

SENATE No. 1940

The Commonwealth of Massachusetts

PRESENTED BY:

Cynthia Stone Creem

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 for utility transition to using renewable energy (FUTURE).

PETITION OF:

NAME:	DISTRICT/ADDRESS:	
<i>Cynthia Stone Creem</i>	<i>First Middlesex and Norfolk</i>	
<i>Lori A. Ehrlich</i>	<i>8th Essex</i>	
<i>Christina A. Minicucci</i>	<i>14th Essex</i>	
<i>Thomas M. Stanley</i>	<i>9th Middlesex</i>	<i>1/23/2019</i>
<i>Jack Patrick Lewis</i>	<i>7th Middlesex</i>	<i>1/23/2019</i>
<i>Michael J. Moran</i>	<i>18th Suffolk</i>	<i>1/24/2019</i>
<i>Mike Connolly</i>	<i>26th Middlesex</i>	<i>1/28/2019</i>
<i>Jason M. Lewis</i>	<i>Fifth Middlesex</i>	<i>1/28/2019</i>
<i>Brian W. Murray</i>	<i>10th Worcester</i>	<i>1/29/2019</i>
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>	<i>1/29/2019</i>
<i>Joanne M. Comerford</i>	<i>Hampshire, Franklin and Worcester</i>	<i>1/29/2019</i>
<i>Joseph A. Boncore</i>	<i>First Suffolk and Middlesex</i>	<i>1/30/2019</i>
<i>Harriette L. Chandler</i>	<i>First Worcester</i>	<i>1/30/2019</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>	<i>1/31/2019</i>
<i>William J. Driscoll, Jr.</i>	<i>7th Norfolk</i>	<i>1/31/2019</i>
<i>Ruth B. Balse</i>	<i>12th Middlesex</i>	<i>1/31/2019</i>
<i>Bruce E. Tarr</i>	<i>First Essex and Middlesex</i>	<i>2/1/2019</i>
<i>Sal N. DiDomenico</i>	<i>Middlesex and Suffolk</i>	<i>2/1/2019</i>

<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>	<i>2/1/2019</i>
<i>Kay Khan</i>	<i>11th Middlesex</i>	<i>2/1/2019</i>
<i>Maria Duaiame Robinson</i>	<i>6th Middlesex</i>	<i>2/1/2019</i>
<i>Carlos González</i>	<i>10th Hampden</i>	<i>2/1/2019</i>
<i>Nika C. Elugardo</i>	<i>15th Suffolk</i>	<i>2/4/2019</i>
<i>Elizabeth A. Malia</i>	<i>11th Suffolk</i>	<i>2/8/2019</i>
<i>James K. Hawkins</i>	<i>2nd Bristol</i>	<i>2/25/2019</i>
<i>Tommy Vitolo</i>	<i>15th Norfolk</i>	<i>4/3/2019</i>
<i>David M. Rogers</i>	<i>24th Middlesex</i>	<i>4/12/2019</i>
<i>Cindy F. Friedman</i>	<i>Fourth Middlesex</i>	<i>4/23/2019</i>
<i>Patricia D. Jehlen</i>	<i>Second Middlesex</i>	<i>10/24/2019</i>

SENATE No. 1940

By Ms. Creem, a petition (accompanied by bill, Senate, No. 1940) of Cynthia Stone Creem, Lori A. Ehrlich, Christina A. Minicucci, Thomas M. Stanley and other members of the General Court for legislation for utility transition to using renewable energy (FUTURE). Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

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

An Act for utility transition to using renewable 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 1 of chapter 21N, as appearing in the 2016 Official Edition of the
2 General Laws, is hereby amended by inserting after line 35, the following words and lines:-

3 “Fossil fuel”, coal, coke, distillate oil, residual oil, used oil fuel, natural gas,
4 manufactured gas, peat and derivatives from such fuels.

5 SECTION 2. Said section 1 of chapter 21N, as so appearing, is hereby amended by
6 striking out lines 50 through 52, and inserting in place thereof the following:-

7 “Indirect emissions”, emissions associated with the distribution and consumption of
8 purchased electricity, natural gas and other sources of energy derived from fossil fuels, steam
9 and heating or cooling by an entity or facility.

10 SECTION 3. Said section 1 of chapter 21N, as so appearing, is hereby amended by
11 inserting, in line 72, after the word “including” the following:-

12 “(i)”.

13 SECTION 4. Said section 1 of chapter 21N, as so appearing, is hereby amended by
14 inserting, in line 76, after the word “imported;” the following words:-

15 “(ii) all emissions of greenhouse gases from the delivery and consumption of natural gas
16 in the commonwealth, including emissions from lost and unaccounted for gas as defined in
17 section 147 of chapter 164; (iii) all emissions of greenhouse gases from any energy source
18 derived from fossil fuels; and (iv) all emissions of biomass, biogas and liquid biofuel
19 technologies,”.

20 SECTION 5. Subsection (a) of section 2 of said chapter 21N, as so appearing, is hereby
21 amended by striking out, lines 35 through 39, after the words “chapter 164A” in line 35, and
22 inserting in place thereof the following paragraphs:-

23 “; (6) require reporting of greenhouse gas emissions from natural gas distributed by a gas
24 company as defined in section 1 of chapter 164, including emissions from lost and unaccounted
25 for gas as defined in section 147 of chapter 164; (7) ensure rigorous and consistent accounting of
26 emissions and provide reporting tools and formats to ensure collection of necessary data; and (8)
27 ensure that greenhouse gas emissions sources maintain comprehensive records of all reported
28 greenhouse gas emissions.”

29 SECTION 6. Subsection (c) of section 3 of said chapter 21N, as so appearing, is hereby
30 amended by inserting, in line 21, after the word “sector” the following words:-

31 “and the natural gas sector”.

