

SENATE No. 2121

The Commonwealth of Massachusetts

PRESENTED BY:

James B. Eldridge

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 investing in a prosperous clean commonwealth by 2030.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>	
<i>Lindsay N. Sabadosa</i>	<i>1st Hampshire</i>	<i>2/1/2023</i>
<i>Vanna Howard</i>	<i>17th Middlesex</i>	<i>2/1/2023</i>
<i>Danillo A. Sena</i>	<i>37th Middlesex</i>	<i>2/23/2023</i>
<i>Rebecca L. Rausch</i>	<i>Norfolk, Worcester and Middlesex</i>	<i>7/11/2023</i>

SENATE No. 2121

By Mr. Eldridge, a petition (accompanied by bill, Senate, No. 2121) of James B. Eldridge, Lindsay N. Sabadosa, Vanna Howard and Danillo A. Sena for legislation to invest in a prosperous clean commonwealth by 2030. Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Third General Court
(2023-2024)**

An Act investing in a prosperous clean commonwealth by 2030.

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 commonwealth should lead the nation by transitioning to 100%
2 renewable electricity and net zero carbon emissions across all sectors by 2030. Climate scientists
3 estimate that we must halve global emissions by 2030 to stop catastrophic climate change;
4 therefore, an equitable and sustainable future necessitates that the commonwealth aggressively
5 transition energy use entirely away from fossil fuels to renewable energy generation. However,
6 climate change is intertwined with social inequities that will not be solved by simply
7 transitioning to renewable energy. To fully address the scope of the climate crisis, all of the
8 interdependencies of the crisis must be acknowledged and addressed, such that: (1) the laws and
9 energy policies of the commonwealth are aligned with the scientific consensus around the
10 climate crisis; (2) all have access to clean air, water, and land; (3) we center justice and equity
11 for environmental justice communities, frontline and fenceline communities - particularly poor,
12 Black and brown, and indigenous communities - and other populations that have been
13 disproportionately affected by the climate crisis; (4) the commonwealth increases energy security

14 and democratization by eliminating the use of fossil fuels and maximizing renewable energy
15 production in our region; and (5) there is a just transition for workers amidst this energy
16 transition by creating green, local, unionized jobs with wage and benefit parity and by
17 prioritizing workers affected by the transition for green job training programs.

18 SECTION 2. Section 1 of Chapter 21N of the General Laws, is hereby amended by
19 striking out the definition of “direct emissions” and inserting in place thereof the following
20 definition:-

21 "Direct emissions", emissions from sources that are owned or operated, in whole or in
22 part, by any person, entity or facility in the commonwealth including, but not limited to,
23 emissions from any transportation vehicle; building; structure; fugitive source; reduction in
24 carbon carrying capacity associated with land use; resource extraction or development;
25 distribution system; or residential, commercial, institutional, industrial, waste management,
26 agricultural, or manufacturing process.

27 SECTION 3. Said section 1 of said chapter 21N, as so appearing, is hereby further
28 amended by inserting the following 4 definitions:-

29 “Negative emissions”, removal of greenhouse gases from the atmosphere measured in
30 tons of carbon dioxide equivalent, reported in the greenhouse gas registry in accordance with
31 subsection a of section 2 of chapter 21N.

32 “Net statewide greenhouse gas emissions”, statewide greenhouse gas emissions minus
33 negative emissions.

34 “Land carbon carrying capacity”, the capacity of land to sequester greenhouse gases
35 measured in tons of carbon dioxide equivalent, including that embodied in organic matter
36 contained in forests, wetlands or soils.

37 “Changes in land use resulting in a reduction in carbon carrying capacity”, any process
38 which causes a reduction in land carbon carrying capacity including development, deforestation,
39 draining, landfill, or resource extraction.

40 SECTION 4: Section 2 of said chapter 21N, as so appearing, is hereby amended by
41 striking out subsection (a) and inserting in place thereof the following subsection:-

42 (a) The department shall monitor and regulate emissions of greenhouse gases with the
43 goal of reducing those emissions. The department shall adopt regulations to require the reporting
44 and verification of statewide greenhouse gas emissions and to monitor and enforce compliance
45 with this chapter. The regulations shall: (1) establish a greenhouse gas registry and reporting
46 system for greenhouse gas emission sources; provided, however, that in establishing the
47 greenhouse gas registry and reporting system, the department may collaborate with other states
48 or a regional consortium; (2) annually require the owner or operator of any facility that is
49 required to report air emissions data to the department pursuant to Title V of the federal Clean
50 Air Act and that has stationary emissions sources that emit greenhouse gases to report annually
51 to the regional registry direct stack emissions of greenhouse gases from such sources; (3) require
52 the owner or operator of a facility that has stationary emissions sources that emit greenhouse
53 gases in excess of 5,000 tons of greenhouse gases per year in carbon dioxide equivalents to
54 report annually to the registry direct emissions of greenhouse gases from such sources; provided,
55 however, that the department shall develop a simplified estimation form to assist facilities in

56 determining who shall report emissions and shall consider, on an annual basis, requiring the
57 expansion of reporting to the greenhouse gas registry; (4) require the owner or developer of a
58 property that has undergone a reduction in carbon carrying capacity in excess of 5,000 tons of
59 carbon dioxide equivalent in a given year to report to the registry direct emissions of greenhouse
60 gases from such sources; (5) provide for the voluntary reporting of emissions and negative
61 emissions of greenhouse gases to the greenhouse gas registry by entities and facilities that are not
62 required to submit information pursuant to clauses (2) and (3); provided, however, that the
63 greenhouse gas emissions reported shall be of a type and format that the greenhouse gas registry
64 can accommodate; (6) require reporting of greenhouse gas emissions from generation sources
65 producing all electricity consumed, including transmission and distribution line losses from
66 electricity generated within the commonwealth or imported from outside the commonwealth;
67 provided, however, that this requirement shall apply to all retail sellers of electricity, including
68 electric utilities, municipal electric departments and municipal light boards as defined in section
69 1 of chapter 164A; (7) require reporting of fugitive greenhouse gas emissions from distribution
70 of natural gas consumed for all residential, commercial and industrial purposes; provided,
71 however, that this requirement shall apply to all owners of infrastructure used for distribution of
72 natural gas including gas companies as defined in section 1 of chapter 164 of the General Laws;
73 (8) ensure rigorous and consistent accounting of emissions and provide reporting tools and
74 formats to ensure collection of necessary data; and (9) ensure that greenhouse gas emissions
75 sources maintain comprehensive records of all reported greenhouse gas emissions.

76 SECTION 5: Section 3 of said chapter 21N, as so appearing, is hereby amended by
77 striking out subsection (b) and inserting in place thereof the following subsection:-

78 (b) The secretary shall, in consultation with the department and the department of energy
79 resources, adopt the following statewide greenhouse gas emissions limits: (i) an interim 2025
80 statewide greenhouse gas emissions limit; (ii) an interim 2025 net statewide greenhouse gas
81 emissions limit; (iii) an interim 2030 statewide greenhouse gas emissions limit; (iv) an interim
82 2030 net statewide greenhouse gas emissions limit; (v) an interim 2035 statewide greenhouse gas
83 emissions limit; (vi) an interim 2035 net statewide greenhouse gas emissions limit; (vii) an
84 interim 2040 statewide greenhouse gas emissions limit; (viii) an interim 2040 net statewide
85 greenhouse gas emissions limit; (ix) an interim 2045 statewide greenhouse gas emissions limit;
86 (x) an interim 2045 net statewide greenhouse gas emissions limit; (xi) a 2050 statewide
87 greenhouse gas emissions limit; (xii) a 2050 net statewide greenhouse gas emissions limit that
88 achieves at least a net emissions reduction of 110 per cent below the 1990 level provided,
89 however, that in no event shall the level of net statewide greenhouse gas emissions after 2030 be
90 higher than zero and provided that in no event shall the level of statewide greenhouse gas
91 emissions after 2040 be higher than zero. Each limit shall be accompanied by publication of a
92 comprehensive, clear and specific roadmap plan to realize said limit.

