structure as well as their existing programs, contractual obligations and asset ownership.  
131 In lieu of, or in conjunction with, the inclusion of municipal electric departments and municipal  
132 light boards in any such regulation or program, the secretary may order or allow a municipal  
133 electric department or municipal light board to submit for the secretary's review and approval,  
134 pursuant to chapter 30A of the General Laws, a comprehensive plan detailing that department or  
135 board's plan to achieve or exceed the greenhouse gas emissions limits established by chapters  
136 21N and 21N1/2. The secretary shall enforce any such plan so approved and may revoke  
137 approval for non-compliance.