

HOUSE No. 4912

The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES, July 29, 2020.

The committee on Ways and Means, to whom was referred the Senate Bill setting next-generation climate policy (Senate, No. 2500), reports recommending that the same ought to pass with amendments striking out all after the enacting clause and inserting in place thereof the text contained in House document numbered 4912; and by striking out the title and inserting in place thereof the following title: “An Act creating a 2050 roadmap to a clean and thriving commonwealth.”

For the committee,

AARON MICHLEWITZ.

HOUSE No. 4912

Text of amendments, recommended by the committee on Ways and Means, to the Senate Bill setting next-generation climate policy (Senate, No. 2500). July 29, 2020.

The Commonwealth of Massachusetts

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

By striking out all after the enacting clause and inserting in place thereof the following:–

1 SECTION 1. Section 1 of chapter 21N of the General Laws, as appearing in the 2018
2 Official Edition, is hereby amended by striking out the definition of “Direct emissions” and
3 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, building, structure or residential, commercial, institutional, industrial or
7 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” the following
10 definition:–

11 “Greenhouse gas-emitting priority”, matter that emits or is capable of emitting a
12 greenhouse gas when burned including, but not limited to, natural gas, petroleum, coal and any
13 solid, liquid or gaseous fuel derived therefrom or any other such matter as identified 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 the definition of “Indirect emissions” and inserting in place thereof the
17 following definition:-

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

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

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

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

37 The department shall monitor and regulate emissions of greenhouse gases with the goal
38 of reducing those emissions in order to achieve greenhouse gas emissions limits established by
39 this chapter.

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

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

44 SECTION 7. Section 4 of said chapter 21N, as so appearing, is hereby amended by
45 striking out, in line 19, the words “established pursuant to section 12”.

46 SECTION 8. Said section 4 of said chapter 21N, as so appearing, is hereby further
47 amended by adding the following 3 subsections:-

48 (i) The secretary shall adopt interim 2030 and 2040 emissions limits consistent with the
49 modeling and analysis required by section 12 and in accordance with this section and section 3.
50 The interim 2030 statewide greenhouse gas emissions limit shall be at least 50 per cent below the
51 1990 level, and the interim 2040 statewide greenhouse gas emissions limit shall be at least 75 per
52 cent below the 1990 level. In setting the interim 2030 and 2040 emissions limits, the secretary
53 shall comply with the second sentence of subsection (a) and subsections (b) through (g).

54 (j) In addition to the requirements of this section and section 5, the secretary shall
55 issue a 2050 emissions reduction roadmap plan. The 2050 emissions reduction roadmap plan
56 shall describe the commonwealth’s plan to achieve the 2050 emissions limit required by clause 4
57 of subsection (b) of section 3, as well as interim 2030 and 2040 emissions limits required by

58 subsection (i), by means of 1 or more technologically and economically feasible pathways
59 selected to reduce statewide emissions. The 2050 emissions reduction roadmap plan shall include
60 proposed policies, regulations and legislative recommendations that incorporate all sources or
61 categories of sources that emit greenhouse gases with the goal of reducing those emissions to
62 achieve the 2050 emissions limit required by subsection (b) of section 3.

63 (k) The secretary shall promulgate regulations regarding all sources or categories of
64 sources that emit greenhouse gases consistent with, and as necessary to implement the 2050
65 emissions reduction roadmap plan required by subsection (j). Regulations shall be consistent
66 with section 12 and subsections (i) and (j), and shall be designed to ensure that the
67 commonwealth achieves its required emissions reductions equitably and in a manner that
68 protects low and moderate income persons and environmental justice populations. The
69 department shall update said regulations within 1 year of the release of the report required by
70 section 5.

71 SECTION 9. Section 5 of said chapter 21N, as so appearing, is hereby amended by
72 striking out, in lines 25 and 26, the words “ and (x) recommendations for future policy action.”
73 and inserting in place thereof the following words:- (x) a comprehensive update to the 2050
74 emissions reduction roadmap plan required by subsection (j) of section 4; and (xi)
75 recommendations for future policy action.