93 SECTION 6: Subsection (a) of section 4 of said chapter 21N, as so appearing, is hereby
94 amended by inserting after the first sentence the following sentence:- The secretary shall further
95 adopt the 2040 net statewide greenhouse gas emissions limit pursuant to clause (8) of subsection
96 (b) of section 3, which shall be not less than 105 per cent below the 1990 emissions level and
97 shall plan to achieve that reduction pursuant to subsection (h) of section 4.

98 SECTION 7: Said section 4 of said chapter 21N, as so appearing, is hereby amended by
99 inserting after subsection (h) the following subsection:-

100 (i) The secretary shall produce a comprehensive set of criteria defining negative
101 emissions. Said criteria will be explicitly designed to (1) ensure that negative emissions represent
102 removal of atmospheric greenhouse gases during the year in which they are recorded, (2) avoid
103 double counting negative emissions in any way, (3) promote the growth of carbon negative
104 practices in the commonwealth. The criteria shall be updated by the secretary every year.

105 SECTION 8. Section 6 of chapter 21A of the General Laws, is hereby amended by
106 adding the following sentences:- Subject to appropriation, the secretary shall appoint an expert
107 aide with the duties of developing policies, plans or programs to: (1) monitor and regulate
108 emissions of greenhouse gases; (2) adopt the statewide greenhouse gas emissions limits; and (3)
109 produce a comprehensive set of criteria defining negative emissions. Subject to appropriation,
110 the secretary shall appoint an expert aide with the duties of developing policies, plans or
111 programs to assist municipalities reach the zero emissions targets.

112 SECTION 9. Notwithstanding any general or special law to the contrary, the secretary of
113 the executive office of energy and environmental affairs shall hire the expert aides set forth in
114 section 8 of this act within 60 days of the start of fiscal year 2024, subject to appropriation.

115 SECTION 10. Section 16 of chapter 298 of the acts of 2008 is hereby amended by
116 striking out, in lines 3 and 4, the words “, and shall expire on December 31, 2020”.

117 SECTION 11. Section 11F 1/2 of chapter 25A of the General Laws, is hereby amended
118 by striking out, in subsection (a), the words “(4) an additional 2 per cent of sales each year
119 thereafter until December 31, 2029; and (5) an additional 1 per cent of sales every year
120 thereafter” and inserting in place thereof the following words:- (4) 33 per cent of total sales by
121 December 31, 2022; (5) 40 per cent of total sales by December 31, 2023; (6) 48 per cent of total

122 sales by December 31, 2024; (7) 55 per cent of total sales by December 31, 2025; (8) 65 per cent
123 of total sales by December 31, 2026; (9) 75 per cent of total sales by December 31, 2027; (10) 87
124 per cent of total sales by December 31, 2028; and (11) 100 per cent of total sales by December
125 31, 2029.”

126 SECTION 12. Section 11F of chapter 25A of the General Laws, is hereby amended by
127 striking out subsection (b) and inserting in place thereof the following subsection:-

128 (b) For the purposes of this subsection, a renewable energy generating source is one
129 which generates electricity using any of the following: (1) solar photovoltaic or solar thermal
130 electric energy; (2) wind energy; (3) ocean thermal, wave or tidal energy; (4) fuel cells utilizing
131 renewable fuels; (5) landfill gas; (6) naturally flowing water and hydroelectric; or (7) geothermal
132 energy. The following technologies and fuels shall not be considered renewable energy sources:
133 (A) coal; (B) petroleum coke; (C) oil; (D) natural gas; (E) construction and demolition debris
134 including, but not limited to, chemically-treated wood; (F) nuclear power; (G) biomass power
135 and (H) hydropower facilities that have nameplate capacity of more than 30MW. A renewable
136 energy generating source may be located behind the customer meter within the ISO-NE, as
137 defined in section 1 of chapter 164, control area if the output is verified by an independent
138 verification system participating in the New England Power Pool Generation Information
139 System, in this section called NEPOOL GIS, accounting system and approved by the department.

140 SECTION 13. Said section 11F, as so appearing, is hereby amended by striking out
141 subsection (c) and inserting in place thereof the following subsection:-

142 (c) New renewable energy generating sources meeting the requirements of this subsection
143 shall be known as Class I renewable energy generating sources. For the purposes of this

144 subsection, a Class I renewable energy generating source is one that began commercial operation
145 after December 31, 1997, or represents the net increase from incremental new generating
146 capacity after December 31, 1997 at an existing facility, where the facility generates electricity
147 using any of the following: (1) solar photovoltaic or solar thermal electric energy; (2) wind
148 energy; (3) ocean thermal, wave or tidal energy; (4) fuel cells utilizing renewable fuels; (5)
149 landfill gas; (6) energy generated by new hydroelectric facilities, or incremental new energy
150 from increased capacity or efficiency improvements at existing hydroelectric facilities; provided,
151 however, that (i) each such new facility or increased capacity or efficiency at each such existing
152 facility must meet appropriate and site-specific standards that address adequate and healthy river
153 flows, water quality standards, fish passage and protection measures and mitigation and
154 enhancement opportunities in the impacted watershed as determined by the department in
155 consultation with relevant state and federal agencies having oversight and jurisdiction over
156 hydropower facilities; (ii) only energy from new facilities having a capacity up to 30 megawatts
157 or attributable to improvements that incrementally increase capacity or efficiency by up to 30
158 megawatts at an existing hydroelectric facility shall qualify; and (iii) no such facility shall
159 involve pumped storage of water or construction of any new dam or water diversion structure
160 constructed later than January 1, 1998; (7) marine or hydrokinetic energy as defined in section 3;
161 or (8) geothermal energy. The following technologies and fuels shall not be considered
162 renewable energy sources: (A) coal; (B) petroleum coke; (C) oil; (D) natural gas; (E)
163 construction and demolition debris including, but not limited to, chemically-treated wood; (F)
164 nuclear power; (G) biomass power and (H) hydropower facilities that have nameplate capacity of
165 more than 30MWA. Class I renewable generating sources may be located behind the customer

166 meter within the ISO-NE control area if the output is verified by an independent verification
167 system participating in the NEPOOL GIS accounting system and approved by the department.