32 SECTION 7. Said subsection (c) of section 3 of chapter 21N, as so appearing, is hereby
33 amended by inserting, in line 23, after the word “based” the following:-

34 “(i)”.

35 SECTION 8. Said subsection (c) of section 3 of chapter 21N, as so appearing, is hereby
36 amended by inserting, in line 26, after the word “standard” the following:-

37 “, (ii) on the consumption and purchases of natural gas entering the commonwealth
38 through the natural gas city gates, and (iii) on the consumption and purchases of any other source
39 of greenhouse gases.”

40 SECTION 9. Subsection (d) of said section 3 of chapter 21N, as so appearing, is hereby
41 amended by inserting, in line 27, after the word “regulations” the following words:-

42 “that apply to all sources in the commonwealth that emit greenhouse gases”.

43 SECTION 10. Subsection (a) of section 4 of said chapter 21N, as so appearing, is hereby
44 amended by inserting, in line 8, after the word “generation,” the following words:-

45 “distribution of natural gas,” .

46 SECTION 11. Said subsection (a) of section 4 of chapter 21N, as so appearing, is hereby
47 amended by inserting, in line 13, after the word “manner” the following words:-

48 “; provided, however, that nothing in this section shall impede the transition of the
49 commonwealth to non-emitting renewable sources of energy.”

50 SECTION 12. Subsection (b) of section 4 of said chapter 21N, as so appearing, is hereby
51 further amended by inserting, in line 20, after the word “economy,” the following words:-

52 “including distribution of natural gas, heating oil and propane.”

53 SECTION 13. Section 9 of said chapter 21N, as so appearing, is hereby amended by
54 striking out, in line 2, the words “public utility commission” and inserting in place thereof the
55 following words:-

56 “department of public utilities”.

57 SECTION 14. Said section 9 of chapter 21N, as so appearing, is hereby further amended
58 by striking out, in line 2, after the word “electrical” the word “utility” and inserting in place
59 thereof the following words:-

60 “company or a gas company”.

61 SECTION 15. Said section 9 of chapter 21N, as so appearing, is hereby further amended
62 by inserting, in line 3, after the word “service” the following words:-

63 “or with safe and reliable natural gas service, provided, however, that the department of
64 public utilities shall actively encourage a transition from the use of natural gas or other fossil
65 fuels to the use of non-emitting renewable energy sources.”

66 SECTION 16. Subsection (c) of said section 9 of chapter 23J, as appearing in the 2016
67 Official Edition of the General Laws, is hereby amended by inserting, in line 45, after the word
68 “facilities” the following:-

69 “and with the distribution and consumption of fossil fuels, including but not limited to,
70 oil and natural gas;”

71 SECTION 17. Subsection (d) of said section 9 of chapter 23J, as so appearing, is
72 amended by inserting, in line 76, after the word “electricity” the following words:-

73 “and the transition to the use of renewable energy by all energy customers in the
74 commonwealth including, but not limited to, customers using natural gas, fuel oil and propane;”

75 SECTION 18. Chapter 25, as appearing in the 2016 Official Edition of the General Laws,
76 is hereby amended by inserting after section 1 the following section:-

77 Section 1A. In administering its responsibilities under this and other chapters of the
78 general laws, the department shall promote the interest of the public, including equitable access
79 to energy efficiency and renewable energy and shall actively promote implementation of the
80 provisions of chapter 21N to reduce greenhouse gas emissions by reducing energy use,
81 increasing efficiency and encouraging renewable sources of energy.

82 SECTION 19. Section 2 of said chapter 25, as so appearing, is hereby amended by
83 striking out lines 1 through 18, after the words “Section 2.” and inserting in place thereof the
84 following paragraph:-

85 “The department shall be under the supervision and control of the commonwealth utilities
86 commission, in this chapter called the commission, which shall consist of 3 members appointed
87 by the governor in consultation with the attorney general following an opportunity for the public
88 to provide written comments. Prospective appointees shall disclose any potential conflicts of
89 interest, including any financial interest in the energy sector. The terms of two such
90 commissioners shall be coterminous with that of the governor, and the term of the third member
91 shall be for 4 years. The commissioners shall report to the secretary of energy and environmental
92 affairs. The secretary may remove a commissioner upon the approval of the governor. The

93 secretary shall designate one commissioner as chairman, who shall serve as chairman for 2 years,
94 and may be reappointed, unless removed as chairman by the secretary, with the approval of the
95 governor. Commission members shall have background and expertise in renewable energy and
96 in electricity or natural gas matters. The commissioners shall devote their full time to the duties
97 of their office. Not more than 2 members of the commission shall be members of the same
98 political party. Any decision made or order issued by the commission may be made by majority
99 vote of a quorum of 2 members.”

100 SECTION 20. Subsection (b) of section 19 of said chapter 25, as so appearing, is hereby
101 amended by inserting after the word “programs”, in line 32, the following:-

102 “and may approve and fund renewable energy and district energy infrastructure programs
103 proposed by gas distribution companies.”

104 SECTION 21. Said subsection (b) of section 19 of said chapter 25, as so appearing, is
105 hereby further amended by inserting, in line 39, after the word “opportunities,” the following
106 words:- “maximizing the use of renewable energy and the reduction of greenhouse gas
107 emissions pursuant to the mandates of chapter 21N, and”.

108 SECTION 22. Subsection (a) of section 20 of said chapter 25, as so appearing, is hereby
109 amended by inserting, in line 2, the following words:-

110 “14.65 mill per therm for all natural gas customers and a mandatory charge of”.

111 SECTION 23. Subsection (a) of section 11F 1/2 of chapter 25A, as appearing in the 2016
112 Official Edition of the General Laws, is hereby amended by inserting, in line 3, after the word
113 “commonwealth” the following words:-

114 “and for all retail gas suppliers selling gas for useful thermal energy to end-use customers
115 in the commonwealth.”