76 SECTION 10. Said chapter 21N is hereby further amended by adding the following 2
77 sections:-

78 Section 12. The secretary shall publish the results of quantitative modeling and analysis
79 of the commonwealth’s energy economy and greenhouse gas emissions in their regional context,

80 including but not limited to the regional electric distribution and transmission grid, and identify
81 multiple technologically and economically feasible plans for reducing statewide emissions
82 consistent with the subsection (b) of section 3 and subsections (i) and (j) of section 4. The
83 modeling and analysis shall employ back-casting methodology and may be conducted in
84 conjunction with other states or regional entities as part of an analysis of reducing regional
85 emissions to a level consistent with this chapter. Each plan identified by the secretary shall
86 analyze the economic, environmental and public health impacts on the commonwealth, including
87 those that may benefit or burden low or moderate income populations or environmental justice
88 populations. The secretary shall publish the results of the modeling and analysis required by this
89 section on its website, and to the maximum extent permitted by law, shall make available for
90 public inspection and use the model, all model assumptions, and all input and output data;
91 provided, that the secretary may protect from public disclosure, trade secrets, confidential,
92 competitively sensitive or other proprietary information provided in the course of proceedings in
93 the same manner as provided in section 5D of chapter 25.

94 SECTION 11. Chapter 23J of the General Laws is hereby amended by adding the
95 following section:-

96 Section 13. (a) There shall be within the center a clean energy equity workforce and
97 market development program to provide workforce training, educational and professional
98 development, job placement, startup opportunities and grants promoting participation in the
99 commonwealth's energy efficiency and clean energy industries to: (i) certified minority-owned
100 and women-owned small business enterprises; (ii) individuals residing within an environmental
101 justice community; and (iii) workers displaced from the fossil fuel industry. The program shall:
102 (i) identify the employment potential of the energy efficiency and clean energy industries and the

103 skills and training needed for workers in those fields; (ii) maximize energy efficiency and clean
104 energy employment opportunities for certified minority-owned and women-owned small
105 business enterprises and individuals residing within an environmental justice community; (iii)
106 identify barriers to deployment of clean energy and energy storage resources to certified
107 minority-owned and women-owned small business enterprises; (iv) recommend near-term
108 deployment targets consistent with the state's clean energy and climate change requirements and
109 awarding incentives to deploy said resources; and (v) make recommendations to the general
110 court for policies to promote employment growth and access to jobs in the clean energy industry.

111 (b) The department of public utilities shall annually transfer funds collected pursuant
112 section 19 of chapter 25 to the center for the purposes of implementing the clean energy equity
113 workforce and market development program, provided, that the department shall transfer no less
114 than \$12,000,000 no later than December 31 each year. Such transfer shall not reduce low-
115 income program funds allocated pursuant to subsection (c) of section 19 of said chapter 25.

116 SECTION 12. Section 19 of chapter 25 of the General Laws, as appearing in the 2018
117 Official Edition, is hereby amended by adding the following subsection:-

118 (d) Notwithstanding any provision of this section to the contrary, the department shall
119 annually transfer, on or before December 31, no less than \$12,000,000 in funds collected
120 pursuant to this section to the Massachusetts clean energy center for the clean energy equity
121 workforce and market development program pursuant to subsection (b) of section 13 of chapter
122 23J; provided, however, such transfer shall not reduce low-income program funds allocated
123 pursuant to subsection (c).

124 SECTION 13. Section 21 of said chapter 25, as so appearing is hereby amended by
125 striking out, in lines 56 to 58, inclusive, the words “and (J) programs that result in customers
126 switching to renewable energy sources or other clean energy technologies;” and inserting in
127 place thereof the following words:- (J) programs that result in customers switching to renewable
128 energy sources or other clean energy technologies; and (K) programs administered by the low-
129 income weatherization and fuel assistance program network that result in whole home retrofits,
130 including but not limited to weatherization and electrification for low-income and fixed-income
131 households residing in (1) affordable housing units under the jurisdiction of the department of
132 housing and community development or (2) affordable housing units the department oversees
133 funding for, which result in lower energy use or utilization in renewable energy;

134 SECTION 14. Said section 21 of said chapter 25, as so appearing, is hereby further
135 amended by adding the following 3 subsections:-

136 (f) The department of housing and community development shall conduct an audit of the
137 (1) affordable housing units under the jurisdiction of the department and (2) the affordable
138 housing units the department oversees funding for in order to determine the need and outreach
139 for participation in programs created pursuant to clause (K) of paragraph (2) of subsection (b)
140 and make recommendations to energy efficiency advisory council on how to improve program
141 access and increase program deployment to individuals residing in affordable housing units.