168 SECTION 14. Said section 11F, as so appearing, is hereby amended by striking out
169 subsection (d) and inserting in place thereof the following subsection:-

170 (d) Every retail electric supplier providing service under contracts executed or extended
171 on or after January 1, 2009, shall provide a minimum percentage of kilowatt-hour sales to end-
172 use customers in the commonwealth from Class II renewable energy generating sources. For the
173 purposes of this section, a Class II renewable energy generating source is one that began
174 commercial operation before December 31, 1997 and generates electricity using any of the
175 following: (1) solar photovoltaic or solar thermal electric energy; (2) wind energy; (3) ocean
176 thermal, wave or tidal energy; (4) fuel cells utilizing renewable fuels; (5) landfill gas; (6) energy
177 generated by existing hydroelectric facilities, provided that such existing facility shall meet
178 appropriate and site-specific standards that address adequate and healthy river flows, water
179 quality standards, fish passage and protection measures and mitigation and enhancement
180 opportunities in the impacted watershed as determined by the department in consultation with
181 relevant state and federal agencies having oversight and jurisdiction over hydropower facilities;
182 and provided further, that only energy from existing facilities up to 7.5 megawatts shall be
183 considered renewable energy and no such facility shall involve pumped storage of water nor
184 construction of any new dam or water diversion structure constructed later than January 1, 1998;
185 (7) marine or hydrokinetic energy as defined in section 3; or (8) geothermal energy. The
186 following technologies and fuels shall not be considered renewable energy sources: (A) coal; (B)
187 petroleum coke; (C) oil; (D) natural gas; (E) construction and demolition debris including, but
188 not limited to, chemically-treated wood; (F) nuclear power; (G) biomass power and (H)

189 hydropower facilities that have nameplate capacity of more than 30MW. A Class II renewable
190 generating source may be located behind the customer meter within the ISO-NE control area
191 provided that the output is verified by an independent verification system participating in the
192 NEPOOL GIS accounting system and approved by the department.

193 SECTION 15. Section 11F 1/2 of chapter 25A of the General Laws, as appearing in the
194 2018 Official Edition, is hereby amended by striking out subsection (a) and inserting in place
195 thereof the following subsection:-

196 (a) The department shall establish an alternative energy portfolio standard for all retail
197 electricity suppliers selling electricity to end-use customers in the commonwealth. Every retail
198 electric supplier providing service under contracts executed or extended on or after January 1,
199 2009 shall provide a minimum percentage of kilowatt-hour sales, as determined by the
200 department, to end-use customers in the commonwealth from alternative energy generating
201 sources and the department shall annually thereafter determine the minimum percentage of
202 kilowatt-hour sales to end-use customers in the commonwealth which shall be derived from
203 alternative energy generating sources. For the purposes of this section, "alternative energy
204 generating source" shall mean a source which generates energy using any of the following: (i)
205 flywheel energy storage; (ii) energy efficient steam technology; or (iii) fuel cells. The following
206 technologies and fuels shall not be considered alternative energy supplies: (A) coal; (B)
207 petroleum coke; (C) oil; (D) natural gas; (E) construction and demolition debris including, but
208 not limited to, chemically-treated wood and (F) nuclear power.

209 SECTION 16. Said section 11F 1/2, as so appearing, is hereby amended by striking out in
210 subsection (b) the following text:-

211 (b) The department, in consultation with the department of environmental protection,
212 shall set: (i) emission performance standards that are protective of public health, including
213 standards for eligible biomass, biogas and liquid biofuel technologies that limit eligibility only to
214 best-in-class commercially-feasible technologies, inclusive of energy conversion and emissions
215 controls, with regard to reducing emissions of particulate matter sized 2.5 microns or less and
216 carbon monoxide and other air pollutants; (ii) for eligible biomass, biogas and liquid biofuel
217 technologies, a requirement of 50 per cent reduction in life-cycle greenhouse gas emissions
218 compared to a high efficiency unit utilizing the fuel that is being displaced or, for a new load, a
219 high-efficiency natural gas unit, if natural gas is available at reasonable cost to the site or
220 otherwise the fuel that is most likely to be utilized; (iii) for eligible biomass, biogas and liquid
221 biofuel technologies, requirements for thermal storage or other means to minimize any
222 significant deterioration of efficiency or emissions due to boiler cycling, if feasible; (iv) for
223 eligible biomass, biogas and liquid biofuel technologies, fuel conversion efficiency performance
224 standards achievable by best-in-class commercially-feasible technologies; and (v) in consultation
225 with the department of conservation and recreation, for forest-derived biomass, requirements that
226 fuel shall be provided by means of sustainable forestry practices; provided, however, that the
227 department shall adopt any existing or new biomass fuel sustainability standards if deemed
228 appropriate by the department after a public comment process.

229 SECTION 17. Said section 11F 1/2, as so appearing, is hereby amended by striking out
230 subsections (c) and (d) and inserting in place thereof the following subsections:-

231 (b) The department shall adopt regulations allowing for a retail supplier to discharge its
232 obligations under this section by making an alternative compliance payment in an amount
233 established by the department. Such regulations shall outline procedures by which each retail

234 supplier shall annually submit for the department's review a filing illustrating the retail supplier's
235 compliance with the requirements of this section.

236 (c) A municipal lighting plant shall be exempt from the obligations under this section so
237 long as and insofar as it is exempt from the requirements to allow competitive choice of
238 generation supply under section 47A of chapter 164.

239 SECTION 18. Said section 11F 1/2, as so appearing, is hereby amended by striking out
240 subsection (e) and inserting in place thereof the following subsection:-

241 (d) The department may provide that for fuel cells and certain nonemitting renewable
242 thermal technologies, an alternative energy credit shall be earned for less than 3,412,000 British
243 thermal units of net useful thermal energy so as to stimulate the development of new on-site
244 energy generating sources.

245 SECTION 19. Notwithstanding any general or special law to the contrary, the department
246 of energy resources shall require distribution companies, as defined in section 1 of chapter 164 of
247 the General Laws, to jointly and competitively conduct additional offshore wind generation
248 solicitations and procurements of up to approximately 6,000 megawatts of aggregate nameplate
249 capacity, in addition to the solicitations and procurements required by section 83C of chapter 169
250 of the acts of 2008, as amended by chapter 188 of the acts of 2016, and may require said
251 additional solicitations and procurements by December 31, 2029.

252 SECTION 20. Subsection (b) of section 83C of chapter 169 of the acts of 2008, inserted
253 by chapter 188 of the acts of 2016 and amended by section 21 of chapter 27 of the acts of 2018
254 shall be hereby amended by striking out the following words:- “; provided, however, that the
255 department of public utilities shall not approve a long-term contract that results from a

256 subsequent solicitation and procurement period if the levelized price per megawatt hour, plus
257 associated transmission costs, is greater than or equal to the levelized price per megawatt hour
258 plus transmission costs that result from the previous procurement.”

259 SECTION 21. Said subsection (b) in section 83C is hereby further amended by striking
260 out the following words:- “(3) provide for an annual remuneration for the contracting distribution
261 company up to 2.75 cent of the annual payments under the contract to compensate the company
262 for accepting the financial obligation of the long-term contract, such provision to be acted upon
263 by the department of public utilities at the time of contract approval;”

264 SECTION 22. In responding to any solicitations issued by distribution companies for the
265 procurement of offshore wind generation, proposals for long-term contracts shall include an
266 environmental and fisheries mitigation plan for the construction and operation of such offshore
267 wind facilities, provided such plan shall include, but not be limited to, an explicit description of
268 the best management practices and any on- or off-site mitigation the bidder will employ,
269 informed by the latest science at the time the proposal is made, that will avoid, minimize and
270 mitigate any impacts to: wildlife, including but not limited to threatened or endangered species
271 such as North Atlantic right whales; coastal and marine habitats; natural resources; ecosystems;
272 and traditional or existing water-dependent uses, including, but not limited to, commercial and
273 recreational fishing. The plan should also include pre- and post-construction monitoring to
274 understand the effects of facilities on marine and avian species.

