

SENATE No. 2136

The Commonwealth of Massachusetts

PRESENTED BY:

Joseph A. Boncore

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 transitioning Massachusetts to clean electricity, heating, and transportation.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	
<i>Joseph A. Boncore</i>	<i>First Suffolk and Middlesex</i>	
<i>Jack Patrick Lewis</i>	<i>7th Middlesex</i>	<i>2/23/2021</i>
<i>Joanne M. Comerford</i>	<i>Hampshire, Franklin and Worcester</i>	<i>2/24/2021</i>
<i>Jason M. Lewis</i>	<i>Fifth Middlesex</i>	<i>2/25/2021</i>
<i>Carmine Lawrence Gentile</i>	<i>13th Middlesex</i>	<i>3/1/2021</i>
<i>Thomas M. Stanley</i>	<i>9th Middlesex</i>	<i>3/8/2021</i>
<i>Rebecca L. Rausch</i>	<i>Norfolk, Bristol and Middlesex</i>	<i>3/8/2021</i>
<i>John H. Rogers</i>	<i>12th Norfolk</i>	<i>3/8/2021</i>
<i>Nick Collins</i>	<i>First Suffolk</i>	<i>3/11/2021</i>
<i>Mary S. Keefe</i>	<i>15th Worcester</i>	<i>3/15/2021</i>
<i>Brendan P. Crighton</i>	<i>Third Essex</i>	<i>3/15/2021</i>
<i>Sal N. DiDomenico</i>	<i>Middlesex and Suffolk</i>	<i>4/1/2021</i>
<i>Harriette L. Chandler</i>	<i>First Worcester</i>	<i>4/9/2021</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>	<i>4/16/2021</i>
<i>Patrick M. O'Connor</i>	<i>Plymouth and Norfolk</i>	<i>4/16/2021</i>
<i>Adam G. Hinds</i>	<i>Berkshire, Hampshire, Franklin and Hampden</i>	<i>4/26/2021</i>
<i>Patricia D. Jehlen</i>	<i>Second Middlesex</i>	<i>4/26/2021</i>

<i>Michael O. Moore</i>	<i>Second Worcester</i>	<i>4/26/2021</i>
<i>Julian Cyr</i>	<i>Cape and Islands</i>	<i>5/12/2021</i>
<i>John Barrett, III</i>	<i>1st Berkshire</i>	<i>5/12/2021</i>
<i>Cindy F. Friedman</i>	<i>Fourth Middlesex</i>	<i>7/29/2021</i>
<i>Sonia Chang-Diaz</i>	<i>Second Suffolk</i>	<i>12/2/2021</i>
<i>Lydia Edwards</i>	<i>First Suffolk and Middlesex</i>	<i>1/31/2022</i>

SENATE No. 2136

By Mr. Boncore, a petition (accompanied by bill, Senate, No. 2136) of Joseph A. Boncore, Jack Patrick Lewis, Joanne M. Comerford, Jason M. Lewis and other members of the General Court for legislation to transition Massachusetts to clean electricity, heating, and transportation. Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Second General Court
(2021-2022)**

An Act transitioning Massachusetts to clean electricity, heating, and transportation.

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. The purpose of this act is to transition the commonwealth to 100 per cent
2 clean energy for electricity by 2035 and 100 per cent clean energy for the building sector and
3 transportation sector by 2045 in order to: (1) protect the health and safety of all residents of the
4 commonwealth by eliminating pollution that is contaminating our air, water and land, and
5 changing our climate in dangerous ways; (2) maximize the ability of the commonwealth to meet
6 the greenhouse gas emissions limits adopted under chapter 21N of the General Laws; (3)
7 improve quality of life and economic well-being for all, with an emphasis on environmental
8 justice populations that have been disproportionately affected by pollution and energy costs; (4)
9 increase energy security and energy affordability by reducing the commonwealth’s reliance on
10 imported fuels and increasing renewable energy generation in the region; and (5) stimulate
11 investment and create local jobs by harnessing the commonwealth’s skilled workforce, business
12 leadership and academic institutions to advance renewable energy technologies.