142 (g) There shall be a low-income whole home retrofit task force to develop
143 recommendations for programs developed pursuant to clause (K) of paragraph (2) of subsection
144 (b). The taskforce shall consist of 11 members as follows: the director of housing and community
145 development, or a designee, who shall serve as chair; the commissioner of the department of

146 energy resources, or a designee; and 9 members appointed by the governor, 1 of whom shall be a
147 representative from the Low-Income Energy Affordability Network, 1 of whom shall a
148 representative from the energy efficiency advisory council established in section 22, 1 of whom
149 shall be from the Income-Eligible Best Practices Committee of the energy efficiency advisory
150 council, 1 of whom shall be a representative from the Massachusetts Housing Finance Agency, 1
151 of whom shall be from the Greater Boston Labor Council,; 1 of whom shall be a representative
152 from a non-profit with expertise in community organizing, affordable housing and labor issues, 1
153 of whom shall be from an organization with expertise in housing displacement prevention and
154 tenant rights, 1 of whom shall be an organization with expertise in enhancing the urban
155 environment and public health and 1 of whom shall be an organization with expertise in
156 environmental justice and transit-oriented development. The task force shall submit
157 recommendations to the energy efficiency advisory council to review every 3 years as part the
158 council’s review of energy efficiency investment plans under this section.

159 (h) Funds may be expended to cover up to the full cost of projects in clause (K) of
160 paragraph (2) of subsection (b) that are located within environmental justice communities;
161 provided, that the expenditure of funds for projects in said clause (K) of said paragraph (2) of
162 said subsection (b) shall be in addition to and shall not reduce low-income program funds
163 allocated in subsection (c) of section 19.

164 SECTION 15 Chapter 25A of the General Laws, as so appearing, is hereby amended by
165 inserting after section 11F¹/₂ the following section:-

166 Section 11F³/₄. (a) Each municipal lighting plant shall establish a greenhouse gas
167 emissions standard, which shall be known as the “Municipal Lighting Plant GGES.”

168 (b) A Municipal Lighting Plant GGES shall set the minimum percentage of non-carbon
169 emitting energy sold by each municipal lighting plant to all retail end-user customers purchasing
170 electricity pursuant to rates established pursuant to section 58 of chapter 164 as follows: (i) 50
171 per cent non-carbon emitting energy by 2030; (ii) 75 non-carbon emitting energy per cent by
172 2040; and (iii) energy sales achieving net-zero greenhouse gas emissions by 2050.

173 (c) For the purposes of this section, “non-carbon emitting” shall mean:

174 (i) energy from facilities using the following generation technologies, but only to the
175 extent that any renewable energy credits, emission free energy certificates or other evidentiary
176 non-carbon emitting documentation associated therewith have not been sold, retired, claimed or
177 otherwise represented by another party as part of electrical energy output or sales or used to
178 satisfy obligations in jurisdictions other than the commonwealth: (1) solar photovoltaic; (2) solar
179 thermal electric; (3) hydroelectric, including imports into the New England wholesale electric
180 market as administered by ISO New England Inc.; (4) nuclear; (5) marine or hydrokinetic
181 energy; (6) geothermal energy; (7) landfill methane; (8) anaerobic digester gas; (9) biomass fuel;
182 (10) wind energy; and (11) any other generation qualifying for renewable portfolio standards
183 pursuant to section 11F or the department of environmental protection’s clean energy standard
184 regulation pursuant to 310 C.M.R. 7.75 ;

185 (ii) generation that has net lifecycle GHG emissions, over a 20 year life cycle, that yield
186 at least a 50 per cent reduction of greenhouse gas emissions per unit of useful energy relative to
187 the lifecycle greenhouse gas emissions from the aggregate use of the operation of a new
188 combined cycle natural gas electric generating facility using the most efficient commercially

189 available technology as of the date of the statement of qualification application to the department
190 of environmental protection for the portion of electricity delivered by the generation unit;

191 (iii) clean energy credits such as renewable energy certificates, emission free energy
192 certificates or other evidentiary non-carbon emitting documentation derived from each megawatt
193 hour of generation from a resource, that are produced, documented or classified in the NEPOOL
194 GIS that have not otherwise been, nor will be, sold, retired, claimed or represented as part of
195 electrical energy output or sales, or used to satisfy obligations in jurisdictions other than the
196 commonwealth;

197 (iv) generation from resources otherwise determined by the department; or

198 (v) any combination of clauses (i) to (iv).