275 The department of energy resources shall establish an environmental working group and
276 a fisheries working group comprised of key experts and stakeholders to provide input on best
277 practices for avoiding, minimizing and mitigating any impacts to: wildlife, including but not

278 limited to threatened or endangered species such as North Atlantic right whales; coastal and
279 marine habitats; natural resources; ecosystems; and traditional or existing water-dependent uses,
280 including, but not limited to, commercial and recreational fishing, during the construction and
281 operation of facilities eligible pursuant to this section. The working groups shall conduct ongoing
282 review of implemented monitoring and mitigation programs and provide feedback and
283 recommendations on an as-needed basis, to be considered by the department. Pre-construction
284 engagement of these working groups will correspond with project development, solicitation, and
285 permitting, and the federal consistency process.

286 Proposals must include a commitment to, if selected and approved, provide financial and
287 technical assistance to support robust monitoring of wildlife and habitat through a minimum
288 \$10,000 per megawatt contribution to regional research on the impacts of offshore wind on
289 wildlife and habitat to inform strategies to avoid and mitigate any impacts to the marine
290 environment. The department of energy resources, in consultation with the environmental and
291 fisheries working groups, shall determine how the funds will be used to advance the responsible
292 development of the offshore wind energy industry, not necessarily the proposed project.

293 SECTION 23. Notwithstanding any general or special law to the contrary, the department
294 of energy resources shall require offshore wind bids to allocate at least 1% of the cost of the
295 project to a general fund in support of Massachusetts-based offshore wind power research and
296 workforce development provided further, that this fund shall be administered by the
297 Massachusetts Clean Energy Center, provided further, that a portion of this fund shall be used to
298 cover reasonable administrative costs of MassCEC.

299 SECTION 24. Notwithstanding any general or special law to the contrary, the department
300 of energy resources shall require retail suppliers, as defined in section 1 of chapter 164 of the
301 General Laws, to jointly and competitively conduct additional solar photovoltaic electric energy
302 generation solicitations and procurements of up to approximately 6,000 megawatts of aggregate
303 nameplate capacity, in addition to the solicitations and procurements required by section 4 of
304 chapter 75 of the acts of 2016, and may require said additional solicitations and procurements by
305 December 31, 2029.

306 SECTION 25. In responding to any solicitations from retail suppliers for the procurement
307 of solar generation, proposals for long-term contracts shall include an environmental mitigation
308 plan for the construction and operation of such solar facilities, provided such plan shall include,
309 but not be limited to, an explicit description of the best management practices and any on- or off-
310 site mitigation the bidder will employ, informed by the latest science at the time the proposal is
311 made, that will avoid, minimize and mitigate any impacts to: wildlife, including but not limited
312 to threatened or endangered species; wetlands, including but not limited to impacts on water
313 quality and vegetation diversity; forests, including impacts from deforestation and removal of
314 trees; natural resources; and ecosystems. The plan should also include pre- and post-construction
315 monitoring to understand the effects of facilities on wetlands, forests, and land on which solar
316 facilities are installed.

317 The department of energy resources shall establish an environmental working group
318 comprised of key experts and stakeholders to provide input on best practices for avoiding,
319 minimizing and mitigating any impacts to: wildlife, including but not limited to threatened or
320 endangered species; wetlands, including but not limited to impacts on water quality and
321 vegetation diversity; forests, including impacts from deforestation and removal of trees; natural

322 resources; and ecosystems. The working groups shall conduct ongoing review of implemented
323 monitoring and mitigation programs and provide feedback and recommendations on an as-
324 needed basis, to be considered by the department. Pre-construction engagement of these working
325 groups will correspond with project development, solicitation, and permitting, and the federal
326 consistency process.

327 Proposals must include a commitment to, if selected and approved, provide financial and
328 technical assistance to support robust monitoring of wildlife, ecosystems and habitat through a
329 minimum \$10,000 per megawatt contribution to regional research on the impacts of solar on
330 wildlife and habitat to inform strategies to avoid and mitigate any impacts to the environment.
331 The department of energy resources, in consultation with the environmental working groups,
332 shall determine how the funds will be used to advance the responsible development of the solar
333 energy industry, not necessarily the proposed project.

334 SECTION 26. Section 139 of chapter 164 of the General Laws, is hereby amended by
335 inserting after the word “entity”, in line 96, the following words:- “or publicly-assisted housing
336 or its residents.”

337 SECTION 27. Said section 138 of said chapter 164, as so appearing, is hereby further
338 amended by striking out the words:- “or (2) of which the municipality or other governmental
339 entity is assigned 100 per cent of the output.” and inserting in place thereof the following words:-
340 "or (2) of which the municipality, other governmental entity, low income or environmental
341 justice households or publicly-assisted housing or its residents are assigned 100 per cent of the
342 output or net metering credits.”

343 SECTION 28. Said section 138 of said chapter 164, as so appearing, is hereby further
344 amended by inserting after the definition of “Net metering facility of a municipality or other
345 governmental entity” the following definition:-

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

347 SECTION 29. Section 139 of chapter 164 of the General Laws, is hereby amended by
348 striking out, in lines 62 and 63, the words “and that are located in the same ISO-NE load zone
349 to” and inserting in place thereof the following words:- , “regardless of which ISO-NE load zone
350 the customers are located in, to.”

351 SECTION 30. Said section 139, as so appearing, is hereby further amended by inserting
352 after the word “charges”, in line 85, the second time it appears, the following words:- “,
353 including demand charges as part of a monthly minimum reliability contribution except as
354 authorized under subsection (j).”

355 SECTION 31. Said section 139 of said chapter 164, as so appearing, is hereby amended
356 by striking out subsection (f) of said section 139 and inserting in place thereof the following
357 subsection:-

358 (f) No aggregate net metering cap shall apply to a solar net metering facility.

359 SECTION 32. Section 138 of chapter 164, as appearing in the 2020 Official Edition, is
360 hereby amended by inserting after the definition of “customer” the following definitions:-

361 "Low-income", includes low-income households as defined under section 1 of chapter
362 40T.

363 "Environmental justice", the right to be protected from environmental pollution and to
364 live in and enjoy a clean and healthful environment regardless of race, income, class, tribal
365 affiliation, gender identity, sexual orientation, national origin, ethnicity or ancestry, religious
366 belief, or English language proficiency. Environmental justice shall include the equal protection
367 and meaningful involvement of all people with respect to the development, implementation, and
368 2 of 5 enforcement of environmental laws, regulations, and policies and the equitable distribution
369 of energy and environmental benefits and environmental burdens.

