

**HOUSE . . . . . No. 2802**

**The Commonwealth of Massachusetts**

PRESENTED BY:

***Ruth B. Balsler***

*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 secure a clean energy future.

PETITION OF:

NAME:	DISTRICT/ADDRESS:
<i>Ruth B. Balsler</i>	<i>12th Middlesex</i>
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>
<i>David M. Rogers</i>	<i>24th Middlesex</i>
<i>David Paul Linsky</i>	<i>5th Middlesex</i>
<i>Brian W. Murray</i>	<i>10th Worcester</i>
<i>Steven Ultrino</i>	<i>33rd Middlesex</i>
<i>Thomas M. Stanley</i>	<i>9th Middlesex</i>
<i>Dylan A. Fernandes</i>	<i>Barnstable, Dukes and Nantucket</i>
<i>Jason M. Lewis</i>	<i>Fifth Middlesex</i>
<i>Louis L. Kafka</i>	<i>8th Norfolk</i>
<i>Carlos Gonzalez</i>	<i>10th Hampden</i>
<i>Paul A. Schmid, III</i>	<i>8th Bristol</i>
<i>Christine P. Barber</i>	<i>34th Middlesex</i>
<i>Antonio F. D. Cabral</i>	<i>13th Bristol</i>
<i>Lindsay N. Sabadosa</i>	<i>1st Hampshire</i>
<i>Natalie M. Higgins</i>	<i>4th Worcester</i>
<i>Jack Patrick Lewis</i>	<i>7th Middlesex</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>

<i>Tricia Farley-Bouvier</i>	<i>3rd Berkshire</i>
<i>Harriette L. Chandler</i>	<i>First Worcester</i>
<i>Maria Duaiame Robinson</i>	<i>6th Middlesex</i>
<i>Tram T. Nguyen</i>	<i>18th Essex</i>
<i>Carmine Lawrence Gentile</i>	<i>13th Middlesex</i>
<i>Joseph W. McGonagle, Jr.</i>	<i>28th Middlesex</i>
<i>RoseLee Vincent</i>	<i>16th Suffolk</i>
<i>Mike Connolly</i>	<i>26th Middlesex</i>
<i>Stephan Hay</i>	<i>3rd Worcester</i>
<i>Adrian C. Madaro</i>	<i>1st Suffolk</i>
<i>Kevin G. Honan</i>	<i>17th Suffolk</i>
<i>Jennifer E. Benson</i>	<i>37th Middlesex</i>
<i>Daniel M. Donahue</i>	<i>16th Worcester</i>
<i>Michelle M. DuBois</i>	<i>10th Plymouth</i>
<i>Ann-Margaret Ferrante</i>	<i>5th Essex</i>
<i>Jay D. Livingstone</i>	<i>8th Suffolk</i>
<i>Denise C. Garlick</i>	<i>13th Norfolk</i>
<i>Tami L. Gouveia</i>	<i>14th Middlesex</i>
<i>Russell E. Holmes</i>	<i>6th Suffolk</i>
<i>Kay Khan</i>	<i>11th Middlesex</i>
<i>Rebecca L. Rausch</i>	<i>Norfolk, Bristol and Middlesex</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>
<i>Paul McMurtry</i>	<i>11th Norfolk</i>
<i>Mary S. Keefe</i>	<i>15th Worcester</i>
<i>Tommy Vitolo</i>	<i>15th Norfolk</i>
<i>Marjorie C. Decker</i>	<i>25th Middlesex</i>
<i>Christina A. Minicucci</i>	<i>14th Essex</i>
<i>Mindy Domb</i>	<i>3rd Hampshire</i>
<i>Jonathan Hecht</i>	<i>29th Middlesex</i>
<i>Lori A. Ehrlich</i>	<i>8th Essex</i>
<i>Nika C. Elugardo</i>	<i>15th Suffolk</i>
<i>Bruce E. Tarr</i>	<i>First Essex and Middlesex</i>
<i>Michael O. Moore</i>	<i>Second Worcester</i>
<i>Carole A. Fiola</i>	<i>6th Bristol</i>
<i>Julian Cyr</i>	<i>Cape and Islands</i>
<i>Jon Santiago</i>	<i>9th Suffolk</i>
<i>Michael D. Brady</i>	<i>Second Plymouth and Bristol</i>
<i>Sean Garballey</i>	<i>23rd Middlesex</i>
<i>Harold P. Naughton, Jr.</i>	<i>12th Worcester</i>

*Michelle L. Ciccolo*  
*Alan Silvia*

*15th Middlesex*  
*7th Bristol*

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**HOUSE . . . . . No. 2802**

By Ms. Balsler of Newton, a petition (accompanied by bill, House, No. 2802) of Ruth B. Balsler and others for legislation to to secure a clean energy future and provide comprehensive solutions to the climate crisis. Telecommunications, Utilities and Energy.

**The Commonwealth of Massachusetts**

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

An Act to secure a clean energy future.

*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 9A of chapter 7 of the General Laws, as appearing in the 2016  
2 Official Edition, is hereby amended by striking out the last 4 paragraphs and inserting in place  
3 thereof the following 3 paragraphs:

4 The commonwealth shall ensure that 50 per cent of the motor vehicles owned or leased  
5 by the commonwealth in the state fleet, including vehicles owned or leased by quasi-public  
6 agencies, shall be zero emission vehicles by June 30, 2025. “Zero emission vehicle” shall mean a  
7 battery electric vehicle, a plug-in hybrid vehicle or a fuel cell vehicle. In reaching that  
8 requirement, the secretary shall prioritize for electrification any vehicles cited as medium or high  
9 priority by the study commissioned by section 6 of chapter 448 of the acts of 2016.

10 The secretary shall submit to the clerks of the senate and house of representatives and the  
11 chairs of the joint committee on transportation a statement annually, not later than July 1,  
12 detailing the progress made in meeting the requirements of this section. The report shall include:

13 (i) a complete listing of vehicles leased, owned or assigned to each agency; and (ii) a description  
14 of each vehicle, including the year, make and model, whether the vehicle is powered by an  
15 internal combustion engine, a mild hybrid engine, a plug-in hybrid motor, a fully battery electric  
16 motor, a hydrogen fuel cell electric motor, a compressed liquefied natural gas engine, a propane  
17 engine or other means of propulsion. If a zero emission vehicle is not purchased or leased, the  
18 secretary shall provide, in each instance, a specific explanation as to why a zero emission vehicle  
19 could not have sufficiently fulfilled the intended functions.

20 Beginning in fiscal year 2026, the secretary shall ensure that 100 per cent of new motor  
21 vehicles purchased or leased each year by the commonwealth shall be zero emission vehicles.  
22 The secretary shall provide a written report to the clerks of the senate and house of  
23 representatives and the chairs of the joint committee on transportation annually, not later than  
24 July 1, explaining in detail all instances where a zero emission vehicle was not purchased or  
25 leased and the reasons therefor.

26 SECTION 2. The first paragraph of subsection (a) of section 11E of chapter 12 of the  
27 General Laws, as so appearing, is hereby amended by striking out the second sentence and  
28 inserting in place thereof the following sentence:- The attorney general, through the office of  
29 ratepayer advocacy, may intervene, appear and participate in administrative, regulatory or  
30 judicial proceedings on behalf of any group of consumers in connection with any matter  
31 involving a company doing business in the commonwealth and subject to the jurisdiction of the  
32 department of public utilities or the department of telecommunications and cable under chapter  
33 164, 164A, 164B, 165 or 166.

34 SECTION 3. Section 26A of chapter 21 of the General Laws, as so appearing, is hereby  
35 amended by inserting after the word “effluent”, in line 67, the following words:- , hydraulic  
36 fracturing fluid.

37 SECTION 4. Section 27 of said chapter 21, as so appearing, is hereby amended by adding  
38 the following clause:-

39 (14) Enforce restrictions on drilling, waste treatment and disposal and mining activities  
40 which have been enacted to protect the water quality and the natural resources of the  
41 commonwealth.

42 SECTION 5. Section 42 of said chapter 21, as so appearing, is hereby amended by  
43 inserting after the word “commonwealth”, in line 3, the following words:- , or into an injection  
44 well or into a treatment works in the commonwealth.

45 SECTION 6. Said chapter 21 is hereby further amended by inserting after section 53A  
46 the following section:-

47 Section 53B. (a) As used in this section, the following words shall have the following  
48 meanings unless the context clearly requires otherwise:-

49 “Fluid”, any material or substance which flows or moves whether in semi-solid, liquid,  
50 sludge, gas or any other form or state.

51 “Gas”, all natural gas, whether hydrocarbon or nonhydrocarbon, including hydrogen  
52 sulfide, helium, carbon dioxide, nitrogen, hydrogen, casinghead gas and all other fluid  
53 hydrocarbons not defined as oil.

54 “Hydraulic fracturing”, the process of pumping a fluid into or under the surface of the  
55 ground in order to create fractures in rock to produce or recover oil or gas.

56 “Oil”, crude petroleum, oil and all hydrocarbons, regardless of specific gravity, that are in  
57 the liquid phase in the reservoir and are produced at the wellhead in liquid form.

58 “Oil and gas”, oil and gas collectively, or either oil or gas, as the context may require to  
59 give effect to the purposes of this chapter.

60 (b) For the period from January 1, 2020 to December 31, 2029, inclusive, no person shall  
61 engage in hydraulic fracturing.

62 (c) For the period from January 1, 2020 to December 31, 2029, inclusive, no person shall  
63 collect, store, treat or dispose of wastewater hydraulic fracturing fluid, wastewater solids, drill  
64 cuttings or other byproducts from hydraulic fracturing.