199 (d) In satisfying the minimum percentages set forth in subsection (b), municipal lighting
200 plants may either purchase or generate non-carbon emitting energy. Non-carbon emitting energy
201 from resources using the types of technology set forth in this section, acquired via ownership
202 interest or purchase pursuant to contracts executed prior to the effective date of this act, shall
203 qualify in calculating the minimum percentages contained in subsection (b).

204 (e) A municipal lighting plant shall file an annual report with the department, using a
205 form specified by the department, demonstrating compliance with this section. If a municipal
206 lighting plant fails to comply with the requirements of this section, it shall make a one-time
207 alternative compliance payment, to be known as the “Municipal Lighting Plant ACP” for the
208 year of non-compliance, and on the anniversary of each year that said non-compliance continues
209 thereafter, in the amount 0.25 times the Renewable Portfolio Standard ACP set forth in the
210 department’s regulations at 225 C.M.R. 14.00 et seq. per kilowatt hour based on the amount of

211 such deficiency, escalated annually by the Consumer Price Index, but in no event shall said ACP
212 exceed \$0.010 per kilowatt hour. Such Municipal Lighting Plant ACP shall be deposited into a
213 fund that shall be maintained and administered by the municipal light plant and such fund shall
214 be used by the municipal light plant to fund greenhouse gas emissions reduction and related
215 programs in its service territory.

216 SECTION 16. Section 139 of chapter 164 of the General Laws, as appearing in the 2018
217 Official Edition, is hereby amended by striking out in lines 60 through 64, inclusive, the words
218 “A solar net metering facility may designate customers of the same distribution company to
219 which the solar net metering facility is interconnected and that are located in the same ISO-NE
220 load zone to receive such credits in amounts attributed by the solar net metering facility.” and
221 inserting in place thereof the following words:- A solar net metering facility may designate
222 customers of any distribution company located in the commonwealth to receive such credits in
223 amounts attributed by the solar net metering facility.

224 SECTION 17. Subsection (i) of said section 139 of said chapter 164, as so appearing, is
225 hereby amended by adding the following sentence:-A Class II net metering facility or Class III
226 net metering facility shall be exempt from the aggregate net metering capacity of facilities that
227 are not net metering facilities of a municipality or other governmental entity under subsection (f),
228 and may net meter and accrue Class II or Class III net metering credits if it is generating
229 renewable energy and serves on-site load; provided, that any credits that are in excess of its
230 annual electricity consumption as calculated at the end of the calendar year shall be credited or
231 paid out at the utility’s avoided cost rate.

232 SECTION 18. Section 16 of chapter 298 of the Acts of 2008 is hereby amended by
233 striking out the following words:- “, and shall expire on December 31, 2020”.

234 SECTION 19. Notwithstanding any general or special law, rule or regulation to the
235 contrary, when initiating a regulatory process for any new solar incentive program developed by
236 the department of energy resources pursuant to section 11 of chapter 75 of the acts of 2016 or
237 any other general or special law or other authority, the department shall to the greatest extent
238 feasible: (1) provide equitable access to all Massachusetts ratepayers, including low-income
239 ratepayers; (2) address solar energy access and affordability for low-income communities; (3)
240 include effective consumer protection provisions; and (4) ensure that information about the
241 program and its benefits are provided in a readily accessible manner to all ratepayers, including
242 non-English speaking communities. The department shall consult with a diverse range of
243 stakeholders to inform the design of any such solar incentive program, including low-income
244 ratepayers and organizations representing their interests.

245 SECTION 20. (a) The department of public utilities shall establish a future utility grid
246 commission for the purpose of studying and making recommendations regarding the
247 establishment of a long-term grid modernization plan to facilitate upgrades to the electric and gas
248 distribution systems located in the commonwealth, including but not limited to: (i) infrastructure
249 and system investments necessary to implement the state’s clean energy and climate change
250 requirements; (ii) clean energy and energy storage deployment targets and incentive programs;
251 and (iii) the state’s clean energy and climate plans and emission reduction requirements set by
252 chapter 21N of the General Laws.