370 "Environmental Justice Population", a neighborhood that meets 1 or more of the
371 following criteria: (i) the annual median household income is not more than 65 per cent of the
372 statewide annual median household income; (ii) minorities comprise 40 per cent or more of the
373 population; (iii) 25 per cent or more of households lack English language proficiency; or (iv)
374 minorities comprise 25 per cent or more of the population and the annual median household
375 income of the municipality in which the neighborhood is located does not exceed 150 per cent of
376 the statewide annual median household income; provided, however, that for a neighborhood that
377 does not meet said criteria, but a geographic portion of that neighborhood meets at least 1
378 criterion, the secretary may designate that geographic portion as an environmental justice
379 population upon the petition of at least 10 residents of the geographic portion of that
380 neighborhood meeting any such criteria; provided further, that the secretary may determine that a
381 neighborhood, including any geographic portion thereof, shall not be designated an
382 environmental justice population upon finding that: (A) the annual median household income of
383 that neighborhood is greater than 125 per cent of the statewide median household income; (B)
384 majority of persons age 25 and older in that neighborhood have a college education; (C) the
385 neighborhood does not bear an unfair burden of environmental pollution; and (D) the

386 neighborhood has more than limited access to natural resources, including open spaces and water
387 resources, playgrounds and other constructed outdoor recreational facilities and venues.

388 "Environmental Justice Household", includes households within Environmental Justice
389 Populations.

390 "Low income solar net metering facility", a solar net metering facility that allocates all of
391 its output and net metering credits to (1) the providers or residents of publicly-assisted housing
392 under section 1 of chapter 40T or (2) low income and environmental justice households; or (3)
393 entities primarily serving such persons. The department of energy resources may establish an
394 alternate minimum threshold or thresholds for allocation of output and net metering credits to
395 determine project eligibility if the department determines a lower threshold is necessary in order
396 to facilitate economic viability of low-income solar net metering facilities or to deliver 24
397 meaningful economic benefit to recipients.

398 "Community shared solar net metering facility", a solar net metering facility with three or
399 more eligible recipients of credits, provided that (1) no more than 50 per cent of the net metering
400 credits produced by the facility are allocated to any one recipient, (2) no more than three
401 recipients may receive net metering credits in excess of those produced annually by 25 kW of
402 nameplate AC capacity and the combined share of said participants' capacity shall not exceed 50
403 per cent of the total capacity of the Generation Unit, unless otherwise allowed by the department
404 of energy resources, and (3) the recipients have an interest in the production of the facility or the
405 entity that owns the facility, in the form of formal ownership, a lease agreement, or a net
406 metering allocation agreement.

407 SECTION 33. Said section 138 of said chapter 164, as so appearing, is hereby further
408 amended in the definition of "market net metering credit" by striking out the following words:-
409 "that credits shall only be allocated to an account of a municipality or government entity." and
410 inserting in place thereof the following words:- "that credits shall only be allocated to an account
411 of a municipality or government entity or low-income and environmental justice households."

412 SECTION 34. Section 139 of said chapter 164, as so appearing, is hereby further
413 amended by adding the following subsections:-

414 (l) Notwithstanding any provision of special or general law to the contrary, a low income
415 solar net metering facility shall receive credits equal to the excess kilowatt-hours by time of use
416 billing period, if applicable, multiplied by the sum of the distribution company's: (i) default
417 service kilowatt-hour charge in the ISO-NE load zone where the customer is located; (ii)
418 distribution kilowatt-hour charge; (iii) transmission kilowatt-hour charge; and (iv) transition 52
419 kilowatt-hour charge; provided, however, that this shall not include the demand side 4 of 5
420 management and renewable energy kilowatt-hour charges set forth in sections 19 and 20 of
421 chapter 25.

422 (m) Notwithstanding any provision of special or general law to the contrary, a community
423 shared solar net metering facility that allocates at least 50 per cent of its credits to low income
424 and environmental justice households or the providers or residents of publicly-assisted housing
425 under section 1 of chapter 40T or (3) entities primarily serving such persons shall receive credits
426 equal to the excess kilowatt-hours by time of use billing period, if applicable, multiplied by the
427 sum of the distribution company's: (i) default service kilowatt-hour charge in the ISO-NE load
428 zone where the customer is located; (ii) distribution kilowatt-hour charge; (iii) transmission

429 kilowatt-hour charge; and (iv) transition kilowatt-hour charge; provided, however, that this shall
430 not include the demand side management and renewable energy kilowatt-hour charges set forth
431 in sections 19 and 20 of chapter 25.

432 SECTION 35. Said section 139 of said chapter 164, as so appearing, is hereby amended
433 by striking out in subsection (f) the following words:- "The aggregate net metering capacity of
434 facilities that are not net metering facilities of a municipality or other governmental entity shall
435 not exceed 7 per cent of the distribution company's peak load. The aggregate net metering
436 capacity of net metering facilities of a municipality or other governmental entity shall not exceed
437 8 per cent of the distribution company's peak load."

438 SECTION 36. Chapter 25A of the General Laws is hereby amended by inserting after
439 section 11I the following section:-

440 Section 11J. For any solar incentive program created by the department of energy
441 resources, under general law, session law, or other authority, the program shall designate 50 per
442 cent of the incentive to equitably share the economic and environmental benefits of the program
443 in communities facing barriers to access. This shall include low-income solar net metering
444 facilities, as defined in section 138 of chapter 164, as well as rental housing or residents thereof.
445 The department may, at its discretion, dedicate part of the incentive to resolve other barriers to
446 equitable access to solar energy if such barriers are identified. The department shall also specify
447 in program design its plans to reach communities whose primary language is not English.

448 SECTION 37. Chapter 25A of the General Laws is hereby amended by inserting after
449 section 11F1/2 the following section:-

450 Section 11F 3/4. (a) Each municipal lighting plant shall establish a greenhouse gas
451 emissions standard, which shall be known as the “Municipal Lighting Plant GGES.”

452 (b) A Municipal Lighting Plant GGES shall set the minimum percentage of renewable
453 energy sold by each municipal lighting plant to all retail end-user customers purchasing
454 electricity pursuant to rates established pursuant to section 58 of chapter 164 as follows: 100 per
455 cent energy sales from renewable sources achieving net-zero greenhouse gas emissions by 2030.

456 (c) For the purpose of this section, “renewable sources” shall mean: energy from facilities
457 using the following generation technologies, but only to the extent that any renewable energy
458 credits, emission free energy certificates or other evidentiary non-carbon emitting documentation
459 associated therewith have not been sold, retired, claimed or otherwise represented by another
460 party as part of electrical energy output or sales or used to satisfy obligations in jurisdictions
461 other than the commonwealth: (1) solar photovoltaic; (2) solar thermal electric; (3) hydroelectric,
462 including imports into the New England wholesale electric market as administered by ISO New
463 England Inc.; (4) marine or hydrokinetic energy; (5) geothermal energy; (6) wind energy; and (7)
464 any other generation qualifying for renewable portfolio standards pursuant to section 11F.

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

472 such deficiency, escalated annually by the Consumer Price Index. Such Municipal Lighting Plant
473 ACP shall be deposited into a fund that shall be maintained and administered by the municipal
474 light plant and such fund shall be used by the municipal light plant to fund greenhouse gas
475 emissions reduction and related programs in its service territory.

476 SECTION 38. Chapter 90 of the General Laws is hereby amended by inserting after
477 section 7CC the following section:-

478 Section 7DD (a) For the purposes of this section the following words shall have the
479 following meanings:-

480 "Consumer", a buyer, other than for purposes of resale, of a motor vehicle, any person to
481 whom such motor vehicle is transferred during the period of any express or statutory warranty
482 under this section applicable to such motor vehicle, and any other person entitled by the terms of
483 such warranty to enforce its obligations.