65 SECTION 7. Section 1 of chapter 21N of the General Laws, as appearing in the 2016  
66 Official Edition, is hereby amended by striking out the definition of “Direct emissions” and  
67 inserting in place thereof the following definition:-

68 “Direct emissions”, emissions from sources that are owned or operated, in whole or in  
69 part, by a person, entity or facility including, but not limited to: (i) emissions from a  
70 transportation vehicle; (ii) a building or structure, including but not limited to a residential,  
71 commercial, industrial or institutional building or structure; or (iii) an industrial, manufacturing  
72 or other business process.

73 SECTION 8. Said section 1 of said chapter 21N, as so appearing, is hereby further  
74 amended by inserting after the definition of “Greenhouse gas emissions source” the following  
75 definition:-

76 “Greenhouse gas-emitting priority”, natural gas, petroleum, coal and any solid, liquid or  
77 gaseous fuel derived therefrom, and any other matter identified by the department as a  
78 greenhouse gas-emitting priority that emits or is capable of emitting a greenhouse gas when  
79 burned.

80 SECTION 9. Said section 1 of said chapter 21N, as so appearing, is hereby further  
81 amended by inserting after the word “of”, in line 50, the following words:- a greenhouse gas-  
82 emitting priority or.

83 SECTION 10. Said section 1 of said chapter 21N, as so appearing, is hereby further  
84 amended by striking out the definition of “Market-based compliance mechanism”, in lines 56 to  
85 65, inclusive, and inserting in place thereof the following definition:-

86 “Market-based compliance mechanism”, any form of price compliance system imposed  
87 on sources or categories of sources or any form of pricing mechanism imposed directly on  
88 greenhouse gas-emitting priorities or on the distribution or sale of greenhouse gas-emitting  
89 priorities which are designed to reduce emissions as required by this chapter including, but not  
90 limited to: (i) a system of market-based declining annual aggregate emissions limitations for  
91 sources or categories of sources that emit greenhouse gases; (ii) greenhouse gas emissions  
92 exchanges, banking, credits and other transactions governed by rules and protocols established  
93 by the secretary or a regional program that results in the same greenhouse gas emissions  
94 reduction, over the same time period, as direct compliance with a greenhouse gas emissions limit



95 or emission reduction measure adopted by the executive office pursuant to this chapter; or (iii) a  
96 system of charges or exactions imposed to reduce statewide greenhouse gas emissions in whole  
97 or in part.

98 SECTION 11. Subsection (a) of section 2 of said chapter 21N, as so appearing, is hereby  
99 amended by striking out the first sentence and inserting in place thereof the following sentence:-  
100 The department shall monitor and regulate greenhouse gas-emitting priorities and direct and  
101 indirect emissions of greenhouse gases with the goal of reducing emissions in order to achieve  
102 greenhouse gas emissions limits established by this chapter.

103 SECTION 12. Subsection (b) of section 3 of said chapter 21N, as so appearing, is hereby  
104 amended by striking out clauses (2) and (3) and inserting in place thereof the following 2  
105 clauses:- (2) a 2030 statewide greenhouse gas emissions limit accompanied by plans to achieve  
106 this limit in accordance with said section 4; provided, however, that the 2030 statewide  
107 greenhouse gas emissions limit shall maximize the ability of the commonwealth to meet the 2050  
108 statewide greenhouse gas emissions limit; (3) a 2040 statewide greenhouse gas emissions limit  
109 accompanied by plans to achieve this limit in accordance with said section 4; provided, however,  
110 that the 2040 statewide greenhouse gas emissions limit shall maximize the ability of the  
111 commonwealth to meet the 2050 statewide greenhouse gas emissions limit.

112 SECTION 13. Subsection (a) of section 4 of said chapter 21N, as so appearing, is hereby  
113 amended by inserting after the first sentence the following 2 sentences:- The secretary shall  
114 further adopt the 2030 statewide greenhouse gas emissions limit pursuant to clause (2) of  
115 subsection (b) of section 3, which shall be not less than 50 per cent below the 1990 emissions  
116 level and shall plan to achieve that reduction pursuant to subsection (h) of section 4. The

117 secretary shall further adopt the 2040 statewide greenhouse gas emissions limit pursuant to  
118 clause (3) of said subsection (b) of said section 3, which shall be not less than 75 per cent below  
119 the 1990 emissions level and shall plan to achieve that reduction pursuant to said subsection (h)  
120 of said section 4.

121 SECTION 14. Said subsection (a) of said section 4 of said chapter 21N, as so appearing,  
122 is hereby further amended by striking out the last sentence and inserting in place thereof the  
123 following sentence:- The 2020, 2030 and 2040 statewide greenhouse gas emissions limits and  
124 implementation plans shall comply with this section.

125 SECTION 15. Said section 4 of said chapter 21N, as so appearing, is hereby further  
126 amended by striking out, in line 17, the word "limit" and inserting in place thereof the following  
127 word:- limits.

128 SECTION 16. Said section 4 of said chapter 21N, as so appearing, is hereby amended by  
129 striking out, in line 29, the word "shall" and inserting in place thereof the following words:- , in  
130 consultation with the department of public health, shall.

131 SECTION 17. Said section 4 of said chapter 21N, as so appearing, is hereby further  
132 amended by striking out, in line 42, the words "emission limit and implementing plan" and  
133 inserting in place thereof the following words:- , 2030 and 2040 statewide greenhouse gas  
134 emissions limits and implementing plans.

135 SECTION 18. Said section 4 of said chapter 21N, as so appearing, is hereby further  
136 amended by striking out subsection (h) and inserting in place thereof the following subsection:-

137 (h) The secretary shall issue a 2050 emissions reduction plan that shall describe in detail  
138 the commonwealth's actions and methods for achieving the 2030, 2040 and 2050 emissions limit  
139 required by subsection (b) of section 3. The 2050 emissions reduction plan shall: (i) address all  
140 sources and categories of sources that emit greenhouse gas emissions; (ii) take into account the  
141 imposition of market-based compliance mechanisms required in section 7A; (iii) indicate for  
142 each source or category of sources how, to what extent and when the commonwealth will act to  
143 reduce its emissions in order to achieve the 2050 emissions limit required by said subsection (b)  
144 of said section 3; and (iv) include or be accompanied by any analysis quantitatively assessing  
145 proposed and planned actions, methods, regulations and programs designed to reduce greenhouse  
146 gas emissions for their economic, environmental and public health impacts, particularly those  
147 that may benefit or burden low-income or moderate-income people. The 2050 emission  
148 reduction plan shall be developed following public hearings. The secretary shall evaluate, adjust  
149 if necessary and publish updates to the 2050 emissions reduction plan not less than once every 30  
150 months, including assessments of the effectiveness, to date, of all actions, methods, regulations  
151 and programs designed to reduce greenhouse gas emissions and the extent to which the actions,  
152 methods, regulations and programs disproportionately impact low-income households and  
153 minimize administrative burdens and leakage.

154 SECTION 19. Subpart (4) of subsection (b) of section 3 of chapter 21N of the General  
155 Laws, as appearing in the 2016 Official Edition, is hereby amended by striking it out and  
156 inserting in place thereof the following:- (4) a 2050 statewide emissions limit that achieves at  
157 least net zero statewide greenhouse gas emissions.

158 SECTION 20. Section 5 of said chapter 21N, as so appearing, is hereby amended by  
159 inserting after the word "communities", in line 10, the following words:- including, but not

160 limited to, economically-distressed manufacturing, economic sectors, economic subsectors or  
161 individual employers located within those communities.

162 SECTION 21. Said chapter 21N is hereby further amended by striking out section 6, as  
163 so appearing, and inserting in place thereof the following section:-

164 Section 6. In implementing its 2050 emissions reduction plan, the commonwealth and its  
165 agencies shall promulgate regulations not later than December 31, 2023 regarding all sources or  
166 categories of sources and all greenhouse gas-emitting priorities that are consistent with the plan  
167 required by subsection (h) of section 4 and sufficient to achieve the statewide emissions limits  
168 pursuant to section 3. The regulations shall be designed to ensure that the commonwealth  
169 achieves its required emissions reductions equitably and in a manner that protects and, where  
170 feasible, improves the condition of low-income and moderate-income persons while creating,  
171 where feasible, additional employment and economic development in the commonwealth.

172 SECTION 22. Said chapter 21N is hereby further amended by inserting after section 7  
173 the following 2 sections:-

174 Section 7A. The secretary shall promulgate regulations establishing market-based  
175 compliance mechanisms for: (i) the transportation sector; provided, however, that the regulations  
176 shall, at a minimum, be designed to reduce passenger vehicle and light duty truck emissions; (ii)  
177 the commercial, industrial and institutional sectors, including but not limited to buildings and  
178 industrial, manufacturing and other business processes; and (iii) the residential building sector.

179 The market-based compliance mechanisms established pursuant to this section shall: (i)  
180 maximize the ability of the commonwealth to achieve the greenhouse gas emissions limits  
181 established pursuant to this chapter;(ii) be designed to minimize disproportionate impacts on

182 low-income households; (iii) be designed to identify, with special attention to manufacturing,  
183 economic sectors, economic subsectors or individual employers at risk of serious negative  
184 impacts due to the market-based compliance mechanisms established pursuant to this section;  
185 and (iv) be designed to mitigate impacts identified in clause (iii). The market-based compliance  
186 mechanisms may be established by joining any existing market-based compliance mechanisms.  
187 The secretary shall evaluate and adjust, if necessary, all market-based compliance mechanisms  
188 adopted pursuant to this section at least once every 30 months to meet the requirements of this  
189 section and to achieve greenhouse gas emissions limits. The regulations may be promulgated as  
190 part of a coordinated regional effort with other states or Canadian Provinces to implement,  
191 expand or join any other market-based compliance mechanisms. The department shall ensure it  
192 has adequate resources to implement the requirements of this chapter.

