

# **HOUSE . . . . . No. 3983**

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## The Commonwealth of Massachusetts

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HOUSE OF REPRESENTATIVES, July 22, 2019.

The committee on Environment, Natural Resources and Agriculture to whom was referred the petition (accompanied by bill, House, No. 832) of Joan Meschino and others for legislation to address climate protection, green economy and global warming solutions, reports recommending that the accompanying bill (House, No. 3983) ought to pass.

For the committee,

SMITTY PIGNATELLI.

**HOUSE . . . . . No. 3983**

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**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, in lines 17 through 20, inclusive, the  
3 definition of “Direct emissions”, 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. Said section 1 of said chapter 21N, as so appearing, is hereby further  
9 amended by inserting after the definition of “Greenhouse gas emissions source”, in lines 44  
10 through 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 SECTION 3. Said section 1 of said chapter 21N, as so appearing, is hereby further  
16 amended by striking out, in lines 50 through 52, inclusive, the definition of “Indirect emissions”,  
17 and inserting in place thereof the following definition:-

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

20 SECTION 4. Said section 1 of said chapter 21N, as so appearing, is hereby further  
21 amended by striking out, in lines 56 through 65, inclusive, the definition of “Market-based  
22 compliance mechanism”, and inserting in place thereof the following definition:-

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

34 SECTION 5. Subsection (a) of section 2 of said chapter 21N, as so appearing, is hereby  
35 amended by striking out the first sentence and inserting in place thereof the following sentence:-

36 The department shall monitor and regulate greenhouse gas-emitting priorities and direct  
37 and indirect emissions of greenhouse gases with the goal of reducing those emissions in order to  
38 achieve greenhouse gas emissions limits established by and pursuant to chapters 21N and 21N ½.

39 SECTION 6. Subsection (b) of section 3 of said chapter 21N, as so appearing, is hereby  
40 amended by striking out, clause (4), and inserting in place thereof the following clause:-

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

43 SECTION 7. The General Laws are hereby amended by inserting after chapter 21N the  
44 following chapter:-

45 Chapter 21N ½ . Global Warming Solutions Implementation Act.

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

48 Section 2. No later than December 31, 2020, the secretary shall conduct and publish the  
49 results of detailed, quantitative modeling and analysis of the commonwealth's energy economy  
50 and emissions in their regional context, to include the regional electric grid, sufficient to identify  
51 multiple technically and economically feasible pathways of reducing statewide emissions  
52 consistent with the 2050 emissions limit required by section 3(b) of chapter 21N. Such modeling  
53 and analysis shall employ back-casting methodology, shall be comparable to that conducted by  
54 the European Union in support of its Roadmap 2050 effort, may be conducted in conjunction

55 with other states or regional entities as part of an analysis of reducing regional emissions in 2050  
56 to a level consistent with those required by chapter 21N for the commonwealth, and shall include  
57 or be accompanied by analysis quantitatively assessing for each pathway economic,  
58 environmental, and public health impacts particularly those that may benefit or burden low or  
59 moderate income people or any environmental justice populations. The secretary shall publish  
60 the results of the modeling and analysis required by this section, and to the maximum extent  
61 permitted by law, shall also make available for public inspection and use the model, all model  
62 assumptions, and all input and output data, subject only to reasonable protection pursuant to  
63 section 5D of chapter 25.

64           Section 3. In conjunction with the modeling and analysis required in section 2, and in any  
65 case no later than December 31, 2020, the secretary shall adopt the interim 2030 and 2040  
66 emissions limits consistent with that analysis and as required by section 3(b) of chapter 21N. The  
67 interim 2030 emissions limit shall be at least 50 per cent below the 1990 level, and the interim  
68 2040 emissions limit shall be at least 75 per cent below the 1990 level. In setting the interim  
69 2030 and 2040 emissions limits, the secretary shall comply with the second sentence of  
70 subsection (a) of section 4 of chapter 21N and with subsections (b) through (g), inclusive, of  
71 section 4 of chapter 21N.