116 SECTION 24. Said subsection (a) of said section 11F 1/2 of chapter 25A, as so
117 appearing, is hereby amended by inserting, in line 11, after the word “sources.” the following
118 sentence:-

119 “Every such retail electric supplier and every such retail gas supplier shall obtain and
120 retire annually alternative energy credits generated by renewable thermal technologies.”

121 SECTION 25. Said section 11F 1/2 of chapter 25A , as so appearing, is hereby amended
122 by inserting after subsection (e) the following subsection:-

123 (f) The department shall determine the requirement for each retail electric supplier and
124 each retail gas supplier to obtain and annually retire renewable thermal alternative energy credits,
125 provided, however, that such requirement shall be proportional to the annual thermal energy
126 consumed by each such supplier’s customers and shall be established so as to effect a transition
127 for all heating oil customers in the commonwealth from oil-fired thermal energy technologies to
128 renewable thermal energy technologies by December 31, 2030, and to effect a transition for all
129 other customers of fossil fuel thermal energy sources to renewable thermal energy technologies
130 by December 31, 2048.

131 SECTION 26. Chapter 30A, as so appearing in the 2016 Official Edition of the General
132 Laws, is hereby amended by inserting after section 10A the following section:-

133 Section 10B. Notwithstanding the provisions of section 10, in any adjudicatory
134 proceeding conducted by the department of public utilities regarding any petition, request for

135 approval or investigation of a gas company or an electric company, as defined in section 1 of
136 chapter 164, the following shall be allowed to participate fully as a party in such proceeding: (a)
137 any municipality that is within the service area of such company; (b) any member of the general
138 court whose district includes ratepayers within the service area of such company; and (c) any
139 group of not fewer than 10 persons who are ratepayers within the service area of such company.

140 SECTION 27. Section 1 of Chapter 164, as appearing in the 2016 Official Edition of the
141 General Laws, is hereby amended by striking out, lines 201 through 205, and inserting in place
142 thereof the following:-

143 “Gas company”, a corporation organized for the purpose of making and selling or
144 distributing and selling gas within the commonwealth, even though subsequently authorized by
145 the department to make or sell electricity or to make, distribute or sell thermal energy, provided,
146 however, that such thermal energy will reduce emissions of greenhouse gases in accordance with
147 chapter 21N; further provided, however, that gas company shall not mean an alternative energy
148 provider.

149 SECTION 28. Subsection (a) of section 1E of said chapter 164, as so appearing, is hereby
150 amended by inserting after the word “standards”, in line 7, the following:-

151 “for”.

152 SECTION 29. Said subsection (a) of section 1E of chapter 164, as so appearing, is hereby
153 amended by striking out, in line 10, after the words “billing service,”, lines 10 through 13, and
154 inserting in place thereof the following:-

155 “compliance with the mandates of chapter 21N to reduce greenhouse gas emissions by
156 reducing energy use, increasing efficiency and encouraging use of renewable sources of energy
157 and public health and safety, provided, however, that such service quality standards shall include
158 benchmarks for employee staff levels and employee training programs for each such distribution,
159 transmission, and gas company.”

160 SECTION 30. Section 1I of said chapter 164, as so appearing, is hereby amended by
161 striking out, in line 6, the following words:-

162 “be authorized to”.

163 SECTION 31. Said chapter 164, as so appearing, is hereby amended by inserting after
164 section 1K the following section:-

165 Section 1L. No right to exclusive service or franchise established within Section 1B or
166 elsewhere in this chapter shall prevent a municipality, an agency of the commonwealth or private
167 electric or gas customers within the service territory of an electric or gas company from
168 procuring local or district energy services, establishing an energy microgrid, or utilizing public
169 rights of way for the purposes of energy generation or resiliency.

170 SECTION 32. Section 5 of said chapter 164, as so appearing, is hereby amended by
171 striking out, in line 9, the words “will be promoted thereby” and inserting in place thereof the
172 following:-

173 “and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing
174 energy use, increasing efficiency and encouraging renewable sources of energy will be promoted
175 thereby.”

176 SECTION 33. Subsection (a) of section 8A of said chapter 164, as so appearing, is
177 hereby amended by striking out the words “convenience will be promoted thereby;”, in lines 13
178 and 14, and inserting in place thereof the following:-

179 “health, safety and convenience will be promoted thereby, and that the mandates of
180 chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency
181 and encouraging renewable sources of energy will be promoted thereby;”

182 SECTION 34. Section 69H of said chapter 164, as so appearing, is hereby amended by
183 striking out, in line 6, the following words “at the lowest possible cost” and inserting in the place
184 thereof the following:-

185 “and public health and safety at the lowest possible cost in compliance with the mandates
186 of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency
187 and encouraging renewable sources of energy.”

188 SECTION 35. Said section 69H of chapter 164, as so appearing, is hereby amended
189 inserting after the word “environmental”, in line 7” the following words:-

190 “and public health and safety”.

191 SECTION 36. Said section 69H of chapter 164, as so appearing, is hereby further
192 amended by inserting, in line 13, after the word “facilities” the following:-

193 “, subject to the mandates of chapter 21N to reduce greenhouse gas emissions by
194 reducing energy use, increasing efficiency and encouraging renewable sources of energy.”

195 SECTION 37. Section 69I of said chapter 164, as so appearing, is hereby amended by
196 inserting, in line 11, after the words “electric companies” the following:-

197 “and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing
198 energy use, increasing efficiency and encouraging renewable sources of energy”.

199 SECTION 38. Said section 69I of said chapter 164, as so appearing, is hereby further
200 amended by inserting, in line 11, after the words “electric companies” the following:-

201 “and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing
202 energy use, increasing efficiency and encouraging renewable sources of energy.”