193           Section 7B. Not later than September 30, 2023 and every 5 years thereafter, the secretary  
194 or a designee shall publish a comprehensive energy plan that shall include and be based upon  
195 reasonable projections of the commonwealth’s energy demands for electricity, transportation and  
196 thermal conditioning and shall also include strategies for meeting those demands in a regional  
197 context, prioritizing meeting energy demand through conservation, energy efficiency and other  
198 demand-reduction resources in a manner that contributes to the commonwealth meeting the  
199 limits for 2030 and 2040 pursuant to subsection (b) of section 3.

200           SECTION 23. Said chapter 21N is hereby further amended by inserting the following  
201 section:-

202           Section 10. For purposes of this section, “energy consumer” shall mean any natural  
203 person who, for personal or household consumption: purchases or contracts to purchase

204 electricity or any form of fossil fuel; or purchases or contracts to purchase vehicular fuel of any  
205 kind.

206 (a) No unit of State, county, or local government shall promulgate any regulatory scheme,  
207 public program or public activity affecting energy consumers or authorize, ratify, participate in,  
208 or provide public monies for any public or private program or activity affecting energy  
209 consumers that –

210 (1) excludes an energy consumer from participation in, denies an energy consumer the  
211 benefits of, or otherwise subjects an energy consumer to discrimination regarding energy  
212 services or programs on the basis of any class of protection expressly identified in Chapter 151B,  
213 Section 4 of the General Laws; or

214 (2) has the effect of excluding energy consumers from participation in, denying energy  
215 consumers the benefits of, or otherwise subjecting energy consumers to discrimination regarding  
216 energy services or programs or undue burdens on the basis of any class of protection expressly  
217 identified in Chapter 151B, Section 4 of the General Laws.

218 (b) Any unit of State, county, or local government that engages in conduct affecting  
219 energy consumers described in (a) of this section shall establish –

220 (1) mechanisms or bodies for investigating and reviewing regulatory schemes, programs,  
221 and activities affecting energy consumers and shall set standards reasonably calculated to avoid  
222 violations of subsections (a)(1) and (a)(2); and

223 (2) an impartial and expeditious administrative forum for any one or more energy  
224 consumers residing the Commonwealth aggrieved by a violation of subsection (a)(1) or any

225 group of ten energy consumers residing in the Commonwealth similarly aggrieved by a violation  
226 of subsection (a)(2) to seek equitable redress. Any final administrative decision issued under this  
227 subsection shall be reviewable by the Superior Court of the county in which the unit of  
228 government sits.

229 (c) Nothing contained in this section shall be construed so as to impair, derogate or  
230 diminish any other right or remedy which may be available to any person, but any cause of  
231 action herein authorized shall be in addition to any such right or remedy.

232 SECTION 24. Subsection (b) of section 21 of chapter 25 of the General Laws, as  
233 appearing in the 2016 Official Edition, is hereby amended by adding the following paragraph:-

234 (4) At least once annually, the natural gas and electric utilities and energy efficiency  
235 service companies shall distribute information about MassSave programs via billing statements  
236 to their customers.

237 SECTION 25. Section 3 of chapter 25A, as so appearing, is hereby amended by inserting  
238 after the definition of “Energy savings” the following 3 definitions:-

239 “Environmental justice”, the right to be protected from environmental pollution and to  
240 live in and enjoy a clean and healthful environment regardless of race, income, national origin or  
241 English language proficiency; provided, however, that “environmental justice” shall include the  
242 equal protection and meaningful involvement of all people with respect to the development,  
243 implementation and enforcement of environmental laws, regulations and policies and the  
244 equitable distribution of environmental benefits.

245 “Environmental justice population”, a neighborhood or a population: (i)(A) determined  
246 by the executive office of energy and environmental affairs or its subordinate agencies to have  
247 experienced a disproportionate environmental impact since Jan, 1, 1998, or to have otherwise  
248 been denied its enjoyment of environmental justice; (B) in which the annual median household  
249 income is equal to or less than 110 per cent of the statewide median; or (C) in which minorities  
250 comprise 25 per cent or more of the population; or (ii) identified by the executive office of  
251 energy and environmental affairs or its subordinate agencies in an environmental justice strategy  
252 issued pursuant to this chapter; provided, however, that “environmental justice population” shall  
253 meet at least 1 of the requirements of subclauses (A) to (C), inclusive, of clause (i).

254 “Environmental justice household”, households within environmental justice populations.

255 SECTION 26. Said section 3 of said chapter 25A, as so appearing, is hereby further  
256 amended by inserting after the definition of “Local government body” the following definition:

257 “Low-income households”, low-income households as defined under section 1 of chapter  
258 40T.

259 SECTION 27. Subsection (a) of section 11F of chapter 25A of the General Laws, as so  
260 appearing, is hereby amended by striking out clauses (4) and (5) and inserting in place thereof  
261 the following clause:- and (4) an additional 3 per cent of sales each year thereafter.

262 SECTION 28. Said chapter 25A is hereby further amended by inserting after section 11I  
263 the following section:-

264 Section 11J. (a) When creating, pursuant to general law, session law or other authority, a  
265 solar incentive program, including, but not limited to, the solar incentive program established



266 pursuant to chapter 75 of the acts of 2016, the department shall design a program whose  
267 economic and environmental benefits are equitably shared by low-income households,  
268 environmental justice populations and other communities facing barriers to accessing the  
269 program. Nothing in this section shall delay the commencement of the program or the  
270 implementation prior to the first program review. The department may dedicate part of the  
271 program to resolving other barriers to access if such barriers are identified. The department shall  
272 specify in program design its plans to reach communities whose primary language is not English.

273 (b) In designing and modifying the program pursuant to subsection (a), the department  
274 shall consider: (i) the proportion of benefits received by low-income households, environmental  
275 justice households and other communities with barriers to access compared to benefits received  
276 by other communities under the solar incentive program; and (ii) the distribution of benefits  
277 received pursuant to other requirements and set-asides in any solar incentive program, including  
278 set-asides for solar units less than or equal to 25 kW. In determining the minimum portion, the  
279 department shall hold at least 3 public hearings in environmental justice communities or other  
280 communities with barriers to access.

281 SECTION 29. Chapter 25A of the General Laws is hereby amended by adding the  
282 following section:-

283 Section 17. (a) The department shall establish an energy storage system target for the  
284 deployment of energy storage systems by distribution company customers, distribution  
285 companies and municipal lighting plants to achieve a statewide energy storage deployment target  
286 of 2,000 megawatts by January 1, 2030 and a subsequent statewide energy storage deployment  
287 target to be achieved by January 1, 2035. The department shall set annual statewide deployment

288 targets to be achieved in each distribution company's and municipal lighting plant's service  
289 territory in order to reach the energy storage system targets required under this section.

290 (b) To achieve the annual targets established in subsection (a), the department may  
291 consider a variety of deployment mechanisms and may require policies to encourage the cost-  
292 effective deployment of energy storage systems including, but not limited to: (i) distribution  
293 company or municipal lighting plant programs to encourage private deployment of energy  
294 storage systems by their customers; (ii) procurement of cost-effective energy storage systems to  
295 be owned and operated by a distribution company; provided, however, that any such  
296 procurement shall finance the deployment of energy storage systems for the purpose of: (1) a  
297 nonwires alternative to investment in distribution; (2) deferring investment in distribution  
298 infrastructure that would otherwise be needed to address actual or forecasted overloads on  
299 distribution circuits or at substations; or (3) improving the capability of the distribution system to  
300 recover from adverse events that otherwise could result in long-term outages in critical areas of  
301 the distribution system; (iii) the use of alternative compliance payments collected pursuant to  
302 subsection (e) to fund a grant program for private development; and (iv) the use of energy storage  
303 to replace fossil generation and the use of energy efficiency funds under section 19 of chapter 25  
304 if the department determines that customer-owned energy storage provides sustainable peak load  
305 reductions on either the electric or gas distribution systems and is otherwise consistent with  
306 section 11G of this chapter.

307 (c) A distribution company shall not own or operate energy storage systems equal to  
308 more than 20 per cent of the annual target established by the department for the distribution  
309 company's service territory established in subsection (a) for the purpose of achieving the annual  
310 targets; provided, however, that the department shall ensure that no distribution company shall

311 prevent or interfere with a customer or developer's ability to enter into agreements to own or  
312 operate behind the meter energy storage systems.

313 (d) Each distribution company and municipal lighting plant shall annually make a map  
314 available that identifies areas of critical need for energy storage systems within their service  
315 territory. Each distribution company and municipal light plant shall identify on the map areas of  
316 actual or forecasted overloads on distribution circuits or at substations. The map shall aggregate  
317 system detail as necessary for distribution system security.

318 (e) The department shall promulgate regulations to: (i) establish a carve-out of the  
319 alternative energy portfolio standard obligation under section 11F1/2 for energy storage systems  
320 as defined in section 1 of chapter 164; and (ii) allow each distribution company and municipal  
321 lighting plant to discharge its obligations under this section by either procuring attributes from  
322 energy storage systems that qualify under the carve-out established pursuant to this section or by  
323 making an alternative compliance payment in an amount to be established by the department.  
324 The regulations shall require distribution companies and municipal lighting plants to annually  
325 submit to the department a report that shows it is in compliance with this section.

326 (f) Annually, not later than December 1, the department shall make available on its  
327 website a report on the energy storage system target program.

328 (g) The department shall promulgate regulations to implement this section.