13 SECTION 2. The General Laws are hereby amended by inserting after chapter 25C the
14 following chapter:-

15 CHAPTER 25D.

16 100 PERCENT CLEAN COMMONWEALTH ACT.

17 Section 1.

18 As used in this chapter the following words shall have the following meanings unless the
19 context clearly requires otherwise:-

20 “Building sector,” all buildings in the commonwealth; provided, that for the purposes of
21 this chapter a building’s energy use shall include only the energy used to provide electricity,
22 space heating and cooling, and water heating and cooling, and shall not include energy used for
23 heavy industrial activities.

24 “Clean electricity,” electricity that is either renewable electricity or generated by another
25 source that emits virtually no greenhouse gases or other harmful pollutants in normal operation.
26 Electricity generated from wood biomass and waste-to-energy shall not be considered clean
27 electricity.

28 “Clean energy,” either: a) clean electricity; b) non-electric energy from other sources that
29 emit virtually no greenhouse gases or other harmful pollutants in normal operation, using
30 technologies such as solar thermal heating or geothermal heating and cooling; or c) avoided
31 energy use or reduced peak energy demand through energy efficiency, energy conservation,
32 demand response, an increase in public transit ridership or carpooling, a reduction in unnecessary
33 travel, or the use of nonmotorized methods of transportation such as walking and bicycling.

34 "Environmental justice population", a neighborhood that meets 1 or more of the
35 following criteria: (i) the annual median household income is not more than 65 per cent of the
36 statewide annual median household income; (ii) minorities comprise 40 per cent or more of the
37 population; (iii) 25 per cent or more of households lack English language proficiency; or (iv)
38 minorities comprise 25 per cent or more of the population and the annual median household
39 income of the municipality in which the neighborhood is located does not exceed 150 per cent of
40 the statewide annual median household income; provided, however, that for a neighborhood that
41 does not meet said criteria, but a geographic portion of that neighborhood meets at least 1
42 criterion, the secretary may designate that geographic portion as an environmental justice
43 population upon the petition of at least 10 residents of the geographic portion of that
44 neighborhood meeting any such criteria; provided further, that the secretary may determine that a
45 neighborhood, including any geographic portion thereof, shall not be designated an
46 environmental justice population upon finding that: (A) the annual median household income of
47 that neighborhood is greater than 125 per cent of the statewide median household income; (B) a
48 majority of persons age 25 and older in that neighborhood have a college education; (C) the
49 neighborhood does not bear an unfair burden of environmental pollution; and (D) the
50 neighborhood has more than limited access to natural resources, including open spaces and water
51 resources, playgrounds and other constructed outdoor recreational facilities and venues.

52 "Neighborhood," a census block group as defined by the United States Census Bureau,
53 excluding people who live in college dormitories and people who are under formally authorized,
54 supervised care or custody, including federal, state or county prisons.

55 "Renewable electricity," electricity generated by Class I or Class II renewable energy
56 generating sources, as defined in section 11F of chapter 25A of the General Laws.

57 “Secretary,” the secretary of energy and environmental affairs.

58 “Transportation sector,” the movement of people and goods throughout the
59 commonwealth; provided, that for the purposes of this chapter the transportation sector shall not
60 include aviation, ocean freight, or ocean passenger travel.

61 Section 2.

62 (a) By 2035, 100 per cent of the electricity used by all residents, institutions, businesses,
63 state and municipal agencies, and other entities operating within the borders of the
64 commonwealth shall be clean electricity, and at least 80 per cent of that electricity shall be
65 renewable electricity.

66 (b) By 2045, 100 per cent of the energy used in the building sector and transportation
67 sector within the borders of the commonwealth shall be clean energy.

68 (c) In achieving these objectives, the commonwealth and its agencies shall prioritize: (1)
69 sources of renewable electricity that are located in Massachusetts or other New England states;
70 (2) sources of renewable electricity that represent additional renewable energy generating
71 capacity added to the electric grid; (3) non-emitting sources of renewable electricity; (4) models
72 for local and community ownership of renewable electricity generation and energy storage; and
73 (5) reductions in energy consumption through efficiency and conservation measures to the
74 greatest extent practicable. In all of its plans to achieve 100 per cent clean energy, the
75 commonwealth and its agencies shall prioritize bringing direct health and financial benefits to
76 environmental justice populations.