484 "Dealer", any person engaged in the business of selling, offering for sale, or negotiating
485 the retail sale of used motor vehicles or selling motor vehicles as broker or agent for another,
486 including the officers, agents and employees of such person and any combination or association
487 of dealers, but not including a bank or other financial institution, or the commonwealth, its
488 agencies, bureaus, boards, commissions, authorities, nor any of its political subdivisions. A
489 person shall be deemed to be engaged in the business of selling used motor vehicles if such
490 person has sold more than three used motor vehicles in the preceding twelve months.

491 "Motor vehicle" or "vehicle", any motor vehicle as defined in section one, sold or
492 replaced by a dealer or manufacturer, except that it shall not include auto homes, vehicles built
493 primarily for off-road use or any vehicle used primarily for business purposes.

494 "Used motor vehicle" or "used vehicle", any vehicle driven more than the limited use
495 necessary in moving or road testing a new vehicle prior to delivery to a consumer, including a
496 demonstrator vehicle, except that it shall not include auto homes, vehicles built primarily for off
497 road use, motorcycles, or any vehicle used primarily for business purposes.

498 "New motor vehicle" or "new vehicle", any vehicle not satisfying the definition of used
499 motor vehicle.

500 "Plug-in vehicle", a battery electric vehicle that draws propulsion energy solely from an
501 on-board electrical energy storage device during operation that is charged from an external
502 source of electricity or a plug-in hybrid electric vehicle with an on-board electrical energy
503 storage device that can be recharged from an external source of electricity which also has the
504 capability to run on another fuel.

505 "Zero-emission vehicle", a motor vehicle that produces no engine exhaust emissions.

506 (b) Beginning on January 1st 2027, no new motor vehicle shall be sold in the
507 commonwealth by a dealer to a consumer unless the vehicle is a plug-in vehicle.

508 (c) Beginning on January 1st 2030, no new motor vehicle shall be sold in the
509 commonwealth by a dealer to a consumer unless the vehicle is a zero-emission vehicle.

510 SECTION 39. Section 16 of chapter 25A of the General Laws, is hereby amended by
511 inserting after the word "section", in line 1, the following words:- and section 18.

512 SECTION 40. Subsection (a) of said section 16 of said chapter 25A, as so appearing, is
513 hereby amended by adding the following definition:-

514 "Zero-emission vehicle", a motor vehicle that produces no engine exhaust emissions.

515 SECTION 41. Said chapter 25A is hereby further amended by inserting after section 17
516 the following section:-

517 Section 18. (a) The commissioner shall, subject to appropriation, establish a program to
518 provide rebates or other financial incentives to consumers who purchase or lease a zero-emission
519 vehicle. Vehicles qualifying for rebates under this section shall: (i) be manufactured primarily for
520 use on public streets, roads and highways; (ii) not be modified from the original manufacturer's
521 specification; and (iii) have been acquired for use or lease by the consumer and not for resale.

522 (b) A rebate under this section shall not be less than \$1,500 per vehicle; provided,
523 however, that no rebate shall be available for a vehicle with a sales price that exceeds \$50,000.

524 (c) The commissioner may promulgate regulations to administer the program established
525 under this section. At least once per calendar year, the commissioner shall provide outreach to
526 underserved consumers and consumers in communities with a high percentage of low-income
527 households with information about the zero-emission vehicle incentive program established
528 under this section.

529 (d) The commissioner shall publish and regularly update data regarding program usage
530 including, but not limited to: (i) the number and amount of rebates or incentives provided each
531 month; (ii) the make, model and type of vehicle for which the rebate or incentive was issued; (iii)
532 the zip code in which the vehicle is registered; and (iv) the estimated total greenhouse gas
533 emissions reductions achieved from the rebate or incentive issued.

534 SECTION 42. Section 94 of chapter 143 of the General Laws, is hereby amended by
535 inserting after subsection (r) the following subsections:-

536 (s) In consultation with the department of energy resources, to adopt and fully integrate
537 into the state building code requirements that new construction of commercial and residential
538 buildings, as well as major reconstruction, renovation and repair of such buildings, include
539 building electrical service, conduit systems, and level-2 or higher electric vehicle chargers
540 sufficient to support the minimum number of zero-emission vehicle parking spaces; provided,
541 however, that the minimum number of zero-emission vehicle parking spaces shall be at least 1
542 parking space or not less than 75 per cent of the total number of parking spaces, whichever is
543 greater. For the purposes of this section, “zero-emission vehicle” shall mean a motor vehicle that
544 produces no engine exhaust emissions.

545 (t) In consultation with the department of energy resources, to adopt and fully integrate
546 into the state building code requirements that new construction of parking facilities as well as
547 major reconstruction, renovation and repair of such facilities, include building building electrical
548 service, and conduit systems, and level-2 or higher electric vehicle chargers sufficient to support
549 the minimum number of zero-emission vehicle parking spaces; provided, however, that the
550 minimum number of zero-emission vehicle parking spaces shall be at least 1 parking space or not
551 less than 75 per cent of the total number of parking spaces, whichever is greater.

552 SECTION 43. Section 3 of chapter 448 of the acts of 2016 is hereby amended by striking
553 out, in lines 3 and 4, the words “may include requirements for electric vehicle charging for
554 residential and appropriate commercial” and inserting in place thereof the following words:-
555 shall include requirements for electric vehicle charging for appropriate residential and
556 commercial.

557 SECTION 44. Section 1 of Chapter 90 of the General Laws, as appearing in the 2016
558 Official Edition, is hereby amended by adding the following definitions:-

559 “Electric vehicles” are vehicles that rely solely on electric motors for propulsion and
560 includes non-combustion vehicles.

561 “Zero-emission infrastructure” means electric battery chargers, trolleybus and railway
562 catenary wire, and other equipment to support the operation of electric vehicles.

563 SECTION 43. Chapter 21N is hereby amended by inserting after Section 7, the following
564 section:-

565 Section 7½. To contribute to the Commonwealth’s greenhouse gas reduction targets, the
566 Secretary, in consultation with the department of energy resources, department of transportation,
567 department of environmental protection, and department of public utilities, shall set and enforce
568 targets for public fleet electrification.

569 (a) The Massachusetts Bay Transportation Authority shall operate a fully electric bus
570 fleet by 2030 and meet the following interim targets: (i) 100 percent of all MBTA procurements
571 shall be electric vehicles as defined in section 1 of chapter 90 by December 31, 2023; (ii) 40
572 percent of all MBTA buses should be electric by 2025; (iii) 60 percent of all MBTA buses
573 should be electric by 2027; (iv) 80 percent of all MBTA buses should be electric by 2028; (v) 90
574 percent of all MBTA buses should be electric by 2029. The MBTA shall establish and meet
575 goals for charging its bus infrastructure with renewable energy generating sources as defined in
576 chapter 25A, section 11F.

577 (b) The MBTA shall work with the department of public health and department of
578 environmental protection to establish air monitoring stations around bus maintenance facilities
579 and to improve air quality around such facilities.

580 (c) The MBTA and its commuter rail contractor shall operate a fully electric commuter
581 rail system by 2030.