329 Section 18. (a) The department shall establish an incentive program to support non-solar  
330 renewable energy resources that are less than 5 megawatts and that qualify for the class I  
331 renewable energy portfolio standard under section 11F. The program shall be designed to finance  
332 the development, construction, and operation of renewable-energy distributed-generation

333 projects through a fixed price performance-based incentive that is designed to achieve annual  
334 megawatt targets at reasonable cost through competitive processes established by the department.

335 (b) The incentive program shall be tariff-based and the department shall promulgate  
336 regulations that, at a minimum: (i) establish the eligibility criteria for facilities to qualify under  
337 the program; (ii) establish the methodology for establishing incentives; and (iii) direct the  
338 distribution companies to jointly file a model tariff to implement the program with department of  
339 public utilities, for its review and approval.

340 (c) The methodology for establishing incentive levels shall: (i) take into consideration  
341 underlying system installation, soft, and fuel costs; (ii) take into account electricity revenues and  
342 any federal or state incentives; (iii) rely on market-based mechanisms or price signals as much as  
343 possible; (iv) differentiate incentives levels by size, location, and project type; (v) establish  
344 annual targets for each technology type; (vi) ensure that the costs of the program are shared  
345 collectively among all ratepayers of the distribution companies; and (vii) promote investor  
346 confidence through long-term incentive revenue certainty and market stability.

347 (d) Attributes, as defined by the department, of the Class I renewable energy generating  
348 sources that qualify under regulations established pursuant to this section shall be eligible for use  
349 by retail electric suppliers pursuant to their obligations under section 11F.

350 SECTION 30. Chapter 30A of the General Laws is hereby amended by inserting after  
351 section 10A the following section:-

352 Section 10B. Notwithstanding section 10, in any adjudicatory proceeding regarding a  
353 petition, request for approval or investigation of a gas company or electric company, as those  
354 terms are defined in section 1 of chapter 164, the following shall be permitted to participate as

355 full parties in the proceeding: (i) a municipality that is within the service area of such company;  
356 (ii) a member of the general court whose district includes ratepayers of such company; and (iii) a  
357 group of not less than 50 persons who are immediately and significantly impacted by such a  
358 petition or request for approval or investigation and whose involvement would not unduly  
359 broaden the issues in the proceeding.

360 SECTION 31. Section 16 of chapter 71 of the General Laws, as appearing in the 2016  
361 Official Edition, is hereby amended by adding the following subsection:-

362 (s) To lease or license land to a business or other organization for periods not exceeding  
363 30 years for the purpose of generating renewable energy; provided, however, that such use shall  
364 not interfere with the educational programs being conducted by the district; provided further, that  
365 no lease or license shall be executed until the expiration of 60 days after the date on which the  
366 lease or license was voted on by the district committee; and provided further, that before the  
367 expiration of this period, any member town of the regional school district may hold a town  
368 meeting to express disapproval of the lease or license authorized by the district committee and if  
369 at that meeting a majority of the voters present and voting disapprove of the lease or license  
370 authorized by the district committee, the lease or license shall not be executed.

371 SECTION 32. Chapter 111 of the General Laws is hereby amended by inserting after  
372 section 142O the following section:-

373 Section 142P. There shall be at least 1 air monitoring station within a 1-mile radius of a  
374 working natural gas compressor station to collect data and verify compliance with the National  
375 Ambient Air Quality Standards. Construction and maintenance of air monitoring stations shall be  
376 funded through the building permit paid for by the operating energy corporation to the

377 department of environmental protection. Personnel shall be staffed through that department to  
378 collect data on a weekly basis, varying between morning and evening collection times.

379 SECTION 33. Section 1B of chapter 164 of the General Laws, as appearing in the 2016  
380 Official Edition, is amended by adding the following subsection:

381 (g)(1) Each distribution company shall offer to residential and small commercial and  
382 industrial customers at least 1 option for a time-of-use rate, including differentials for energy  
383 supply, transmission and distribution that is designed to reflect the cost of providing electricity at  
384 different times of the day and year, but shall not include demand charges. Peak time periods for  
385 each rate shall not be longer than 6 hours in length per day and, as consistent with cost causation,  
386 price differentials shall be sufficient to motivate customer response. Each distribution company  
387 shall provide each customer, at least once annually, a summary of available rate options with a  
388 calculation of expected bill impacts under each option. Options for a time-of-use rate shall be  
389 posted prominently on the website of each distribution company, including the ability to opt into  
390 such a rate online, and additional educational material. If a customer opts into a time-of-use rate,  
391 the distribution company shall install all necessary equipment within 60 days after the notice to  
392 opt in. A customer may choose a different rate schedule after 1 year.

393 (2) If the department approves rates that include time-varying pricing on an opt-out basis,  
394 the opt-in time of use rate structure may be discontinued but each distribution company shall  
395 offer a time-varying rate to all residential and all small commercial and industrial customers at  
396 all times. In considering an opt-out time-varying rate structure, the department shall consider the  
397 impacts of such a structure on low-income and vulnerable consumers and shall take appropriate  
398 mitigating actions, including the consideration of continuing low-income discount and other

399 selected categories of customers on non-time-varying rate structures and allowing these  
400 categories of customers to opt into time-varying rates.

401 (3) The department shall promulgate rules and regulations necessary to carry out this  
402 subsection which shall include, but not be limited to: (i) the procedure for procurement of time-  
403 varying default service offerings; and (ii) separately accounting for the reconciliation of expenses  
404 for time-varying default service procurement from customers on time-varying default service.

405 SECTION 34. Said chapter 164 is hereby further amended by inserting after section 1K  
406 the following section:-

407 Section 1L. (a) As used in this section, the following words shall have the following  
408 meanings unless the context clearly requires otherwise:

409 “Low-income customer”, a retail customer who is on a residential low-income discount  
410 distribution rate as set forth in subsection (4) of section 1F or who participates in a low-income  
411 energy assistance program.

412 “Residential retail customer”, a retail customer in the commonwealth who is on a  
413 residential distribution rate.

414 (b) No supplier or entity acting on the supplier’s behalf shall:

415 (1) extend an electricity supply agreement with a residential retail customer beyond the  
416 agreement’s stated term without receiving the customer’s affirmative written consent to do so at  
417 least 2 months prior to the end of the electricity supply agreement’s stated term unless the rate  
418 provided for the extended term is equal to or less than the rate applied to the stated terms; or

419 (2) charge a cancellation fee of greater than \$50 to a residential retail customer.

420 (c) As a condition of licensure under paragraph (1) of section 1F, each supplier shall:

421 (1) not less than quarterly, provide to the department: (i) a list detailing each rate the  
422 supplier charged to residential retail customers; and (ii) the number of residential retail  
423 customers charged each rate included in such list by rate class; provided, however, that the  
424 department shall publish the list on the department's website, [energyswitchma.gov](http://energyswitchma.gov), or a  
425 successor website;

426 (2) not less than annually, provide data to the department concerning any renewable  
427 energy certificates retired in connection with the generation service provided to individual  
428 residential retail customers; provided, however, that such data shall include the geographic  
429 location and fuel type of each such renewable energy certificate, the total cost of each renewable  
430 energy certificate and whether each certificate is RPS Class I eligible pursuant to section 11F of  
431 chapter 25A; and provided further, that the department shall publish such information on its  
432 website, [energyswitchma.gov](http://energyswitchma.gov), or a successor website;

433 (3) provide on its bills, if the electric supplier chooses to provide its own billing and  
434 collection services, at a minimum, the requirements listed in subsection (d); and

435 (4) guarantee that each low-income customer shall pay a rate that is either equal to or less  
436 than the fixed basic service rate charged by the low-income customer's electric distribution  
437 company for the same period of time.

438 (d) Each electric distribution company that bills on behalf of a supplier pursuant to  
439 section 1D shall include the following information on the first page of each bill for each  
440 residential customer receiving electric generation service from a supplier:



- 441 (i) the electric generation service rate;
- 442 (ii) the term and expiration date of such rate;
- 443 (iii) the cancellation fee, if applicable;
- 444 (iv) notification that such rate is variable, if applicable;
- 445 (v) the fixed basic service rate for the same period;
- 446 (vi) the term and expiration date of the fixed basic service rate;
- 447 (vii) the dollar amount that would have been billed for the electric generation service  
448 component had the residential retail customer been receiving fixed basic service;
- 449 (viii) an electronic link or internet web site address to the department's website,  
450 energyswitchma.gov, or a successor website and a toll-free telephone number and other  
451 information necessary to enable the residential retail customer to obtain further information or  
452 make the switch to another supplier or to basic service; and
- 453 (ix) if a residential retail customer is enrolled in automatic electronic bill payments  
454 and does not receive a bill through United States mail, a link to the customer's bill in electronic  
455 mail with confirmation of bill payment.

456 An electric distribution company that implements the billing information requirements of  
457 this subsection may recover from electric suppliers all reasonable costs for such implementation.

458 (e) Each electric distribution company shall submit a report to the department and to the  
459 attorney general semi-annually that details the numbers of low-income customers and all other  
460 residential retail customers, by supplier, for each zip code in the electric distribution company's

461 service territory. This report shall be published on the department’s website, energyswitch.gov  
462 or a successor website.

463 (f) A violation of the conditions of licensure under this section shall be punished pursuant  
464 according to subsection (7) of section 1F of not less than \$1,000 per violation per day. In  
465 addition, the attorney general may bring an action under section 4 of chapter 93A to enforce the  
466 consumer protection provisions of this section and to obtain restitution, civil penalties, injunctive  
467 relief and any other relief awarded pursuant to said chapter 93A.