77 Section 3.

78 (a) The secretary shall establish the council for the clean energy transition not later than
79 90 days from the passage of this act.

80 (b) The council shall be chaired by the secretary or the secretary's designee, and shall
81 include the following individuals or their designees: (1) the commissioners of the department of
82 environmental protection and the department of energy resources; (2) the chair of the department
83 of public utilities; (3) the chief executive officer of the Massachusetts Clean Energy Center; (4)
84 the secretaries of administration and finance, education, health and human services, housing and
85 economic development, labor and workforce development, public safety and security,
86 transportation and public works, and any other executive office subsequently created; (5) the
87 attorney general, the treasurer and receiver general, the secretary of the commonwealth, and the
88 state auditor; (6) the president of the University of Massachusetts; (7) a member designated by
89 the secretary of education to represent the community college system; (8) a member designated
90 by the secretary of education to represent the the state university system; (9) the general manager
91 of the Massachusetts Bay Transportation Authority; and (10) a member designated by the
92 secretary of transportation to represent the regional transit authorities. The governor may appoint
93 additional representatives from state agencies or quasi-public agencies to the council.

94 (c) Each executive office and quasi-public agency shall submit a report to the council
95 describing how the laws, regulations, programs, and activities under its jurisdiction can be
96 modified in order to facilitate the commonwealth's transition to 100 per cent clean energy, and
97 how such modifications may help achieve the office or agency's other objectives. The secretary
98 shall publish the council's findings within 6 months of the first meeting of the council. The
99 secretary and the council shall review and update these findings every 3 years from the date of
100 initial publication.

101 (d) Within 12 months from the effective date of this act, the secretary, acting with the
102 council’s advice, shall determine a date not later than January 1, 2035, by which the operations
103 of state government shall be powered with 100 percent clean energy for electricity, space heating
104 and cooling, water heating and cooling, and transportation, and such determination shall be
105 legally binding. Within 18 months of the effective date of this act, each executive office and
106 quasi-public agency shall present a plan to meet this requirement for its operations. Each
107 executive office and quasi-public agency shall report to the council on its progress toward this
108 requirement and update its plan annually.

109 (e) The council shall meet at least 4 times each year to review progress in modifying
110 laws, regulations, programs, and activities to accelerate the transition to 100 per cent clean
111 energy for the commonwealth and for the operations of state government. These meetings shall
112 be open to members of the public and shall provide opportunities for public comment. Meeting
113 times and locations shall be set to maximize opportunities for public engagement, and at least 1
114 meeting shall be held in a neighborhood with an environmental justice population each year.

115 Section 4.

116 (a) The council for the clean energy transition shall be supported in its work by an
117 advisory committee. Members of the advisory committee shall be appointed by the secretary and
118 shall include the following individuals:

119 (1) experts knowledgeable in (i) renewable energy and energy storage, (ii) energy
120 efficiency, (iii) architecture, building engineering and construction, (iv) clean heating
121 technologies, (v) zero emission vehicles, (vi) public transportation, (vii) nonmotorized
122 transportation, (viii) affordable housing, and (ix) environmental justice;

123 (2) representatives of (i) the Massachusetts AFL-CIO, (ii) the Massachusetts Building
124 Trades Council, (iii) an environmental organization, (iv) an environmental justice organization,
125 (v) a renewable energy business, (vi) an economic development organization, and (vii) a
126 community development corporation;

127 (3) youth representatives, including one individual between 14 to 18 years of age and one
128 individual between 19 to 25 years of age; and

129 (4) any other individuals appointed by the secretary.

130 (b) The advisory committee shall meet at least 4 times each year separately from the
131 council, and shall be invited to attend all council meetings. Meetings of the advisory committee
132 shall be open to members of the public and shall provide opportunities for public comment.
133 Meeting times and locations shall be set to maximize opportunities for public engagement, and at
134 least 1 meeting shall be held in a neighborhood with an environmental justice population each
135 year.