582 (d) Regional transit authorities (RTAs) shall operate a fully electric bus fleet by 2035 and
583 meet the following interim targets: (i) 100 percent of all RTA procurements shall be electric by
584 December 31, 2026; (ii) 40 percent of all RTA buses should be electric by 2025; (iii) 60 percent
585 of all RTA buses should be electric by 2028; (iv) 80 percent of all RTA buses should be electric
586 by 2032; (v) 90 percent of all RTA buses should be electric by 2034.

587 SECTION 46. Chapter 161A is hereby amended by inserting the following paragraphs in
588 section 7 after the term “under Section 6C”:

589 (a) The MBTA governing board shall establish deadlines for MBTA bus maintenance
590 facilities to support an all electric bus fleet. Construction of new 100 percent electric bus garages
591 and modernization of old garages, as needed for electric bus infrastructure, shall be complete at
592 least one year prior to full bus fleet electrification in 2030.

593 (b) The MBTA governing board shall direct the MBTA to update and operate existing
594 zero-emission vehicle infrastructure and to expand its zero-emission infrastructure. Removal of
595 existing zero-emission infrastructure shall be permitted for temporary road, catenary, or public
596 utility work. Any replacements for electric vehicles in operation must meet or exceed the
597 availability of the current zero-emission fleet, with no auxiliary systems. For all diesel-electric
598 hybrid buses, the MBTA shall develop robust monitoring about the locations where such buses

599 are operating on diesel power versus electric power and provide this data to the public on a
600 timely basis.

601 (c) The MBTA governing board shall direct the MBTA to operate electric buses with a
602 priority for operating such buses on routes serving environmental justice populations. The
603 MBTA governing board shall direct the MBTA to operate electric buses on bus routes serving
604 residents of Chelsea, Everett, Revere, Somerville, Chinatown, Roxbury, Dorchester, Lynn, and
605 Mattapan by 2025. The MBTA governing board shall direct MBTA staff to conduct robust
606 community outreach and engagement with residents of environmental justice populations,
607 municipal officials in cities and towns that have environmental justice populations, and with
608 transportation and environmental justice advocates. The MBTA staff shall report to the MBTA
609 governing board at least six times per year the progress of electrifying the bus and rail fleet. As
610 part of the public reports, MBTA staff shall explain the cost analysis of all procurements of fossil
611 fuel infrastructure and the reasons for procuring fossil fuel infrastructure in lieu of zero-emission
612 infrastructure.

613 (d) The MBTA governing board shall electrify the commuter rail fleet in two phases.
614 Phase I includes electrification of the Providence Line, Fairmount Line, and Newburyport /
615 Rockport Line at least through the Beverly Depot Station by December 31, 2024. Phase II
616 includes electrification of the Framingham/Worcester Line by December 31, 2026;
617 Middleborough/ Lakeville Line by December 31, 2027, and the remaining routes that pass
618 through environmental justice populations, but do not offer passenger service by December 31,
619 2030: South Coast (Phase 2 via Downtown Taunton), Haverhill, Lowell, Fitchburg, Franklin,
620 Plymouth/Kingston, Greenbush, Foxborough, Newburyport/ Rockport beyond Beverly Depot,
621 Cape Cod Extension, NH Capitol Corridor.

622 SECTION 47. Section 6 of chapter 161B is hereby amended by adding after paragraph
623 (r), the following paragraph:-

624 (s) The authorities shall operate electric buses with a priority for operating such buses on
625 routes serving environmental justice populations. Authorities shall conduct robust community
626 outreach and engagement with residents of environmental justice populations, municipal officials
627 in cities and towns that have environmental justice populations, and with transportation and
628 environmental justice advocates. The authorities shall report annually to the Regional Transit
629 Authority Council pursuant to Section 27 of chapter 161B the progress of electrifying the bus
630 fleet. As part of the public reports, authorities shall explain the cost analysis of all procurements
631 of fossil fuel infrastructure and the reasons for procuring internal combustion engines and fossil
632 fuel infrastructure in lieu of electric vehicles and zero-emission infrastructure.

633 SECTION 48. Section 1 of Chapter 90 of the General Laws, as appearing in the 2016
634 Official Edition, is hereby amended by adding the following definitions:-

635 “Electric vehicles” are vehicles that rely solely on electric motors for propulsion and
636 includes non-combustion vehicles.

637 “Emergency vehicle”, any publicly owned vehicle operated by a peace officer in
638 performance of their duties, any authorized emergency vehicle used for fighting fires or
639 responding to emergency fire calls, any publicly owned authorized emergency vehicle used by an
640 emergency medical technician or paramedic, or used for towing or servicing other vehicles, or
641 repairing damaged lighting or electrical equipment, any motor vehicle of mosquito abatement,
642 vector control, or pest abatement agencies and used for those purposes, or any ambulance used
643 by a private entity under contract with a public agency.

644 SECTION 49. Section 1 of chapter 21N is hereby amended by inserting the following
645 definitions:

646 “Motor vehicles”, as defined in section 1 of chapter 90.

647 “Motor vehicle fleet” is a set of at least twenty-five motor vehicles under the same
648 ownership or control and registered in the Commonwealth of Massachusetts.

649 “Motor vehicle fleet serving a public purpose” is a motor vehicle fleet of which a portion
650 is leased, rented, or contracted by the Commonwealth of Massachusetts or a municipality or any
651 political subdivision thereof from a person or entity other than the Commonwealth of
652 Massachusetts or a municipality to provide a public service or for its own use, including school
653 buses and paratransit vehicles.

654 “Public motor vehicle fleet” is a motor vehicle fleet owned by the Commonwealth of
655 Massachusetts, a transportation authority, a school district, a public university, a quasi-public
656 agency, or a municipality or in the shared ownership of multiple municipalities, or any political
657 subdivision thereof. A public motor vehicle fleet includes vehicles under the same ownership of
658 the Commonwealth or a municipality, even if a portion of the motor vehicle fleet is under the
659 management or control of separate secretariats, departments, agencies, or offices.

660 “Electric vehicle”, as defined in section 1 of chapter 90.

661 SECTION 50. Chapter 21N is hereby amended by inserting after section 7 the following
662 sections: -

663 Section 7A. The Secretary, in consultation with the department of energy resources,
664 department of transportation, department of environmental protection, and department of public

665 utilities, shall develop a transition to an electric motor vehicle fleet program and promulgate
666 regulations to require the following motor vehicle fleet standards: (a) fifty percent of all public
667 motor vehicle fleets and motor vehicle fleets serving a public purpose shall be electric vehicles
668 by 2025; (b) seventy-five percent of all public motor vehicle fleets and motor vehicle fleets
669 serving a public purpose shall be electric vehicles by 2027; and (c) one hundred percent of all
670 public motor vehicle fleets and motor vehicle fleets serving a public purpose shall be electric
671 vehicles by 2030.

672 In reaching the Commonwealth's public fleet requirements defined in this section, the
673 Secretary shall prioritize for electrification any vehicles cited as medium- or high-priority by the
674 study commissioned pursuant to section 6 of chapter 448 of the acts of 2016. To meet the
675 deadlines established in this section, the Secretary shall prioritize electric vehicle deployment in
676 locations serving environmental justice populations as defined in the general laws or, in the
677 absence of a statutory definition, the environmental justice policy of the executive office of
678 energy and environmental affairs, as may be amended.