468 (g) Not less than quarterly, the department shall publish each supplier’s complaint data,  
469 sourced from complaints made to the department and those made to the attorney general and the  
470 distribution companies, as provided to the department annually, on the department’s website,  
471 energyswitchma.gov or a successor website. The complaint data shall include, but not be limited  
472 to, the total number of complaints received regarding the supplier, the number of complaints  
473 received for misleading or false marketing, the number of complaints for unauthorized switching,  
474 the number of complaints for Do Not Call list violations and the number of complaints for  
475 aggressive marketing.

476 (h) This section shall not apply to a supplier in the course of providing generation  
477 services pursuant to sections 134, 136 and 137.

478 SECTION 35. Section 69H of said chapter 164, as appearing in the 2016 Official  
479 Edition, is hereby amended by inserting after the word “environment”, in line 6, the following  
480 words:- and public health.

481 SECTION 36. Said section 69H of said chapter 164, as so appearing, is hereby further  
482 amended by striking out, in lines 20 and 21, the words “2 commissioners of the commonwealth

483 utilities commission” and inserting in place thereof the following words:- the commissioner of  
484 public health, 1 commissioner of public utilities.

485 SECTION 37. Section 94A of said chapter 164, as so appearing, is hereby amended by  
486 adding the following 2 paragraphs:-

487 Nothing in this section shall be construed to authorize the department to review and  
488 approve contracts for natural gas pipeline capacity filed by electric companies.

489 As part of the review of a contract with a term of more than 1 year for new gas pipeline  
490 capacity, the department shall determine whether such contract is in the public interest. The  
491 department shall not approve such a contract unless, as part of its public interest determination,  
492 the department finds that: (i) such contract is necessary to satisfy demand for gas by, and is cost-  
493 effective for, in-state ratepayers; (ii) such contract compares favorably to other reasonably  
494 available options in terms of its impact on rates, the economy, environment, climate, local  
495 communities, public health, safety and welfare; (iii) the parties to the proposed contract have  
496 attempted, in good faith, to identify and evaluate alternatives that would reduce or eliminate the  
497 need for private land takings or public land disposition including, but not limited to, expanded  
498 and more long-term utilization of existing gas infrastructure, distribution system repairs and  
499 upgrades, contracts for gas storage along unconstrained pipeline corridors, enhancement of peak-  
500 shaving measures and colocation of gas infrastructure with major roadways; and (iv) for  
501 contracts exceeding a term of 3 years, the parties to the proposed contract have attempted, in  
502 good faith, to identify and evaluate demand-side options to reduce or eliminate the need for new  
503 gas infrastructure.

504 SECTION 38. Section 134 of said chapter 164, as so appearing, is hereby amended by  
505 adding the following subsection:-

506 (c)(1) As used in this subsection, the following words shall have the following meanings  
507 unless the context clearly requires otherwise:

508 “Alternative compliance payment” or “ACP”, an amount established by the department  
509 of energy resources that retail electricity suppliers may pay in order to discharge their renewable  
510 energy portfolio standard obligation required under section 11F of chapter 25A.

511 “Community empowerment contract” or “contract”, an agreement between a municipality  
512 and the developer, owner or operator of a renewable energy project.

513 “Customer”, an electricity end-use customer of an electric utility distribution company  
514 regardless of how that customer receives energy supply services.

515 “Department”, the department of public utilities.

516 “Large commercial customer”, a large commercial, industrial or institutional customer, as  
517 further defined by the department of energy resources utilizing existing usage-based tariff  
518 structures.

519 “Municipality”, a city or town or a group of cities or towns that is not served by a  
520 municipal lighting plant and meet the eligibility criteria under paragraph (9).

521 “Participant”, a customer within a municipality that has entered into a community  
522 empowerment contract; provided, however, that the customer did not opt out of, or is prevented  
523 from participating in, the community empowerment contract under subsection (d).

524 “Renewable energy certificate”, a certificate representing the environmental attributes of  
525 1 megawatt hour of electricity generated by a renewable energy project, the creation, use and  
526 retirement of which is administered by ISO New England, Inc.

527 “Renewable energy portfolio standard”, the renewable energy portfolio standard  
528 established in section 11F of chapter 25A.

529 “Renewable energy project” or “project”, a facility that generates electricity using a Class  
530 1 renewable energy resource and is qualified by the department of energy resources as eligible to  
531 participate in the renewable energy portfolio standard and to sell renewable energy certificates  
532 under the program.

533 “Residential customer”, a utility distribution customer that is a private residence or group  
534 of residences, as further defined by the department of energy resources, utilizing existing usage-  
535 based tariff structures.

536 “Small commercial customers”, a small or medium commercial, industrial or institutional  
537 utility distribution customer, as further defined by the department of energy resources, utilizing  
538 existing usage-based tariff structures.

539 (2) A municipality may, on behalf of the electricity customers within the municipality,  
540 enter into a community empowerment contract with a company that proposes to construct a  
541 renewable energy project. A municipality may enter into more than 1 community empowerment  
542 contract and may enter into new contracts at any time.

543 (3) A community empowerment contract shall be subject to the following conditions:

544 (i) the contract shall be between the municipality and the company proposing to construct  
545 a renewable energy project; provided, however, that this section shall not authorize a  
546 municipality to utilize its collateral, credit or assets as collateral or credit support to the  
547 counterparty of the contract and a municipality may do so only as otherwise authorized by law;

548 (ii) the renewable energy project specified in the contract shall not have begun  
549 construction prior to the contract having been entered into by the municipality;

550 (iii) the contract shall be structured as a contract for differences so as to stabilize  
551 electricity prices for participants and shall specify a fixed price for the energy and renewable  
552 energy certificates to be generated by the project; provided, however, that the contract shall also  
553 specify a means by which the project's contracted amount of energy and renewable energy  
554 certificates shall be sold to a third party, at a price established by the wholesale market or an  
555 index and as agreed by the parties to the contract, and the proceeds from which shall be credited  
556 to the amount owed from the participants to the project; provided further, that if the amount  
557 earned in a sale exceeds the agreed fixed price, the participants shall be credited from the project  
558 for the difference between the sale price and the contracted fixed price; and provided further, that  
559 a contract shall not be an agreement to physically deliver electric energy to the participants but it  
560 may require delivery of renewable energy certificates;

561 (iv) the contract shall specify whether renewable energy certificates from the renewable  
562 energy project are to be provided and, if so provided, shall specify how the renewable energy  
563 certificates are to be transmitted and disposed of or retired; provided, however, that renewable  
564 energy certificates purchased through a contract may be: (A) assigned to the load of each  
565 participant or subset of participants, as stipulated in the contract, so as to increase the amount of

566 renewable energy attributed to use by the participants in the aggregate; or (B) sold in a  
567 transparent, competitive process, the proceeds from which shall be applied to the contract for  
568 differences mechanism under clause (iii); and provided further, that a renewable energy  
569 certificate purchased through a contract shall not be used by a basic service supply provider or  
570 competitive supply provider to meet its requirements under the renewable energy portfolio  
571 standard unless the renewable energy certificate is first sold to the supplier in a competitive,  
572 transparent process under this clause;

573 (v) the contract shall have a term of not less than 10 years from the time the specified  
574 renewable energy project commences operation;

575 (vi) the contract shall describe the calculations by which a charge or credit to a  
576 participant or to the renewable energy project are calculated based on the contract for differences  
577 mechanism under clause (iii); provided, however, that the calculations shall ensure full payment  
578 or credit to the renewable energy project even if a participant does not make full payment of the  
579 participant's distribution utility bill; provided further, that if there is a nonpayment of all or a  
580 portion of a distribution utility bill, an increase in charges to the contract participants may be  
581 used to ensure sufficient revenue to meet obligations to the project; and provided further, that the  
582 contract shall specify a contract administrator who shall perform the calculations under this  
583 subsection and determine, for implementation by the distribution utility, the charges and credits  
584 due to the project, participants, distribution utility and others as required by the contract; and

585 (vii) the contract may exempt for differences mechanism residents of the municipality  
586 who receive low-income electric rates.

587 (4) A town may enter into a community empowerment contract upon authorization by a  
588 majority vote of town meeting, town council or other municipal legislative body. A city may  
589 authorize a community empowerment contract by a majority vote of the city council or  
590 municipal legislative body, with the approval of the mayor or the city manager in a Plan D or  
591 Plan E form of government. Two or more municipalities may initiate a process jointly to  
592 authorize community empowerment contracting by a majority vote of each municipality under  
593 this paragraph. Prior to an authorizing vote, a public hearing shall be held to inform the  
594 municipalities of the proposed contract, the impact on residents and information on how to opt  
595 out of the contract if it proceeds. This hearing shall specify the proposed project under the  
596 contract and the length of the contract. An entity that is not a party to the contract shall estimate  
597 the contract's rate impacts under reasonable scenarios for future energy prices and the estimates  
598 shall be presented. The proposed project and contract information, estimated rate impact on  
599 constituents, procedure for customers to opt out of the proposed contract and information  
600 regarding the public hearing shall also be mailed to the residents of the municipalities 30 days  
601 before the hearing.

602 (5) The electricity customers within a municipality shall be required to participate in a  
603 community empowerment contract; provided, however, that a customer may opt not to  
604 participate in a contract if the customer provides notice to an administrator designated by the  
605 municipality within 90 days after the vote authorizing a contract or, in the case of a residential  
606 user receiving a low-income electric rate, at any time. No customer shall be a participant in a  
607 contract if that customer uses more than 5 per cent of the total annual electricity usage of the  
608 electricity customers located within a single municipality that is a party to the contract or, in the  
609 case of a contract with a group of municipalities, 5 per cent of the total annual electricity usage



610 of the electricity customers located in the group of municipalities that are parties to the contract.  
611 Residential and small commercial customers that establish service within a municipality after the  
612 municipality enters into a community empowerment contract shall be required to participate in  
613 any community empowerment contracts in effect for the municipality at the time the new service  
614 is established. A large commercial customer within a municipality may become a participant  
615 unless otherwise prohibited and, upon electing to become a participant, shall remain a participant  
616 for the remainder of the community empowerment contract as long as the large commercial  
617 customer continues to be located within the municipality.