203 SECTION 39. Subparagraph (2) of said section 69I of chapter 164, as so appearing, is
204 hereby further amended by striking out, in line 37, the words “and energy policies as adopted by
205 the commonwealth” and inserting in place thereof the following:-

206 “and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing
207 energy use, increasing efficiency and encouraging renewable sources of energy and other energy
208 policies as adopted by the commonwealth.”

209 SECTION 40. Subparagraph (3) of said section 69I of chapter 164, as so appearing, is
210 hereby further amended by striking out, in lines 48 through 49, the words “impact of each
211 proposed facility” and inserting in the place thereof the following:-

212 “and public health and safety impact of each proposed facility and its emission of
213 greenhouse gases;”

214 SECTION 41. Said subparagraph (3) of section 69I of chapter 164, as so appearing, is
215 hereby further amended by inserting, in line 56, after the words “radiation impact,” the following
216 words:-

217 “public health and safety impact,”.

218 SECTION 42. Said subparagraph (3) of section 69I of chapter 164, as so appearing, is
219 hereby further amended by striking out, in line 63, the following words: “impacts, facilities
220 agreements and” and inserting in the place thereof the following words:-

221 “and public health and safety impacts, emissions of greenhouse gases, facilities
222 agreements and compliance with the mandates of chapter 21N to reduce greenhouse gases by
223 reducing energy use, increasing efficiency and encouraging renewable sources of energy and
224 other”.

225 SECTION 43. Said section 69I of chapter 164, as so appearing, is hereby further
226 amended by striking out, in line 78, the following words “ , environmental protection,” and
227 inserting in place thereof the following:-

228 “and safety, environmental protection, reduction in greenhouse gas emissions as
229 mandated by chapter 21N by reducing energy use, increasing efficiency and encouraging
230 renewable sources of energy,”.

231 SECTION 44. Said section 69I, of said chapter 164, as so appearing, is hereby further
232 amended by inserting, in line 82, after the words “impact on the environment” the following
233 words:-

234 “and public health and safety”.

235 SECTION 45. Said section 69I of said chapter 164, as so appearing, is hereby further
236 amended by inserting, in line 109, after the word “interest” the following words:-

237 “; provided, however, that such exemption complies with the mandates of chapter 21N to
238 reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging
239 use of renewable sources of energy.”

240 SECTION 46. Section 70 of said chapter 164, as so appearing, is hereby amended by
241 inserting, in line 9, after the word “nuisance.” the following:-

242 “For the purposes of this section, damage to property shall include any tree on public
243 property damaged or killed by gas migrating into the root zone of such tree, as defined as the
244 area of the ground under the canopy of such tree; or by construction during the course of
245 repairing or replacing gas infrastructure. A municipality or person whose property is alleged to
246 have been damaged by a gas company may submit a claim for such damages with the department
247 which shall follow the procedures of chapter 30A for the resolution of any such claim, provided,
248 however, that such claim for damage to a tree as a result of a gas leak must be substantiated by a
249 certified arborist. Nothing in this section shall prevent a municipality from further regulating the
250 opening of streets or the use of public ways by a gas company, or from conditioning the consent
251 of such municipality to dig up and open the ground.”

252 SECTION 47. Said chapter 164, as so appearing, is hereby amended by striking out
253 section 75 and inserting in place thereof the following section:-

254 Section 75. (a) The city council, aldermen or selectmen of a municipality may regulate,
255 restrict and control all acts and doings of a corporation subject to this chapter which may in any
256 manner affect the health, safety, convenience or property of the inhabitants of their towns.
257 Beginning in January 1, 2020, a municipality may require an electric company or a gas company
258 to establish or renew a license, permit, right or franchise agreement in accordance with the terms,

259 conditions and limitations of regulatory acts of the municipality, including the placing of
260 distribution lines and facilities underground. An electric company or gas company required by
261 municipal ordinance to establish a franchise agreement shall enact such agreement in order to
262 retain the exclusive obligation to provide distribution service to all retail customers within its
263 service territory. Such franchise may be established in 10-year increments and may be
264 renegotiated and renewed upon expiration or in the year prior to expiration. Under the license,
265 permit, right or franchise, an electric company or a gas company may be obligated by a
266 municipality (i) to pay to such municipality fees to raise revenue or to defray any increase in
267 municipal costs accruing as a result of operations by such company; and (ii) to share data or
268 information regarding electric or gas infrastructure or operations, provided that such data would
269 not unreasonably expose Critical Energy/Electric Infrastructure Information as designated by the
270 Federal Energy Regulatory Commission. Such fees may include, but not be limited to, a sum of
271 money based upon gross operating revenues or upon gross earnings from the operations of such
272 company in such municipality so long as such company shall continue to operate in such
273 municipality, unless upon request at any time of such company, such municipality expressly
274 releases such company from the obligation. No fees charged pursuant to this section shall be
275 recoverable by such company in a proceeding conducted in accordance with Section 94 of this
276 Chapter.

277 (b) A municipality may file with the department a complaint alleging a breach by an
278 electric or gas company of its franchise or of any regulation issued by such department. The
279 department shall investigate any such complaint, including holding a public hearing at which the
280 municipality shall participate as a party, according to the procedures of chapter 30A. The

281 department shall issue a written decision describing the resolution of such complaint, which
282 decision shall be made public.

283 SECTION 48. Section 76 of said chapter 164, as so appearing, is hereby amended by
284 inserting, in line 5, after the words “with reference to the” the following words:-

285 “public health and”.

286 SECTION 49. Section 76C of said chapter 164, as so appearing, is hereby amended by
287 inserting, in line 3, after the word “thereof.” the following:-

288 “In establishing and enforcing such rules and regulations, the department shall comply
289 with the commonwealth’s plan for statewide greenhouse gas emissions limits as mandated by
290 chapter 21N to reduce energy use, increase efficiency and encourage renewable sources of
291 energy.”