136 Section 5.

137 (a) There shall be an office of clean energy equity in the executive office of energy and
138 environmental affairs. The office shall oversee the equitable deployment of energy efficiency,
139 renewable electricity, clean transportation, and clean heating technologies, particularly in
140 environmental justice populations, in programs established under this chapter, sections 11F, 11F
141 1/4 and 18 of chapter 25A, section 77 of chapter 6C, and other provisions of the General Laws.

142 (b) The office shall ensure that the tangible benefits of clean energy at the household and
143 community level, including clean energy asset ownership, energy cost savings, pollution

144 reductions, public health benefits, and employment and economic opportunities, are available
145 equitably to all residents of the commonwealth, and particularly in environmental justice
146 populations. The office shall ensure that a certain percentage of projects completed under the
147 commonwealth's clean energy programs benefit the residents of environmental justice
148 populations, and that percentage shall be no less than the percentage of residents of the
149 commonwealth who live in environmental justice populations.

150 (c) The office shall work with the Massachusetts Clean Energy Center and the just
151 transition office in the department of career services to increase the availability of workforce
152 development programs for residents of environmental justice populations to work in clean energy
153 industries.

154 Section 6.

155 (a) The commonwealth and its agencies shall take all actions necessary to achieve the
156 objectives of this chapter. The provisions of this chapter shall be legally enforceable by any
157 citizen of the commonwealth.

158 (b) The secretary may grant exemptions to the requirements of this chapter, for a period
159 of no longer than 3 years, for emergency services and for other energy uses for which there is no
160 feasible clean energy option. The secretary may renew exemptions for subsequent 3-year
161 periods. The secretary shall hold at least one public hearing before granting or renewing an
162 exemption.

163 (c) In promulgating regulations to implement the requirements of this chapter, the
164 commonwealth and its agencies shall consider how to minimize costs and maximize economic,

165 social, public health, and environmental benefits for residents of environmental justice
166 populations.

167 SECTION 3. Chapter 23 of the General Laws is hereby amended by adding the following
168 section:-

169 Section 26. Just Transition to Clean Energy

170 (a) In the department of career services, within the executive office of labor and
171 workforce development, there shall be a just transition office. The office shall ensure that
172 workers employed in the energy sector who are displaced due to efforts by the commonwealth or
173 the private sector to reduce greenhouse gas emissions or transition from fossil fuels to clean
174 energy have immediate access to employment and training opportunities in clean energy
175 industries and related fields. The just transition office shall also work with clean energy
176 businesses to ensure they act as responsible employers to further the commonwealth's workforce
177 and economic development goals. The just transition office shall also work to increase access to
178 employment and training opportunities in clean energy industries and related fields for residents
179 of environmental justice populations.

180 (b) The secretary of labor and workforce development shall appoint the director of the
181 office.

182 (c) Within the office there shall be a just transition advisory committee consisting of: (1)
183 the director of the office; (2) the secretary of labor and workforce development and the
184 commissioner of the department of energy resources, or their designees; (3) the director of the
185 office of clean energy equity in the executive office of energy and environmental affairs; (4) a
186 representative of employers in the gas utility sector appointed by the governor; (5) a

187 representative of employers in the electric power generation sector appointed by the governor;
188 (6) a representative of employers in the renewable electricity sector appointed by the governor;
189 (7) a representative of employers in the energy efficiency sector appointed by the governor; (8) a
190 representative of employers in the clean transportation sector appointed by the governor; (9) a
191 representative of employers in the clean heating sector appointed by the governor; (10) a
192 representative of employees in the gas utility sector appointed by the president of the
193 Massachusetts AFL-CIO; (11) a representative of employees in the electric power generation
194 sector appointed by the president of the Massachusetts AFL-CIO; (12) two representatives of
195 employees in the clean energy sector appointed by the president of the Massachusetts AFL-CIO;
196 (13) a representative of employees in the transportation sector appointed by the president of the
197 Massachusetts AFL-CIO; (14) the president of the Massachusetts Building Trades Council or a
198 designee, and (15) two representatives of environmental justice populations appointed by the
199 director of the office of clean energy equity.