618 (6) The department shall promulgate regulations, guidelines or orders that:

619 (i) establish the manner in which a municipality may request from a distribution utility,  
620 and which the distribution utility shall provide in a timely manner, the summary historic load and  
621 payment information of the electricity customers within the municipality that is necessary for a  
622 municipality to request and analyze a proposal for a community empowerment contract;  
623 provided, however, that the distribution utility may charge the municipality for verifiable,  
624 reasonable and direct costs associated with providing the information as approved by the  
625 department generally or on a case-by-case basis;

626 (ii) establish a procedure by which a municipality shall have a community empowerment  
627 contract approved by the department; provided, however, that a community empowerment  
628 contract shall not take effect until so approved and the department shall be obligated to and shall  
629 approve a contract that meets the requirements under this section; and provided further, that in  
630 establishing the approval procedure, the department shall adopt means to minimize the  
631 administrative and legal costs to municipalities to the maximum extent possible;

632 (iii) establish guidelines or standards by which the contract administrator under clause  
633 (vi) of paragraph (3) shall: (A) provide utility adjustments to charges to the distribution or credits  
634 to participants via a line item on the distribution utility bill; and (B) provide information to the  
635 distribution utility that is necessary to enable it to make or receive payments to or from the  
636 project and to others as necessary; provided, however, that each community empowerment  
637 contract shall be indicated on a participant's distribution utility bill by a line item specific to the  
638 contract; provided further, that a distribution utility may recover verifiable and reasonable costs  
639 for the implementation of this subsection from a contract party or participant except as provided  
640 for in clause (iv); provided further, that should implementation of this subsection require changes  
641 to the distribution utility company's billing system that would not otherwise be incurred, the cost  
642 of implementing such changes shall, upon approval by the department as being verifiable,  
643 reasonable and necessary to implement this subsection, be paid for by ACP funds or, if available  
644 ACP funds are insufficient, by the Massachusetts Renewable Energy Trust Fund established  
645 under section 9 of chapter 23J.

646 (iv) establish guidelines or standards by which distribution company customers may  
647 receive or access accurate energy source disclosure information, taking into account the  
648 renewable energy certificates that may be ascribed to each customer's electricity usage and  
649 regardless of the source from which the renewable energy certificates were supplied or  
650 purchased; provided, however, that should implementation of this subsection require changes to  
651 the distribution utility company's billing system that would not otherwise be incurred, the cost of  
652 implementing such changes shall, upon approval by the department as being verifiable,  
653 reasonable and necessary to implement this subsection, be paid for by ACP funds or, if available

654 ACP funds are insufficient, by the Massachusetts Renewable Energy Trust Fund established  
655 under section 9 of chapter 23J.

656 (7) The department of energy resources shall promulgate regulations or guidelines that:

657 (i) establish the manner in which, in the case of a community empowerment contract in  
658 which the renewable energy certificates are to be assigned to participants, the renewable energy  
659 certificates may be transmitted and retired appropriately and the energy source disclosure  
660 information accurately provided to participants; and

661 (ii) establish recommended practices to ensure transparency and accountability on the  
662 part of a municipality in entering into and managing a community empowerment contract,  
663 including the means by which an executed community empowerment contract shall be available  
664 for public inspection and recommendations for a municipality to follow in order to ensure  
665 compliance with the requirements for entering into a community empowerment contract.

666 The department of energy resources shall also provide technical assistance to a  
667 municipality regarding a community empowerment contract upon request.

668 (8) A community empowerment contract shall be in addition to, and aside from, an  
669 electricity supply contract that a customer may have at the time of the contract or that that the  
670 customer may later seek to establish. A municipality that enters into a community empowerment  
671 contract under this subsection shall not be considered a wholesale or retail electricity supplier. A  
672 community empowerment contract shall not require participants to change their choice of  
673 electricity supplier regardless of whether the supplier is a competitive supplier or a basic service  
674 supplier.

675 SECTION 39. Section 138 of said chapter 164, as so appearing, is hereby amended by  
676 inserting after the word “entity”, in line 96, the following words:- or publicly-assisted housing  
677 or its residents.

678 SECTION 40. Said section 138 of said chapter 164, as so appearing, is hereby further  
679 amended by striking out, in lines 122 and 123, the words “is assigned 100 per cent of the output”  
680 and inserting in place thereof the following words:- or publicly-assisted housing or its residents  
681 are assigned 100 per cent of the output or net metering credits.

682 SECTION 41. Said section 138 of said chapter 164, as so appearing, is hereby further  
683 amended by inserting after the definition of “Net metering facility of a municipality or other  
684 governmental entity” the following definition:-

685 “Publicly-assisted housing”, housing as defined in section 1 of chapter 40T.

686 SECTION 42. Section 139 of said chapter 164, as so appearing, is hereby amended by  
687 striking out, in lines 62 and 63, the words “and that are located in the same ISO-NE load zone  
688 to” and inserting in place thereof the following words:- , regardless of which ISO-NE load zone  
689 the customers are located in, to.

690 SECTION 43. Said section 139 of chapter 164 of the General Laws, as so appearing, is  
691 hereby amended by striking out subsection (f) and inserting in place thereof the following  
692 subsection:-

693 (f) No aggregate net metering cap shall apply to a solar net metering facility; provided,  
694 however, that the maximum amount of generating capacity eligible for net metering by a  
695 municipality or other governmental entity shall be 10 megawatts.

696 SECTION 44. Subsection (i) of said section 139 of said chapter 164, as so appearing, is  
697 hereby amended by adding the following 3 sentences:- Any facility which is at least 75 per cent  
698 owned by, or at least 75 per cent of which is producing net metering credits for, 3 or more  
699 individual residential customers, including a neighborhood net metering facility, in which no one  
700 residential customer owns more than 60 kilowatts of design capacity or receives more credits  
701 than the amount of credits produced annually by a facility with a 60 kilowatt design capacity  
702 shall be exempt from subsections (b $\frac{1}{2}$ ) and (k) and may net meter and accrue Class I net  
703 metering credits. Any such facility shall also be exempt from any limit on the aggregate net  
704 metering capacity set by subsection (f). An agricultural net metering facility utilizing anaerobic  
705 digestion technology or an anaerobic digestion net metering facility shall be exempt from  
706 aggregate net metering capacity caps under subsection (f) and may net meter and accrue Class I,  
707 II, or III net metering credits.

708 SECTION 45. Section 16 of chapter 298 of the acts of 2008 is hereby amended by  
709 striking out, in lines 3 and 4, the words “, and shall expire on December 31, 2020”.

710 SECTION 46. The secretary of energy and environmental affairs shall conduct a detailed,  
711 quantitative modeling and analysis of the commonwealth’s energy economy and emissions,  
712 which shall be sufficient to identify multiple technically and economically-feasible pathways to  
713 reduce statewide emissions consistent with the 2050 emissions limit required by subsection (b)  
714 of section 3 of chapter 21N of the General Laws. Such modeling and analysis shall include back-  
715 casting planning considerations and may be conducted in conjunction with other states or  
716 regional entities as part of an analysis of reducing regional emissions by 2050 to a level  
717 consistent with those required by said chapter 21N. The secretary shall publish the results of its  
718 modeling and analysis and shall make the model, all model assumptions and all input and output

719 data available for public inspection and use. The secretary shall file a report of its findings with  
720 the clerks of the senate and house of representatives, the senate and house committees on ways  
721 and means and the joint committee on telecommunications, utilities and energy not later than  
722 December 31, 2020.

723 SECTION 47. (a) Notwithstanding any general or special law to the contrary, the  
724 department of energy resources shall investigate the necessity, benefits and costs of requiring  
725 distribution companies, as defined in section 1 of chapter 164 of the General Laws, to jointly and  
726 competitively conduct additional offshore wind generation solicitations and procurements of up  
727 to approximately 2,800 megawatts of aggregate nameplate capacity, in addition to the  
728 solicitations and procurements required by section 83C of chapter 169 of the acts of 2008, as  
729 amended by chapter 188 of the acts of 2016, and section 21 of chapter 227 of the acts 2018 and  
730 shall require said additional solicitations and procurements by December 31, 2035; provided,  
731 however, that for said solicitations and procurements, as outlined in this section, the department  
732 of energy resources may also require distribution companies to jointly and competitively solicit  
733 and procure proposals for offshore wind energy transmission sufficient to deliver energy  
734 generation procured pursuant to this section from designated wind energy areas for which a  
735 federal lease was issued on or after January 1, 2012 that may be developed independent of such  
736 offshore wind energy generation; provided further, that such transmission service shall be made  
737 available for use by more than 1 wind energy generation project and shall not exceed the  
738 generation capacity authorized by this section; provided further, that any selection of offshore  
739 wind energy transmission shall be the most cost-effective mechanism for procuring reliable, low-  
740 cost offshore wind energy transmission service for ratepayers in the commonwealth

741 (b) Notwithstanding any general or special law to the contrary, the department of energy  
742 resources may analyze and recommend clean energy generation solicitations and procurements  
743 for more than the 9,450,000 megawatts-hours as required by section 83D of chapter 169 of the  
744 acts of 2008 if the department, after investigation, makes a written finding that doing so is  
745 consistent with the commonwealth's energy policy, including the policies established in said  
746 chapter 169 and chapter 298 of the acts of 2008 and after consideration of the economic benefits  
747 of additional clean energy generation and the impact on ratepayers, including distribution  
748 company customers. The department shall publish a plan to effectuate any such additional  
749 solicitations and procurements. Notwithstanding the requirements of this section, as part of the  
750 plan, the department may require different solicitation, evaluation and selection of parties as  
751 required by said section 83D of said chapter 169 if such changes are recommended by the joint  
752 procurement taskforce or will benefit distribution company customers. The department shall hold  
753 at least 1 public hearing to consider the economic benefits of more than 9,450,000 megawatts-  
754 hours of clean energy generation and the impact of such subsequent solicitations and  
755 procurements on the commonwealth's energy policies under this subsection and on ratepayers,  
756 including distribution company customers. The plan required to be published under this  
757 subsection shall be filed with the clerks of the senate and the house of representatives.