292 SECTION 50. Said chapter 164, as so appearing, is hereby amended by inserting after
293 section 94I the following section:-

294 Section 94J. (a) Any base rate proceeding conducted by the department under section 94
295 for electric companies or gas companies must include full decoupling, as specified in D.P.U. 07-
296 50-A. The department shall consider the impact of decoupling on the gas or electric company's
297 return on equity and make any necessary adjustments thereto.

298 (b) In any base rate proceeding commencing on or after July 31, 2020, the department
299 may not approve a decoupling mechanism for gas companies based on a revenue per customer
300 approach, or any other method that disincentivizes customers using fossil fuel for heating and

301 cooling from converting to use of heat pumps, solar thermal, or other heating or cooling
302 technologies using renewable sources of energy that do not emit greenhouse gases.

303 SECTION 51. Section 116B of said chapter 164, as so appearing, is hereby amended by
304 inserting, in line 5, after the word “ accessible” the following words:-

305 “; provided, further, that the gas company shall comply with the requirements of section
306 144.”

307 SECTION 52. Section 141 of said chapter 164, as so appearing, is hereby amended by
308 inserting, in line 4, after the word “efficiency,” the following words:-

309 “the replacement of natural gas infrastructure with district energy infrastructure and the
310 reduction of greenhouse gases as mandated by chapter 21N to reduce energy use, increase
311 efficiency and encourage renewable sources of energy, including the reduction of lost and
312 unaccounted for gas as defined in section 147.”.

313 SECTION 53. Said section 141 of chapter 164, as so appearing, is hereby amended by
314 inserting, in line 7, after the word “discount.” the following:-

315 “The department shall not approve rate designs or other plans that include payment by a
316 gas company or an electric company of fees or other costs associated with membership in trade
317 associations or similar associations.”

318 SECTION 54. Section 142 of said chapter 164, as so appearing, is hereby amended by
319 inserting, in line 3, after the word “power” the following words:-

320 “and district energy,” .

321 SECTION 55. Said section 142 of chapter 164, as so appearing, is hereby further
322 amending by striking out, lines 5 to 8, beginning with the words “For the purposes” and inserting
323 in place thereof the following:-

324 “The department shall issue regulations to expand municipal aggregation provided in
325 section 134 of chapter 164 to authorize a municipality or group of municipalities to establish
326 district energy where it will result in reducing greenhouse gas emissions, reducing consumer cost
327 and improving public health and safety. For the purposes of this section, “efficient, low-
328 emission” shall mean use of the best available energy efficient technology, as determined
329 annually by the department of energy resources, for the purpose of meeting the mandates of
330 chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency
331 and encouraging renewable sources of energy.”

332 SECTION 56. Subsection (b)(2) of section 144 of said chapter 164, as so appearing, is
333 hereby amended by striking out, in line 11, the words “whenever appropriate and feasible,”.

334 SECTION X. Said subsection (b)(2) of section 144 of chapter 164, as so appearing, is
335 hereby amended by inserting, in line 12, after the word “notify” the following words:-

336 “within an hour or less of detection”.

337 SECTION 57. Subsection (b)(3) of said section 144 of chapter 164, as so appearing, is
338 hereby amended by striking out, lines 16 through 22, after the word “future”, and inserting in
339 place thereof the following:-

340 “hazard to be completed as immediately as possible. The gas company shall immediately
341 schedule a completion of repairs, such repair to be completed within 6 months, and the condition

342 of such leak shall be kept under surveillance at a frequency of not less than once every two
343 weeks until the hazard or source of the leak is eliminated. For the purposes of this section, a
344 Grade 2 leak shall include: (i) any leak migrating into the root zone of a tree, defined as co-
345 extensive with the canopy of such tree; (ii) any leak within 10 feet of any foundation or wall; (iii)
346 any gas-in-air reading of up to 1 per cent in any manhole or confined space; (iv) any leak deemed
347 of sufficient magnitude by the fire chief of a municipality to be hazardous or to be a public
348 nuisance; and (v) any gas leak within 150 feet of a school zone, as defined in subsection (d). A
349 gas company shall notify within an hour or less of detection the fire department and chief law
350 enforcement officer in each city or town where a Grade 2 leak is identified.

351 (A) A municipality or person whose property is alleged to have been damaged by a gas
352 company may submit a claim for such damages with the department, which shall follow the
353 procedures of chapter 30A for the resolution of any such claim.

354 (B) Any suspected damage to a tree due to a natural gas leak should be reported to the gas
355 company for mandatory inspection by a qualified arborist. If a qualified arborist determines that
356 a tree is damaged or killed by a natural gas leak, the gas company shall provide the entity which
357 owns the tree with the funds of equal or greater value to replace the compromised tree. The
358 department shall promulgate rules and regulations to implement this section.

359 SECTION 58. Said subsection (b) (4) of section 144 of chapter 164, as so appearing, is
360 hereby amended by inserting after the word “safety.”, in line 32, the following:-

361 “A gas company shall notify within an hour or less of detection the fire department and
362 chief law enforcement officer in each city or town where a Grade 3 leak is identified.”

363 SECTION 59. Said section 144 of chapter 164, as so appearing, is here by amended by
364 striking out subsection (c), in lines 33 through 48, and inserting in place thereof the following:-

365 (c) (1) For the purposes of this subsection, a Grade 3 leak identified as having a
366 significant environmental impact shall be defined by the department, and such definition shall
367 include those leaks whose estimated gas emissions per day are in the top 7% of all Grade 3 leaks
368 in the commonwealth.