200 (d) The committee shall develop a just transition plan for the energy sector that identifies
201 workers currently employed in the sector by industry, trade, and job classification, and contains
202 relevant information including, but not limited to, current wage and benefit packages and current
203 licensing, certification and training requirements. The committee, through the just transition
204 plan, shall recommend education and training programs to enhance re-employment opportunities
205 within the energy sector, and services to support dislocated workers displaced from jobs in the
206 energy sector as a result of emissions-reducing policies and advances in clean energy
207 technologies. The just transition plan shall also recommend actions to increase opportunities for
208 residents of environmental justice populations to work in clean energy industries.

209 (e) The just transition plan shall include provisions to:

210 (1) Administer climate adjustment assistance benefits that are similar in type, amount,
211 and duration to federal Trade Adjustment Assistance Benefits available pursuant to 20 CFR
212 617.20–617.49;

213 (2) Educate dislocated workers, in collaboration with employers of dislocated workers
214 and relevant labor unions, on re-employment or training opportunities, and how to apply for
215 climate adjustment assistance benefits;

216 (3) Provide training, cross-training, and retraining to workers displaced by gas
217 infrastructure loss in the commonwealth’s local distribution companies and related businesses;

218 (4) Address the workforce development challenges of the fossil fuel energy sector’s
219 shrinking workforce over the course of the commonwealth’s 25-year transition to a clean energy
220 economy;

221 (5) Incentivize the hiring of displaced energy sector workers with utilities, clean energy
222 industries, and related industries;

223 (6) Work with the Massachusetts Clean Energy Center to ensure that training and
224 employment opportunities for displaced energy sector workers are included in their initiatives,
225 incentives, funding opportunities, and projects;

226 (7) Work with the department of public utilities and other agencies regulating the energy
227 sector within the commonwealth to coordinate just transition initiatives, complementing the other
228 regulatory priorities of those agencies;

229 (8) Establish a fund to implement the just transition plan and its components, including
230 potential sources for sustainable short-term and long-term funding;

231 (9) Develop requirements, including the submission of a workforce reduction plan, for
232 energy sector employers that are closing a facility or significantly reducing their workforces as a
233 result of efforts by the commonwealth or the private sector to reduce greenhouse gas emissions
234 or transition from fossil fuels to clean energy; and

235 (10) Increase access to employment and training opportunities in clean energy industries
236 and related fields for residents of environmental justice populations.

237 (f) Employers described in paragraph (9) of subsection (e) shall submit a workforce
238 reduction plan to the office. Workforce reduction plans shall be subject to section 10 of chapter
239 66 and shall include:

240 (1) The reasons for the workforce reduction or facility closure;

241 (2) The total number of workers by job classification and by geographic assignment
242 employed by the employer;

243 (3) The total number of workers whose existing jobs who will be retained, by job
244 classification and geographic location;

245 (4) The total number of workers whose existing jobs will be eliminated by the workforce
246 reduction or the closure of a facility, by job classification and geographic location;

247 (5) Whether each classification of workers whose jobs are being eliminated will be
248 offered employment in any other job classification or capacity by the employer, how many
249 employees in each classification will be offered employment, and whether the replacement
250 employment offered will provide comparable wages, benefits, and working conditions;

251 (6) Whether the employer is offering severance or early retirement benefits to impacted
252 workers, the value of the severance or early retirement benefits, whether the severance or early
253 retirement benefits are being provided to all or certain classes of workers, and how many
254 impacted workers intend to utilize these offerings;

255 (7) Whether the employer plans to transfer the work to a separate facility, enter a
256 contracting agreement for work previously performed by company employees, or otherwise
257 outsource work previously performed by company employees; and

258 (8) Whether the employer is a recipient of loans, grants, tax increment financing, or any
259 other financial incentive from the commonwealth, its independent state agencies, departments, or
260 corporations, or any municipality within the last five years.

261 SECTION 4.

262 (a) Section 11F of chapter 25A of the General Laws, as appearing in the 2018 Official
263 Edition, is hereby amended by striking out the words “2029; and (5) an additional 1 per cent of
264 sales every year thereafter” and inserting in place thereof the following words:- 2022; (5) an
265 additional 3 per cent of sales each year thereafter until December 31, 2025; (6) an additional 4
266 per cent of sales each year thereafter until December 31, 2028; (7) an additional 5 per cent of
267 sales each year thereafter until December 31, 2031; (8) an additional 6 per cent of sales each year
268 thereafter until December 31, 2034; and (9) a total of at least 80 per cent of sales in 2035 and
269 every year thereafter.