253 (b) The commission shall review and incorporate department findings from the
254 department's regulatory processes regarding short to medium-term grid modernization planning,
255 including utilization of consensus filings and findings related to: (i) cost allocation; (ii) a timeline
256 enforcement mechanism; (iii) interconnection of renewable energy and energy storage systems
257 and a standard interconnection process; (iv) affected system operator studies; (v) state and
258 federal jurisdiction governing the electric distribution and transmission system; (vi) the
259 management of high volumes of applications to incentive programs for distributed energy
260 generation; (vii) the interconnection process for distributed generation facilities interconnecting
261 to the distribution and transmission system; (viii) and advanced metering requirements.

262 (c) The commission shall examine whether the department should implement a system
263 planning process for electric and gas distribution systems that shall: (i) create a technical
264 foundation to understand the physical and electrical state of current grid infrastructure as well as
265 future scenarios; (ii) analyze the evaluation and approval process for infrastructure investment
266 proposals from distribution companies that meet the department's requirements to maintain the
267 safety and reliability of the distribution system, minimize costs to ratepayers, and comply with
268 the state's clean energy and climate change requirements outlined in subsection (a); (iii)
269 determine a method for dispute resolution for interconnecting distributed generation facilities to
270 the electric distribution system conducted by the department; (iv) determine an appropriate cost
271 recovery mechanism for electric and gas distribution companies to deploy necessary upgrades
272 approved by the department; (v) determine an appropriate penalty structure that applies to the
273 interconnection process to ensure the timely deployment of distributed generation facilities; and
274 (vi) examine opportunities to increase deployment of energy storage systems that facilitate the
275 state's ability to comply with its clean energy and climate change requirements.

276 (d) The commission shall consist of 19 members or their designees: the secretary of
277 energy and environmental affairs or a designee, who shall serve as chair; the commissioner of the
278 department of public utilities or a designee; the commissioner of the department of energy
279 resources or a designee; the commissioner of the department of environmental protection or a
280 designee; the chief executive officer of the Massachusetts clean energy technology center
281 established pursuant to section 2 of chapter 23J of the General Laws or a designee; the attorney
282 general in the role of the commonwealth's ratepayer advocate or a designee; and 13 members
283 who shall be appointed by the chair: 1 of whom shall be a representative from the distributed
284 energy generation industry; 1 of whom shall be a representative from the energy storage
285 industry; 1 of whom shall be a representative from a higher education institution with expertise
286 in utility engineering; 3 of whom shall be a representative from each of the electric distribution
287 companies located in the commonwealth; 1 of whom shall be a municipal official to be
288 nominated by the Massachusetts Municipal Association, Inc.; 3 of whom shall be representatives
289 from environmental organizations; 1 of whom shall be a representative from the business
290 community; 1 of whom shall be a representative from an organization that serves low-income
291 ratepayers; and 1 of whom shall be a representative from the executive office of energy and
292 environmental affairs' global warming solutions act implementation advisory committee. The
293 commission may request from all state agencies such information and assistance as the
294 commission may require and may retain consultants as necessary.

295 (e) The commission shall convene its first meeting on or before January 31, 2021. The
296 commission shall meet regularly and provide at least 3 opportunities for public comment in
297 different geographical areas of the state. The commission shall file its recommendations,
298 including drafts of legislation, with the clerks of the house of representatives and the senate and

299 with the chairs of the joint committee on telecommunications, utilities and energy not later than
300 November 1, 2021.

301 SECTION 21. The secretary of energy and environmental affairs shall adopt the interim
302 2030 and 2040 emissions limits pursuant to subsection (i) of section 4 of chapter 21N of the
303 General Laws no later than December 31, 2021.

304 SECTION 22. The secretary of energy and environmental affairs shall issue the 2050
305 emissions reduction roadmap plan pursuant to subsection (j) of section 4 of chapter 21N of the
306 General Laws no later than December 31, 2022.

307 SECTION 23. The secretary of energy and environmental affairs shall promulgate the
308 regulations required pursuant to subsection (k) of section 4 of chapter 21N of the General Laws
309 no later than December 31, 2023.

310 SECTION 24. The secretary of energy and environmental affairs shall publish the results
311 of quantitative modeling and analysis of the commonwealth's energy economy and greenhouse
312 gas emissions required pursuant to section 12 of chapter 21N of the General Laws no later than
313 December 31, 2021."; and by striking out the title and inserting in place thereof the following
314 title: "An Act creating a 2050 roadmap to a clean and thriving commonwealth."