369 (2) Upon the undertaking of a significant project on a public way exposing confirmed
370 natural gas infrastructure, and with sufficient notice, a municipality or the commonwealth shall
371 submit written notification of the project to a gas company. In response to such notice from the
372 municipality or upon seeking a permit from a municipality to open a public way for the purpose
373 of repairing or replacing leak-prone infrastructure, the gas company shall survey the project area
374 for the presence of Grade 1 leaks, Grade 2 leaks and Grade 3 leaks identified as having a
375 significant environmental impact and shall set repair and replacement schedules for all known or
376 newly detected Grade 1 leaks, Grade 2 leaks and Grade 3 leaks identified as having a significant
377 environmental impact. The gas company shall provide to such municipality for each such leak,
378 the location, history, and grade classification as defined in this section, and for each such
379 pipeline, the age, type, condition, operating pressure, size and material. Upon completion of any
380 repair or replacement of leak-prone infrastructure, the gas company shall provide to such
381 municipality a report from a certified gas inspector that (i) all pipes are installed at the proper
382 depth and all new joints are sealed; (ii) all gas shutoff valves and gate boxes are uncovered,
383 accessible, operational, tested and capable of accepting a gate key; (iii) the repaired or replaced
384 infrastructure is free from defects that could cause new leaks; and (iv) the repair or replacement
385 has otherwise been properly completed according to state and federal regulations.

386 SECTION 60. Said section 144 of chapter 164, as so appearing, is here by amended by
387 striking out subsection (d), in lines 49 through 54, and inserting in place thereof the following:-

388 (d) A gas company shall survey pipelines in every school zone at least once every 12
389 months or during the next scheduled survey, whichever is sooner. Grade 3 gas leaks detected in a
390 school zone shall be repaired by the gas company no later than 6 months from the date the leak
391 was detected. Grade 1 leaks and Grade 2 leaks shall be repaired as required in subsection (b) of
392 this section. For the purposes of this section, "school zone" shall mean on or within 150 feet of
393 the real property comprising a public or private accredited preschool, accredited Head Start
394 facility, elementary, vocational or secondary school.

395 SECTION 61. Said section 144 of chapter 164, as so appearing, is here by amended by
396 striking out subsection (e), in lines 55 through 63, and inserting in place thereof the following:-

397 (e) (1) For the purposes of this subsection, the following words shall have the following
398 meaning:-

399 "global positioning system," a positioning system using satellites that continuously
400 transmit coded information. The information transmitted from the satellites is interpreted by
401 receivers to precisely identify locations on earth by measuring distance from the satellites.

402 (2) As part of the annual service quality standards report required by section 1I, each gas
403 company shall report to the department the following data as of the time of the report: (i) the
404 location of each Grade 1, Grade 2 and Grade 3 leak; (ii) the date each Grade 1, Grade 2 and
405 Grade 3 leak was classified; (iii) the dates of repairs performed on each Grade 1, Grade 2 and
406 Grade 3 leak; and (iv) the positioning of each such leak according to the global positioning

407 system. A gas company shall specify any reclassification of previously identified leaks in its
408 annual report.

409 (3) The annual service quality standards report shall be posted electronically and
410 publically by March 1 by the department in spreadsheet format, which shall include, or be
411 accompanied by, definitions of terms or acronyms, methodologies and instrumentation used to
412 detect a gas leak and to determine its grade, emissions, volume and emissions impact. The report
413 shall include the cost to ratepayers of (i) lost and unaccounted for gas; (ii) system maintenance;
414 (iii) leak-prone infrastructure replacements and percent remaining under plans mandated by
415 subsection (b) of section 145; (iv) safety violations by each gas company, including but not
416 limited to, over pressurization incidents, third-party hits, and natural force pipe failures, reported
417 both as absolute numbers as well as by incidents per linear mile of pipe; (v) the cost of replacing
418 all leak-prone infrastructure as compared to repairing all known gas leaks in the commonwealth;
419 and (vi) progress by the department and the gas companies regulated under this chapter towards
420 achieving the targets and benchmarks mandated by chapter 21N. The department shall post a
421 map of all leaks by grade classification, updated quarterly, showing the location of such leaks
422 throughout the commonwealth.

423 SECTION 62. Subsection (f) of said section 144 of chapter 164, as so appearing, is
424 hereby amended by inserting, in lines 66 through 67, after the word “reporting.” the following:-

425 “Such oversight and monitoring by the department shall include an annual audit of leak
426 classifications assessed by gas companies in the commonwealth, to be conducted by a qualified
427 independent contractor. The independent contractor shall be chosen jointly by the department
428 and the attorney general. The audit shall include (i) a randomly selected representative sample of

429 reported leaks; (ii) leak classification; (iii) leak extent measurement; and the (iv) success of the
430 leak repairs. The department shall make such audit available to the public within 30 days of its
431 issuance.”

432 SECTION 63. Said section 144 of chapter 164, as so appearing, is hereby amended by
433 inserting after subsection (f), the following:-

434 (g) The department shall promulgate regulations establishing uniform standards for
435 winter surveillance and patrol of cast iron pipes subject to hazardous frost cap conditions. Such
436 standards shall meet or exceed federally mandated standards for integrity management
437 requirements for distribution pipelines and shall include criteria to determine the conditions of
438 weather, the duration and oscillation of temperatures around and below 32 degrees Fahrenheit,
439 the type and size of cast iron pipe segments that are prone to cracks and leaks as a result of
440 extended frost cap conditions and the frequency of surveillance and patrol necessary to ensure
441 public safety from hazardous leaks caused by such cracks. Such winter surveillance and patrol
442 standards shall be in effect from December 15 to March 15 unless weather conditions warrant an
443 earlier start or later end date. Such regulations shall be promulgated by the department within 6
444 months of the effective date of this provision.

445 SECTION 64. Subsection (a) of section 145 of said chapter 164, as so appearing, is
446 hereby amended by inserting, in line 7, after the word “public” the following words:-

447 “health and”.