270 (b) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
271 striking out the sixth paragraph of subsection (b).

272 (c) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
273 striking out, in the eighth paragraph of subsection (b), the words “wood, by-products,” and
274 inserting in place thereof the following word:- “by-products.”

275 (d) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
276 striking out, in subsection (b), the words “The department may also consider any previously
277 operational biomass facility retrofitted with advanced conversion technologies as a renewable
278 energy generating source.”

279 (e) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
280 striking out, in the seventh paragraph of subsection (c), the words “wood, by-products,” and
281 inserting in place thereof the following word:- “by-products.”

282 (f) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
283 striking out the seventh paragraph of subsection (d).

284 (g) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
285 striking out, in the eighth paragraph of subsection (d), the words “wood, by-products,” and
286 inserting in place thereof the following word:- “by-products.”

287 (h) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
288 inserting after the word “power,” in subsection (f), the following words:- “and provided further,
289 that a technology or technology category may only be added to a list if it emits virtually no
290 greenhouse gases or other harmful pollutants in normal operation, generates electricity from a
291 source that is inexhaustible or practically inexhaustible, is safe, and uses resources efficiently.”

292 (i) Said section 11F of said chapter 25A, as so appearing, is hereby further amended by
293 inserting after the words “shall be established by the department,” in subsection (g), the
294 following words:- “, and shall be at least 15 per cent of additional renewable energy kilowatt-
295 hours sales required under subsection (a) after December 31, 2022.”

296 SECTION 5. Chapter 25A of the General Laws is hereby amended by inserting after
297 section 11F the following section:-

298 Section 11F 1/4. 100 Percent Clean Electricity.

299 (a) No later than January 1, 2035, the department of energy resources shall establish a
300 clean electricity standard for all retail electricity suppliers selling electricity to end-use customers
301 in the commonwealth. The clean electricity standard for 2035 and each year thereafter shall be
302 100 per cent of kilowatt-hours sales to end-use customers in the commonwealth. Nothing in this
303 section shall prohibit the department or other state agencies from establishing a clean electricity
304 standard or enforcing an existing requirement similar to the clean electricity standard prior to
305 2035.

306 (b) Retail electricity suppliers shall demonstrate compliance with the clean electricity
307 standard with: (1) renewable energy certificates from Class I or Class II renewable energy
308 generating sources, as defined in section 11F of this chapter; or (2) clean energy certificates from
309 other sources generating clean electricity as defined in chapter 25D. Such certificates shall be
310 retired by the retail electricity suppliers and not sold or assigned to other end users in the
311 commonwealth or elsewhere.

312 (c) In 2032 and every 3 years thereafter, the department of energy resources shall
313 evaluate whether it is feasible to require retail electricity suppliers to obtain more than 80 per

314 cent of the electricity provided to end-use customers from Class I renewable energy generating
315 sources, as defined in section 11F of this chapter. The department may require retail electricity
316 suppliers to obtain a higher percentage of electricity from Class I renewable energy generating
317 sources than is required in section 11F, up to 100 per cent, if the department determines that
318 doing so is feasible, furthers the interests of the commonwealth and its citizens, and will not
319 impose an undue burden on ratepayers. Prior to making this determination, the department shall
320 hold at least one public hearing.

321 (d) Every municipal lighting plant shall provide a minimum percentage of kilowatt-hours
322 sales to end-use customers from Class I renewable energy generating sources, according to the
323 following schedule: (1) at least 20 per cent between January 1, 2025, and December 31, 2029;
324 (2) at least 50 per cent between January 1, 2030, and December 31, 2034; and (3) at least 80 per
325 cent in 2035 and every year thereafter. Every municipal light plant shall provide 100 per cent
326 clean electricity, as defined in chapter 25D, to its customers in 2035 and every year thereafter.