758 SECTION 48. (a) The department of environmental protection shall promulgate  
759 regulations requiring producers, importers and wholesale distributors that sell, supply or offer for  
760 sale transportation fuels in the commonwealth to report to the department all sales of  
761 transportation fuel sales made in the commonwealth and the source of any fuel sold to the  
762 department. The regulations shall require the Department of Environmental Protection to  
763 compute and track the individual and collective lifecycle greenhouse gas emissions of all fuels,

764 as well as the carbon intensity of each fuel, that are reported by regulated entities on an annual  
765 basis.

766 (b) All sales, lifecycle greenhouse gas emissions and carbon intensity data collected or  
767 computed by the department pursuant to the regulations required by subsection (a) shall be  
768 published by the department in an annual report that shall be made available to the public.

769 SECTION 49. The Massachusetts Department of Transportation, in consultation with the  
770 department of state police, shall conduct a feasibility study on authorizing an electric vehicle as  
771 defined in section 16 of chapter 25A of the General Laws to travel in lanes designated for use by  
772 high-occupancy vehicles notwithstanding the number of occupants in the vehicle. The study shall  
773 include, but not be limited to: (i) an examination of existing capacity in lanes designated for use  
774 by high-occupancy vehicles; (ii) the impact of additional electric vehicles in the lanes; and (iii) a  
775 plan to properly differentiate eligible electric vehicles to ensure appropriate access to the  
776 designated lanes. The department shall file a report on the results of the study with the clerks of  
777 the senate and the house of representatives and the chairs of the joint committee on  
778 transportation not later than July 31, 2020.

779 SECTION 50. The Massachusetts Department of Transportation, in consultation with the  
780 executive office of energy and environmental affairs, shall develop and implement a program to  
781 promote private electric vehicle ownership with the goal of ensuring that 25 per cent of motor  
782 vehicles owned or leased in the commonwealth shall be electric vehicles by December 31, 2030.  
783 The department shall promulgate regulations necessary to implement this program.

784 SECTION 51. Notwithstanding any general or special law to the contrary, the department  
785 of public utilities, in consultation with the department of energy resources, shall develop a plan



786 to facilitate the authorization and regulation of the creation of new municipal light districts in  
787 municipalities that choose to undertake such action. The plan shall include, but not be limited to,  
788 the acquisition or creation of the necessary infrastructure and mechanisms to acquire and deliver  
789 electricity to customers within the district. The department shall submit the plan to the clerks of  
790 the senate and the house of representatives and the chairs of the joint committee on  
791 telecommunications, utilities and energy not later than December 31, 2020.

792 SECTION 52. Notwithstanding any general or special law to the contrary, no new  
793 natural gas compressor station shall be located in an area that is less than 0.5 miles in linear  
794 distance from: (i) a playground;(ii) a licensed day care center; (iii) a school; (iv) a church; (v) an  
795 environmental justice population neighborhood; (vi) an area of critical environmental concern as  
796 determined by the secretary of environmental affairs under 301 CMR 12.00; (vii) a waterway  
797 preserved and protected for water-dependent uses under chapter 91; or (viii) an area occupied by  
798 residential housing. Linear distance shall be measured from any point along a natural gas  
799 compressor station to the outermost point of buildings or areas in clauses (i) to (viii), inclusive;  
800 provided, however, that repairs or replacements that do not increase the capacity of a natural gas  
801 compressor station in operation prior to January 1, 2020, shall not be subject to this section. For  
802 the purposes of this section, “environmental justice population neighborhood” shall mean a  
803 neighborhood with an annual median household income of not more than 65 per cent of the  
804 statewide median income or with a segment of the population that consists of residents that is not  
805 less than 25 per cent minority, foreign born or lacking in English language proficiency based on  
806 the most recent United States census.

807 SECTION 53. (a) As used in this section, the following words shall have the following  
808 meanings unless the context clearly requires otherwise:

809 “Board”, the pension reserves investment management board established in section 23 of  
810 chapter 32 of the General Laws.

811 “Company”, a sole proprietorship, organization, association, corporation, partnership,  
812 joint venture, limited partnership, limited liability partnership, limited liability company or other  
813 entity or business association, including all wholly-owned subsidiaries, majority-owned  
814 subsidiaries, parent companies or affiliates of such entities or business associations that exist for  
815 profit-making purposes.

816 “Direct holdings”, all securities of a company held directly by the public fund or in an  
817 account or fund in which the public fund owns all shares or interests.

818 “Fossil fuel company”, a company identified by a Global Industry Classification System  
819 code in 1 of the following sectors: (i) coal and consumable fuels; (ii) integrated oil and gas; or  
820 (iii) oil and gas exploration and production.

821 “Indirect holdings”, all securities of a company held in an account or fund, including a  
822 mutual fund, managed by at least 1 person not employed by the public fund and in which the  
823 public fund owns shares or interests together with other investors not subject to this section.

824 “Public fund”, the Pension Reserves Investment Trust Fund established in subdivision (8)  
825 of section 22 of chapter 32 of the General Laws or the pension reserves investment management  
826 board charged with managing the pooled investment fund consisting of the assets of the State  
827 Employees’ and Teachers’ Retirement Systems and the assets of local retirement systems under  
828 the control of the board.

829 "Thermal coal", coal used to generate electricity, including coal which is burned to create  
830 steam to run turbines; provided, however, "thermal coal" shall not include metallurgical coal or  
831 coking coal used to produce steel.

832 "Thermal coal company", a publicly-traded company that generates at least 50 per cent of  
833 its revenue from the mining of thermal coal as determined by the board.

834 (b) Notwithstanding any general or special law to the contrary, within 30 days after the  
835 effective date of this act, the public fund shall facilitate the identification of all thermal coal and  
836 fossil fuel companies in which the fund owns direct or indirect holdings.

837 (c) Notwithstanding any general or special law to the contrary, the public fund shall take  
838 the following actions in relation to thermal coal companies in which the fund owns direct or  
839 indirect holdings:

840 (i) sell, redeem, divest or withdraw all publicly-traded securities of each thermal coal  
841 company identified pursuant to subsection (b) before December 31, 2020;

842 (ii) if recommended by the commission established in subsection (d), sell, redeem, divest  
843 or withdraw all publicly-traded securities of each fossil fuel company identified pursuant to  
844 subsection (b) according to the following schedule: (i) at least 33 per cent of such assets shall be  
845 removed from the public fund's assets under management before December 31, 2022; (ii) 67 per  
846 cent of such assets shall be removed from the public fund's assets under management before  
847 December 31, 2024; and (iii) 100 per cent of such assets shall be removed from the public fund's  
848 assets under management before December 31, 2025.

849           The public fund shall not acquire new assets or securities of thermal coal companies or, if  
850 so recommended by the commission established in subsection (d), fossil fuel companies.

851           (d) There shall be a special commission to investigate and study divestment of the public  
852 fund from fossil fuel companies, but not including thermal coal companies, as proposed by the  
853 schedule in subsection (c). The commission shall evaluate the benefits of divestment from fossil  
854 fuels, not including thermal coal, compared to any potential increased risk that divestment may  
855 pose to the commonwealth's pension funds and retirees.

856           The commission shall consist of: the state treasurer or a designee who shall serve as  
857 chair; the executive director of the public employee retirement administration commission or a  
858 designee; a member of the Retired State, County and Municipal Employees Association of  
859 Massachusetts; an active member of the Service Employees International Union who shall be  
860 designated by the state council; and 3 private citizens to be appointed by the governor who shall  
861 have expertise and current employment in environment, social and governance-related finance,  
862 institutional divestment or climate science.

863           The commission shall consult with experts in the relevant fields of economics, wealth  
864 management, fiduciary law and environmental sciences. The report shall include, but not be  
865 limited to: (i) recommendations on defining fossil fuel companies; (ii) a sensitivity analysis of  
866 the potential impact of divestment on the fund's return on investment, including an analysis of  
867 the potential impact that divestment from fossil fuel companies may have on the amortization  
868 schedules for the commonwealth's pension funds; (iii) an analysis and recommendations as to  
869 how to best incorporate assessment of carbon risk into the investment policy statement; (iv) an  
870 analysis of the potential environmental and policy benefits derived from divestment from fossil

871 fuel companies; (v) recommendations on divestment of indirect holdings, particularly regarding  
872 potential exceptions for mutual funds and index funds that may invest in fossil fuel companies;  
873 (vi) analysis of the potential impact that divestment may pose to companies and employees based  
874 in the commonwealth; and (vii) recommendations on effective administration and oversight of  
875 fossil fuel divestment.