448 SECTION 65. Said subsection (a) of section 145 of chapter 164, as so appearing, is
449 hereby amended by inserting, in line 14, after the word “proceeding.” the following:- “Such
450 eligible infrastructure replacement may include replacing natural gas infrastructure with district

451 energy infrastructure, provided, however, that such district energy infrastructure complies with
452 the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use,
453 increasing efficiency and encouraging renewable sources of energy.”

454 SECTION 66. Section 145 of said chapter 164, as so appearing, is hereby amended by
455 striking out subsection (b) and inserting in place thereof the following subsection:-

456 (b) A gas company shall file with the department a plan to address aging or leaking
457 natural gas infrastructure within the commonwealth in the interest of public health and safety and
458 reducing lost and unaccounted for natural gas through a reduction in natural gas system leaks by
459 number and by volume.

460 SECTION 67. Section 145 of said chapter 164, as so appearing, is hereby amended by
461 striking out subsection (c) and inserting in place thereof the following subsection:-

462 (c) (1) For the purposes of this subsection, a Grade 3 leak identified as having a
463 significant environmental impact shall be defined by the department, and such definition shall
464 include those leaks whose estimated gas emissions per day are in the top 7% of all Grade 3 leaks
465 in the commonwealth.

466 (2) Any plan filed with the department shall include, but not be limited to: (i) eligible
467 infrastructure replacement or repair of mains, services, meter sets and other ancillary facilities
468 composed of non-cathodically protected steel, cast iron and wrought iron, prioritized to
469 implement the federal gas distribution pipeline integrity management plan annually submitted to
470 the department and consistent with subpart P of 49 C.F.R. part 192; (ii) replacement
471 infrastructure proposed, including gas infrastructure or district energy infrastructure; (iii) an
472 anticipated timeline for the completion of each project; (iv) the estimated cost of each project;

473 (v) rate change requests; (vi) a description of customer costs and benefits under the plan; (vii)
474 work plans including location by street segments of leak-prone infrastructure scheduled to be
475 replaced as required by this section; (viii) how the replacement infrastructure complies with the
476 mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing
477 efficiency and encouraging renewable sources of energy, and (viii) any other information the
478 department considers necessary to evaluate the plan. Such improvement of existing infrastructure
479 may include repair rather than replacement of a pipe having a grade 3 leak identified as having a
480 significant environmental impact as classified by section 144 (c), provided, however that such
481 repair shall be cost effective and shall comply with applicable safety regulations related to
482 pipeline infrastructure. Such plan filed with the department may include an alternative other than
483 natural gas to provide thermal energy using renewable sources.

484 (3) Upon filing an initial plan under this section, a gas company shall include a timeline
485 for removing all leak-prone infrastructure on an accelerated basis specifying an annual
486 replacement pace and program end date with a target end date of either (i) not more than 20
487 years, or (ii) a reasonable target end date considering the allowable recovery cap established
488 pursuant to subsection (f). The department shall not approve a timeline as part of a plan unless
489 the allowable recovery cap established pursuant to subsection (f) provides the gas company with
490 a reasonable opportunity to recover the costs associated with removing all leak-prone
491 infrastructure on the accelerated basis set forth under the timeline utilizing the cost recovery
492 mechanism established pursuant to this section, provided, however, that no depreciation
493 associated with the replacement of infrastructure delivering natural gas shall be claimed by such
494 gas company after 2050 unless such infrastructure has the capacity to deliver thermal heat from
495 renewable sources of energy. After filing the initial plan, a gas company shall, at 5 year intervals,

496 provide the department with a summary of its replacement progress to date, a summary of work
497 to be completed during the next 5 years, a report of any remaining leak-prone infrastructure by
498 street segment remaining in the service territory of the gas company and any similar information
499 the department may require. The department may require a gas company to file an updated long-
500 term timeline as part of a plan if it alters the cap established pursuant to subsection (f).

501 SECTION 68. Subsection (d) of said section 145 of said chapter 164, as so appearing, is
502 hereby amended by inserting, in line 63, after the word “public” the following words:-

503 “health and”.

504 SECTION 69. Subsection (h) of said section 145 of chapter 164, as so appearing, is
505 hereby amended by inserting, in line 111, after the word “section.” the following:-

506 “Such regulations may permit and structure a performance-based financial incentive to a
507 gas company to build eligible district energy infrastructure, provided, however, that such
508 infrastructure complies with the mandates of chapter 21N to reduce greenhouse gas emissions by
509 reducing energy use, increasing efficiency and encouraging renewable sources of energy.”

510 SECTION 70. Said section 145 of chapter 164, as so appearing, is hereby amended by
511 inserting after subsection (h) the following subsection:-

512 (i) Within 30 days of approval of any plan submitted to the department by a gas company
513 for replacement or improvement of any existing infrastructure pursuant to this section, the
514 department shall send such plan and such approval to the municipality whose service territory is
515 covered by such plan.

516 SECTION 71. (a) There is hereby established within the office of the governor a Clean
517 Energy Transition Commission to make recommendations to the governor and the general court
518 for legislation, regulations and policies to ensure a safe, just and expeditious transition in the
519 commonwealth from energy derived from fossil fuels to energy derived from clean, renewable
520 sources, in order to reach 100% reduction in greenhouse gas emissions below the 1990 level by
521 2050.