327 (e) Each municipal light plant shall file a plan with the department no later than
328 December 31, 2023, indicating how it will satisfy the requirements of subsection (d), including
329 annual benchmarks. A municipal lighting plant may not count renewable electricity or clean
330 electricity it has generated or purchased toward this requirement if the renewable or clean
331 attributes of that electricity have been claimed by another utility or entity.

332 (f) The department of energy resources shall take all actions necessary to achieve the
333 objectives of this section. The provisions of this section shall be legally enforceable by any
334 citizen of the commonwealth.

335 (g) The department of energy resources may grant exemptions to the requirements of this
336 section, for a period of no longer than 3 years, for emergency services and for other energy uses
337 for which there is no feasible clean energy option. The department may renew exemptions for
338 subsequent 3-year periods. The department shall hold at least one public hearing before granting
339 or renewing an exemption.

340 (h) In promulgating regulations to implement the requirements of this section, the
341 department shall consider how to minimize costs and maximize economic, social, public health,
342 and environmental benefits for residents of environmental justice populations, as defined in
343 chapter 25D.

344 SECTION 6. Chapter 25A of the General Laws is hereby amended by adding the
345 following section:-

346 Section 18. 100 Percent Clean Buildings.

347 (a) Beginning January 1, 2025, all new buildings built in the commonwealth shall only
348 use clean energy technologies, as defined in chapter 25D, for space heating and cooling and
349 water heating and cooling, and shall be highly energy efficient, including a building envelope
350 that meets passive house standards and efficient appliances, lighting fixtures, and plumbing
351 fixtures.

352 (b) The department of energy resources may delay the requirements of subsection (a)
353 until January 1, 2030, for specific types of buildings; provided, that detached one and two-family
354 dwellings, multiple single-family dwellings not more than three stories in height, and
355 commercial buildings consisting of less than 20,000 square feet of gross floor area shall not be
356 granted a delay.

357 (c) The department of energy resources shall develop and adopt amendments to the state
358 building code, in consultation with the board of building regulations and standards, to enforce the
359 requirements of subsection (a).

360 (d) The department of energy resources shall establish a clean heating trust fund to
361 subsidize the conversion of existing residential and commercial buildings to clean energy
362 technologies, as defined in chapter 25D, for space heating and cooling and water heating and
363 cooling. The department shall designate a dedicated funding source for the trust fund, accept
364 funds from other sources into the trust fund as available, establish procedures to disburse funds
365 to building owners and tenants, and develop a public education and outreach program to educate
366 building owners and tenants about clean energy technologies for heating.

367 (e) Between January 1, 2021 and December 31, 2030, the commonwealth, electric and
368 gas distribution companies, and municipal aggregators with certified clean energy plans shall
369 retrofit no fewer than 1,000,000 residential units and 300,000,000 square feet of commercial real
370 estate to be highly energy efficient and to use clean energy technologies, as defined in chapter
371 25D, for space heating and cooling and water heating and cooling. The department of energy
372 resources shall propose revisions and additions to the three-year energy efficiency plans adopted
373 under chapter 25 to meet these requirements, in consultation with the department of public
374 utilities, the electric and gas distribution companies, and municipal aggregators with certified
375 clean energy plans. The department of public utilities shall adopt such revisions and additions to
376 the three-year energy efficiency plans as are necessary to achieve the objectives of this section.

377 (f) After January 1, 2025, public or ratepayer funds shall not be used to subsidize the
378 installation of combustion-based heating systems.

379 (g) Nothing in this section shall prohibit the use of wood heating in residential buildings.

380 (h) The department of energy resources and the department of public utilities shall take
381 all actions necessary to achieve the objectives of this section. The provisions of this section shall
382 be legally enforceable by any citizen of the commonwealth.

383 (i) The department of energy resources may grant exemptions to the requirements of this
384 section, for a period of no longer than 3 years, for emergency services and for other energy uses
385 for which there is no feasible clean energy option. The department may renew exemptions for
386 subsequent 3-year periods. The department shall hold at least one public hearing before granting
387 or renewing an exemption.

388 (j) In promulgating regulations to implement the requirements of this section, the
389 department of energy resources and the department of public utilities shall consider how to
390 minimize costs and maximize economic, social, public health, and environmental benefits for
391 residents of environmental justice populations, as defined in chapter 25D.