876 The commission shall file its report and its recommendations, together with an actuarial  
877 analysis, if any, with the clerks of the senate and house of representatives, the chairs of the senate  
878 and house committees on ways and means and the chairs of the joint committee on public service  
879 not later than April 1, 2020.

880 (e) Notwithstanding this section, any requirement to divest the public fund from thermal  
881 coal or other fossil fuel companies shall not apply to indirect holdings in actively-managed  
882 investment funds; provided, however, that the public fund shall submit letters to the managers of  
883 the investment funds containing thermal coal or other fossil fuel companies requesting that they  
884 consider removing remove such companies from the investment fund or create a similar actively-  
885 managed fund with indirect holdings devoid of such companies. If the manager creates a similar  
886 fund, the public fund shall replace all applicable investments with investments in the similar fund  
887 in an expedited timeframe consistent with prudent investing standards. For the purposes of this  
888 section, private equity funds shall be deemed to be actively-managed investment funds.

889 (f) Notwithstanding any general or special law to the contrary, the public fund may cease  
890 divesting from companies under subsection (c), reinvest in companies from which it divested  
891 under said subsection (c) or continue to invest in companies from which it has not yet divested  
892 upon clear and convincing evidence showing that the total and aggregate value of all assets under

893 management by or on behalf of the public fund becomes: (i) equal to or less than 99.5 per cent;  
894 or (ii) 100 per cent less 50 basis points of the net value of all assets under management by or on  
895 behalf of the public fund in the previous year as a direct result of divestment. Cessation of  
896 divestment, reinvestment or any subsequent ongoing investment authorized by this section shall  
897 be strictly limited to the minimum steps necessary to avoid the contingency set forth in the  
898 preceding sentence. For any cessation of divestment and in advance of any cessation authorized  
899 by this subsection, the public fund shall provide a written report to the attorney general, the  
900 senate and house committees on ways and means and the joint committee on public service,  
901 updated semi-annually thereafter as applicable, setting forth the reasons and justification,  
902 supported by clear and convincing evidence, for its decisions to cease divestment, to reinvest or  
903 to remain invested in thermal coal.

904 This subsection shall also apply to any divestment of the public fund from fossil fuel  
905 companies.

906 (g) Present, future and former board members of the public fund, jointly and individually,  
907 state officers and employees and investment managers under contract with the public fund shall  
908 be indemnified from the General Fund and held harmless by the commonwealth from all claims,  
909 demands, suits, actions, damages, judgments, costs, charges and expenses, including court costs  
910 and attorneys' fees, and against all liability, losses and damages of any nature whatsoever that  
911 such present, future or former board members, state officers and employees and investment  
912 managers shall or may at any time sustain by reason of any decision to restrict, reduce or  
913 eliminate investments in fossil fuel companies.

914 (h) The public fund shall file a copy of the lists of thermal coal in which the fund owns  
915 direct or indirect interests with the clerks of the senate and the house of representatives and the  
916 attorney general within 30 days after of the effective date of this act. Annually thereafter, the  
917 public fund shall file a report with the clerks of the senate and the house of representatives and  
918 the attorney general which shall includes: (i) all investments sold, redeemed, divested or  
919 withdrawn in compliance with subsection (c); and (ii) all prohibited investments from which the  
920 public fund has not yet divested under said subsection (c). This subsection shall also apply to any  
921 divestment of the public fund from fossil fuel companies.

922 SECTION 54. Notwithstanding any general or special law to the contrary, any  
923 Independent Retirement Board may, in accordance with the procurement process described in  
924 M.G.L. c. 32, § 23B, divest in whole or in part from any investment in fossil fuel companies. In  
925 accordance with this provision, an independent retirement board may, after following the process  
926 described in M.G.L. c. 32, § 23B, invest in index funds or other investment vehicles that may not  
927 include fossil fuel companies. For the purposes of this section, fossil fuel companies shall be  
928 defined as follows: “Fossil fuel company”, a company identified by a Global Industry  
929 Classification System code in one of the following sectors: (1) coal and consumable fuels; (2)  
930 integrated oil and gas; (3) oil and gas exploration and production.

931 SECTION 55. The secretary of transportation and the Massachusetts Bay Transportation  
932 Authority control board established in section 200 of chapter 46 of the acts of 2015, in  
933 consultation with the executive office of energy and environmental affairs, shall develop and  
934 complete a detailed plan for the full electrification of all of the authority’s passenger vehicles,  
935 including buses, ferries and commuter rail lines. The plan for electrification of the commuter rail  
936 shall include the procurement by purchase, lease or other method of electric locomotives, electric

937 multiple unit equipment or a combination of both. The plan shall include the design and  
938 construction of high level platforms at all stations on each line. The overall plan shall include a  
939 detailed project schedule including all necessary procurement activities, leading to all of the  
940 authority's passenger vehicles being electric by December 31, 2030. The plan shall be filed with  
941 the clerks of the senate and house of representatives and the chairs of the joint committee on  
942 transportation and shall be made publicly available on the Massachusetts Department of  
943 Transportation's website not later than December 31, 2020.

944 SECTION 56. Notwithstanding any general or special law to the contrary, the state board  
945 of building regulations and standards established in section 93 of chapter 143 of the General  
946 Laws shall form a working group that may include representatives of the following trades:  
947 planning; real estate sales and brokerage; homebuilding; and solar installation to study the  
948 feasibility of requiring the installation of solar powered systems in newly-constructed housing as  
949 amendments to the state building and electric codes, and the feasibility of regulatory methods to  
950 promote housing that consumes a total amount of annual energy that is substantially equivalent  
951 to the amount of renewable energy generated on site, also known as net-zero housing. The  
952 working group shall report to the general court the result of its study and its recommendations, if  
953 any, together with drafts of legislation or regulations necessary to carry its recommendations into  
954 effect, by filing the same with the clerks of the senate and house of representatives not later than  
955 July 1, 2019.

956 SECTION 57. The Massachusetts Bay Transportation Authority shall issue a report on  
957 the development of a power management system to capture and reuse energy produced from  
958 regenerative braking with authority trains. The report shall be filed with the clerks of the senate  
959 and the house of representatives not later than December 31, 2020.



960 SECTION 58. The 2030 statewide greenhouse gas emissions limit required by subsection  
961 (a) of section 4 of chapter 21N of the General Laws shall be adopted not later than January 1,  
962 2021.

963 SECTION 59. The 2040 statewide greenhouse gas emissions limit required pursuant to  
964 subsection (a) of section 3 of chapter 21N of the General Laws shall be adopted not later than  
965 January 1, 2021.

966 SECTION 60. The department of energy resources shall establish not later than  
967 December 31, 2020 annual statewide deployment targets to be achieved in each distribution  
968 company's and municipal lighting plant's service territory in order to reach the 2,000 megawatt  
969 energy storage system target pursuant to subsection (a) of section 17 of chapter 25A of the  
970 General Laws.

971 SECTION 61. Anaerobic digestion facilities that are both operational and qualified as  
972 Class I renewable energy generating sources under section 11F of chapter 25A of the General  
973 Laws prior to the effective date of section 17 of said chapter 25A shall be eligible to participate  
974 in the incentive program via a one-time procurement for the class I renewable generation  
975 attributes created by existing anaerobic digestion facilities. The department shall determine  
976 eligibility criteria for existing anaerobic digestion facilities to participate in the one-time  
977 procurement, with the total megawatts being procured equal to the combined capacity of all  
978 eligible facilities. The 1-time procurement shall include a ceiling price equal to or greater than  
979 the alternative compliance payment rate, not to exceed double the alternative compliance  
980 payment rate established by the department under said section 11F of said chapter 25A.

981 SECTION 62. The department of energy resources shall establish a pilot program for  
982 anaerobic digestion technology that utilizes solid waste or organic materials otherwise eligible  
983 under section 138 of chapter 164 of the General Laws up to 6 megawatts.

984 SECTION 63. The department of energy resources shall establish the subsequent  
985 statewide energy storage deployment target required pursuant to subsection (a) of section 17 of  
986 chapter 25A of the General Laws not later than December 31, 2022.

987 SECTION 64. The regulations required pursuant to clause (i) of the first paragraph of  
988 section 7A of chapter 21N of the General Laws shall be promulgated and in effect not later than  
989 December 31, 2020.

990 SECTION 65. The regulations required pursuant to clause (ii) of the first paragraph of  
991 section 7A of chapter 21N of the General Laws shall be promulgated and in effect not later than  
992 December 31, 2021.

993 SECTION 66. The regulations required pursuant to clause (iii) of the first paragraph of  
994 section 7A of chapter 21N of the General Laws shall be promulgated and in effect not later than  
995 December 31, 2022.

996 SECTION 67. The regulations required by section 48 shall be promulgated within 180  
997 days after the effective date of this act and shall take effect within 180 days after promulgation.

998 SECTION 68. Subsection (g) of section 1B of chapter 164 of the General Laws shall  
999 take effect on July 2, 2020.

1000 SECTION 69. The regulations, guidelines or orders required by paragraphs (6) and (7) of  
1001 subsection (c) of section 134 of chapter 164 of the General Laws shall be promulgated not more  
1002 than 6 months after the effective date of this act.

1003 SECTION 70. Section 1L of chapter 164 of the General Laws shall take effect on  
1004 January 1, 2019; provided, however, that the department shall promulgate regulations to  
1005 implement said section 1L of said chapter 164 not later than January 1, 2020.

1006 SECTION 71. The 2050 emissions reduction plan required pursuant to subsection (h) of  
1007 section 4 of chapter 21N of the General Laws shall be completed not later than December 31,  
1008 2021.

1009 SECTION 72. Section 52 shall take effect upon a determination by the attorney general  
1010 that the section is constitutional.