522 (b) Such commission shall be chaired by the lieutenant governor and shall consist of 25
523 members appointed or re-appointed by the governor for specific terms in consultation with the
524 president of the senate, the speaker of the house of representatives and the attorney general,
525 reflecting the cultural and geographical diversity of the commonwealth. Such members shall
526 include 2 representatives from the senate, 2 representatives from the house of representatives, the
527 attorney general, the secretary of energy and environmental affairs, the chairman of the public
528 utilities commission, the commissioner of the department of environmental protection, the
529 commissioner of the department of energy resources, 1 representative from the Metropolitan
530 Area Planning Council, 1 expert on solar energy technology and markets, 1 expert on wind
531 energy technology and markets, 1 expert on geothermal energy technology and markets, 1 expert
532 on energy efficiency initiatives, 1 representative of organized labor appointed from a list of three
533 qualified names submitted by the Massachusetts State Labor Council of the AFL-CIO, 1
534 representative from community-based organizations focused on environmental equity, 1
535 representative from community-based organizations focused on inter-generational energy equity,
536 1 representative from faith-based organizations focused on climate change, 1 representative from
537 youth organizations focused on climate change and 2 representatives from environmental
538 advocacy organizations. In addition to the members of the commission, there shall be 1 non-

539 voting ex-officio member from each of the following: 1 representative of an investor-owned
540 electric company, 1 representative of an investor-owned gas company, 1 representative of a
541 district energy company, 1 representative of a renewable energy company, 1 representative of the
542 Independent Service Operator - New England and 1 representative of the New England Clean
543 Energy Council. A vacancy on the commission shall be filled in the manner in which the
544 original appointment was made. Members of the commission shall receive no compensation for
545 their services. No voting member of the commission shall be employed by a for-profit company
546 that will directly benefit from decisions made by the commission.

547 (c) Such commission shall have such staff as is required, including an executive director
548 appointed by the governor, to carry out its functions and shall have funding from the
549 Massachusetts Renewable Energy Trust Fund to hire and convene such staff and experts as it
550 requires. The executive director with the approval of the lieutenant governor as chair of such
551 commission shall carry out the administrative work of the commission and shall organize
552 working groups to execute the mandates of such commission. Members of such working groups
553 shall be appointed by the chair of such commission upon the recommendations of members of
554 such commission and shall reflect the cultural and geographic diversity of the commonwealth
555 and shall include subject matter experts on the specific mandates of the commission.

556 (d) Such commission shall meet at minimum once every two months or more often as the
557 chair directs, shall set annual goals and shall annually hold public hearings throughout the
558 commonwealth that include opportunities for invited panelists as well as members of the public
559 to present testimony. Such commission may request from agencies of the commonwealth such
560 information and assistance as it may require, provided, further that such agencies are authorized
561 to designate staff and financial resources necessary to carry out the work of such commission.

562 Such commission shall provide an annual report by October 1 of each year to the governor and
563 the general court that includes its findings and recommendations for legislative, regulatory and
564 policy changes to ensure that by 2050 the commonwealth achieves a complete and just transition
565 from energy derived from fossil fuels to energy derived from non-emitting renewable sources of
566 energy. Such report shall include any updates to the commonwealth's clean energy transition
567 plan. In developing its findings and recommendations, such commission shall authorize and
568 review research related to its mandates.

569 (e) Such commission is charged with developing a comprehensive plan to ensure a safe,
570 just and expeditious transition in the commonwealth from energy derived from fossil fuels to
571 energy derived from clean, renewable sources, to reach 100% reduction in greenhouse gas
572 emissions by 2050 from the 1990 level. Such annually updated commonwealth clean energy
573 transition plan shall include but not be limited to:

574 (i) an annual status report of the generated, transmitted, distributed and purchased energy
575 in the commonwealth, and the associated emissions of such energy, prepared by the department
576 of energy resources. This report shall assemble and integrate existing ISO-NE plans and reports,
577 private utility industry plans, municipally owned and alternative energy generator reports,
578 renewable energy company and individual system generation data, transportation system data,
579 energy efficiency advisory council reports, and any other relevant existing reports or data on the
580 energy system of the commonwealth. Such status report shall summarize any available energy
581 use data by industry category. Such status report shall summarize resulting economic costs and
582 benefits for the commonwealth. Such status report shall report on any emerging challenges in the
583 commonwealth's energy system, and shall report on any emerging technologies or innovative

584 solutions that may impact the Commonwealth's energy system or prove useful to meeting energy
585 goals;

586 (ii) an integrated inclusive multi-year energy system transition plan for moving from the
587 latest annual status report to 100% reduction in greenhouse gas emissions by 2050. Such plan
588 shall consider, but not be limited to, public health and safety impacts, economic and equity
589 impacts, the existing and projected demographics of the commonwealth, the built environment,
590 projected impacts of climate change including weather pattern shifts, and stability, resilience,
591 and adaptation for the social, economic, and ecological systems. Such plan shall provide for
592 energy that is reliable, accessible and cost-effective, meeting energy needs through conservation,
593 energy efficiency, energy system optimization, and renewable sources of energy to the maximum
594 extent feasible and complying with the mandates set forth in Chapter 169 of the Acts of 2008;
595 Chapter 298 of the Acts of 2008; Chapter 149 of the Acts of 2014; Chapter 251 of the Acts of
596 2014; Chapter 188 of the Acts of 2016; Chapter 227 of the Acts of 2018; and this Act. Such plan
597 shall include an annual schedule with renewable energy benchmarks for each energy source,
598 utility ,including private, public and municipally owned, energy industry, energy use industry,
599 and energy industry related work force regarding transition and & retraining. Such plan shall
600 include an analysis of unmet benchmarks of the previous year including, but not limited to,
601 identification of barriers to success and potential solutions;

602 (iii) resulting annual recommendations to the governor and to the general court for
603 expeditious adoption of legislative changes, regulatory changes by state agencies, resource
604 allocations needed to ensure that goals are met, and prioritized pilot studies needed to test
605 innovative solutions.

606 (e) Such commission is a standing commission whose membership and mandates may
607 change but shall continue to function until the commonwealth achieves 100% reduction in
608 greenhouse gas emissions below the 1990 level.