72           Section 4. After conducting the modeling and analysis required in section 2, and in any  
73 case no later than December 31, 2021, the secretary shall issue a 2050 emissions reduction  
74 roadmap plan in lieu of the plan update required by section 4(h) of chapter 21N. The 2050  
75 emissions reduction roadmap plan shall describe in detail the commonwealth's plan to achieve  
76 the 2050 emissions limit required by section 3(b) of chapter 21N, as well as the interim 2030 and  
77 2040 emissions limits, by means of one or more technically and economically feasible pathways

78 selected to reduce statewide emissions. The 2050 emissions reduction roadmap plan shall include  
79 proposed policies, regulations, and legislative recommendations, that address all sources or  
80 categories of sources that emit greenhouse gas emissions and indicate for each how, to what  
81 extent, and when the commonwealth will act to reduce their emissions as part of a plan achieve  
82 the 2050 emissions limit required by section 3(b) of chapter 21N. In developing the 2050  
83 emissions reduction roadmap plan, the secretary shall comply with section 4 of chapter 21N as  
84 described in section 3. The secretary shall update the 2050 emissions reduction roadmap plan at  
85 least once every 30 months. This section 4 reporting requirement supersedes and replaces that  
86 required by subsection (h) of section 4 of chapter 21N.

87           Section 5. Separate from the plan required by section 4, the secretary shall after  
88 conducting the modeling and analysis required in section 2, and no later than December 31,  
89 2021, issue the report required by section 5 of chapter 21N, hereinafter referred to as the Global  
90 Warming Solutions Act implementation assessment report. The report must quantitatively assess  
91 the effectiveness of all regulations and programs designed to reduce greenhouse gas emissions  
92 directly or indirectly and must also address all elements required by section 5 of chapter 21N,  
93 except that the secretary shall update and file the Global Warming Solutions Act implementation  
94 assessment report annually.

95           Section 6. Twelve months after the plan required by section 4 is first issued or  
96 subsequently updated, the commonwealth and its agencies shall promulgate regulations  
97 regarding all sources or categories of sources and all greenhouse gas emitting priorities  
98 consistent with, and as necessary to implement and accomplish that plan. The development of  
99 such regulations shall be coordinated by the secretary, and shall be consistent with the modeling  
100 and analysis required in section 2, with achievement of the adopted interim 2030 and 2040

101 emissions limits as required by section 3, and with the plan required by section 4, and shall be  
102 designed to ensure that the commonwealth achieves its required emissions reductions equitably  
103 and in a manner that protects, and where feasible improves the condition of low and moderate  
104 income persons and environmental justice populations while creating, where feasible, additional  
105 employment and economic development in the commonwealth. The regulations required by this  
106 section may include any market-based compliance mechanism or other carbon pricing for any  
107 greenhouse gas or greenhouse gas-emitting priority that the Secretary has determined to be likely  
108 to contribute to the cost-effective reduction of direct or indirect emissions as required by this  
109 chapter and chapter 21N.

110           Section 7. No later than 6 months after this chapter is enacted, the department may, in  
111 consultation with the secretary, impose a schedule of fees on regulated sources of greenhouse gas  
112 emissions sufficient to recover, for each fiscal year, the costs of implementation of this chapter  
113 and chapter 21N. Revenues collected pursuant to this section shall be deposited in a Global  
114 Warming Solutions Act Implementation Fund for use, as directed by the legislature or the  
115 secretary, solely for the purposes of carrying out this chapter and chapter 21N.

116           Section 8. All municipal electric departments and municipal light boards as defined in  
117 section 1 of chapter 164A are subject to this chapter and chapter 21N, and shall be included in all  
118 regulations and programs associated therewith unless the secretary determines their inclusion  
119 will not contribute to the commonwealth's achievement of the greenhouse gas emissions limits  
120 established by said chapters. When including municipal electric departments and municipal light  
121 boards in any such regulation or program, the secretary shall consult with the municipal electric  
122 departments and municipal light boards and shall take into account, where relevant, their size and  
123 structure as well as their existing programs, contractual obligations and asset ownership. In lieu

124 of, or in conjunction with, the inclusion of municipal electric departments and municipal light  
125 boards in any such regulation or program, the secretary may order or allow a municipal electric  
126 department or municipal light board to submit for the secretary's review and approval, pursuant  
127 to chapter 30A of the General Laws, a comprehensive plan detailing that department or board's  
128 plan to achieve or exceed the greenhouse gas emissions limits established by this chapter and  
129 chapter 21N. The secretary shall enforce any such plan so approved and may revoke approval  
130 for non-compliance.

131 SECTION 8. Chapter 298 of the Acts of 2008 is hereby amended by striking out section  
132 16.