392 SECTION 7. Chapter 6C of the General Laws is hereby amended by inserting after
393 section 76 the following section:-

394 Section 77. 100 Percent Clean Transportation.

395 (a) No later than 2035, and each year thereafter, 100 per cent of the light-duty vehicles
396 sold in the commonwealth shall be zero emission vehicles. In 2030, at least 30 per cent of the
397 medium-duty and heavy-duty vehicles sold in the commonwealth shall be zero emission
398 vehicles, and the share of medium-duty and heavy-duty vehicle sales that are zero emission
399 vehicles shall increase to 100 per cent over time.

400 (b) The department of environmental protection shall adopt any revisions to the
401 California Low Emission Vehicle program authorized in chapter 111, sections 142A–142M, that
402 will help achieve the objectives of subsection (a). The department of environmental protection
403 and the department of transportation shall take all other actions necessary to achieve these
404 objectives, such as providing incentives for electric vehicle or other zero emission vehicle
405 purchases and adopting regional mechanisms authorized in section 7 of chapter 21N.

406 (c) All buses operated by the Massachusetts Bay Transportation Authority shall be zero
407 emission vehicles by January 1, 2030. All buses operated by regional transit authorities created
408 under chapter 161B shall be zero emission vehicles by January 1, 2035.

409 (d) The Massachusetts Bay Transportation Authority shall convert at least three
410 commuter rail lines to run on electric power by 2026, and convert all of its commuter rail lines to
411 run on electric power by 2035. Where feasible, the Massachusetts Bay Transportation Authority
412 shall combine the electrification of commuter rail lines with other infrastructure improvements
413 enabling fast, frequent, all-day transit service to communities throughout the Greater Boston
414 metropolitan region, including high-level platforms; the addition of second platforms; track,
415 signal, and switch upgrades; the addition of double track and triple track sections; and the
416 construction of new stations.

417 (e) There shall be a main streets office within the department of transportation. The office
418 shall provide technical assistance, training and funding for municipalities to reduce
419 transportation sector energy use and strengthen and revitalize their historic commercial districts
420 by: (1) improving pedestrian and bicycle infrastructure within commercial districts and
421 connecting commercial districts with other neighborhoods; (2) creating bus-only lanes to

422 enhance transit service to, from, and within commercial districts; (3) where appropriate, setting
423 aside portions of streets in commercial districts as pedestrian-only zones; (4) installing seating,
424 plantings, and other streetscape improvements in commercial districts; (5) modifying zoning
425 codes to allow for and encourage multi-family, mixed-use and transit-oriented development in
426 and near commercial districts; and (6) taking other actions to promote vibrant walkable,
427 bikeable, and transit-accessible neighborhoods where people live, work, shop, and socialize. The
428 main streets office shall designate a municipality as a main streets community when it has
429 demonstrated a commitment to the goals of the program by completing certain actions or
430 adopting certain bylaws and policies as determined by the office. The main streets office, other
431 offices in the department of transportation, and other state agencies shall offer enhanced funding
432 opportunities for main streets communities.

433 (f) The department of transportation and the department of environmental protection shall
434 take all actions necessary to achieve the objectives of this section. The provisions of this section
435 shall be legally enforceable by any citizen of the commonwealth.

436 (g) The department of transportation and the department of environmental protection may
437 grant exemptions to the requirements of this section, for a period of no longer than 3 years, for
438 emergency services and for other energy uses for which there is no feasible clean energy option.
439 The departments shall consider how the requirements of this section may apply to vehicles
440 traveling into the commonwealth from other states, and may exempt those vehicles from the
441 requirements of this section if those vehicles are not registered to owners in the commonwealth.
442 The departments may renew exemptions for subsequent 3-year periods. The departments shall
443 hold at least one public hearing before granting or renewing an exemption.

444 (i) In promulgating regulations to implement the requirements of this section, the
445 department of transportation and the department of environmental protection shall consider how
446 to minimize costs and maximize economic, social, public health, and environmental benefits for
447 residents of environmental justice populations, as defined in chapter 25D.

448 SECTION 8. The provisions of this act shall become effective 90 days from the passage
449 of this act, except where otherwise specified.