679 Section 7B. Notwithstanding section 9A of chapter 7, vehicles subject to the electric
680 vehicle public motor vehicle fleet program include: all public motor vehicle fleets, all motor
681 vehicle fleets serving a public purpose, and all motor vehicle fleets that are owned, leased,
682 rented, or contracted, by quasi-public agencies, excluding emergency vehicles. The Department
683 of Energy Resources, with input from the Department of Environmental Protection, Department
684 of Public Utilities, and Department of Transportation, shall: (i) establish goals for private motor
685 vehicle fleets conversion; (ii) identify and implement incentives to support electric vehicle
686 purchases; (iii) work with owners of motor vehicle fleets used, at least in part, for the purpose of
687 commercial ride-sharing and ride-hailing and passenger transportation, including vehicles

688 regulated pursuant to chapter 159A½ to transition to electric vehicles; (iv) work with owners of
689 motor vehicle fleets used for public transportation licensed to operate in the Commonwealth
690 pursuant to chapter 90 or chapter 159A to transition to electric vehicles; and (v) work with
691 owners of motor vehicle fleets used as commercial motor carriers, freight services, limousine
692 services, and taxis registered to operate in the Commonwealth to transition to electric vehicles.

693 Section 7C. The Secretary, in consultation with the executive office for administration
694 and finance, shall require that new motor vehicles purchased by the Commonwealth shall be
695 electric vehicles according to the following deadlines:(i) forty percent of all purchases in 2024;
696 (ii) sixty percent of all purchases in 2025; (iii) eighty percent of all purchases in 2026; (iv) ninety
697 percent of all purchases in 2027; and (v) one hundred percent of all purchases in 2028.

698 Section 7D. The Department of Energy Resources shall design and implement an
699 incentive program to encourage the conversion of private fleets to electric vehicles. Should an
700 owner of a motor vehicle fleet fail to comply with electric vehicle program requirements, the
701 Department of Energy Resources shall remove the incentive for that owner and require
702 reimbursement of the incentive. As part of the incentive program, the Department of Energy
703 Resources shall ensure a specific pool of funds, not less than ten percent of all funds allocated to
704 the incentive program, is available to municipalities to promote the transition to electric vehicle
705 motor vehicle fleet.

706 SECTION 51. Beginning in 2024 and every five years thereafter through 2040, the
707 Secretary shall submit a report to the Legislature that measures the Commonwealth's progress
708 towards implementation of the electric vehicle motor vehicle fleet program. The report shall: (i)
709 assess the electric vehicle market in the Commonwealth; (ii) identify funding sources to serve as

710 incentives for purchasing electric vehicles to offset costs to agencies, municipalities, and
711 businesses; (iii) identify barriers to increased penetration of electric vehicles; and (iv)
712 recommend legislative and regulatory action to address those barriers.

713 SECTION 52. The Secretary may provide education, training, and technical assistance to
714 motor vehicle fleet operators to support electric vehicle penetration.

715 SECTION 53. The regulations required pursuant to sections 7A through 7D of said
716 chapter 21N shall be promulgated and in effect not later than 270 days following the effective
717 date.

718 SECTION 54. Section 6 of chapter 25A of the General Laws, is hereby amended by
719 inserting after clause (11) the following clause:-

720 (12) develop and adopt, as an appendix to the state building code, in consultation with the
721 board of building regulations and standards, a specialized net-zero energy code that includes, but
722 is not limited to, a definition of net-zero building.

723 SECTION 55. Section 96 of said chapter 143, as so appearing, is hereby amended by
724 inserting, in line 7, after the word “to” the following words:- , the specialized net-zero energy
725 code developed and adopted by the department of energy resources.

726 SECTION 56. Section 97 of said chapter 143, as so appearing, is hereby amended by
727 striking out, in line 22, the words “a reasonable time” and inserting in place thereof the following
728 words:- 45 days.

729 SECTION 57. To develop the specialized net-zero energy code required by section 6 of
730 chapter 25A of the General Laws, the department of energy resources shall hold not less than 5

731 public hearings in geographically diverse locations throughout the commonwealth that shall
732 represent the distinguishing characteristics of rural, suburban and urban households, 3 of which
733 shall be held in an underserved community or community with a high percentage of low-income
734 households. The specialized net-zero energy code required by said section 6 of said chapter 25A
735 shall be developed, adopted and incorporated as an appendix to the state building code not later
736 than 1 year after the passage of this act.

737 SECTION 58. Section 94 of chapter 143 of the General Laws, is hereby amended by
738 striking out subsection (o) and inserting in place thereof the following subsection:-

739 (o) To adopt and fully integrate as part of the state building code: (i) the latest
740 International Energy Conservation Code, (ii) the net-zero energy code required by section 6 of
741 chapter 25A of the General Laws for new residential construction beginning on January 1st
742 2025, (iii) the net-zero energy code required by said section 6 of said chapter 25A for new
743 commercial construction beginning on January 1st 2028, and (iv) any more stringent energy-
744 efficiency provisions that the board, in consultation with the department of energy resources,
745 concludes are necessary to achieve the emissions limits established by subsection (b) of section 3
746 of chapter 21N of the General Laws as amended, and the renewable energy requirements
747 established by subsection (a) of section 3 of chapter 25D of the General Laws as amended. The
748 energy provisions of the state building code shall be updated within 1 year of any revision to the
749 International Energy Conservation Code.

750 SECTION 59. Section 94 of chapter 143 of the General Laws, is hereby amended by
751 striking out subsection (q) and inserting in place thereof the following subsection:-

752 (q) In consultation with the department of energy resources, to develop requirements and
753 promulgate regulations as part of the state building code, in addition to the requirements
754 enumerated in subsection (o) of Section 94 of chapter 143 of the General Laws, requiring a
755 process to ensure that all new non-residential buildings larger than 10,000 square feet and any
756 major reconstruction, alteration or repair of all such buildings perform as designed with respect
757 to energy consumption by undergoing building commissioning or acceptance testing. Such
758 commissioning must be completed before the issuance of a certificate of occupancy.

759 SECTION 60. Amendments to the state building and electric code required under section
760 A4 and A8 shall be in effect not later than 18 months after the effective date of this act.

761 SECTION 61. Chapter 121B of the General Laws is hereby amended by inserting after
762 section 38D the following section:-

763 Section 38D ½. (a) The department shall develop a program to transition the entire public
764 housing stock of the Commonwealth into highly energy-efficient homes that produce on-site, or
765 procure, enough carbon-free renewable energy to meet total energy consumption annually.

766 (b) Projects pursuant to this section may include a mix of extremely low income
767 households, low or moderate income households and market-rate housing and may utilize any
768 available source of rental subsidy or financial assistance.(c) The local housing authority shall: (i)
769 comply with section 12, related to wages, labor requirements and the Social Security Act; (ii)
770 comply with section 29, related to wage rates and collective bargaining; (iii) retain the same
771 number of public housing units as existed before participation in this program and to the greatest
772 extent possible: (A) provide for full tenant participation, including public hearings, on adoption
773 or material amendment of its annual plan as required under subsection (h); (B) provide for a

774 tenant lease and grievance procedure substantially similar to that in effect prior to entry into this
775 program; (C) provide that evictions shall be only for good cause; (D) assure that housing assisted
776 under this program is decent, safe and sanitary and that, excepting any market-rate housing, the
777 housing is deed restricted to occupancy by extremely low income households, very low income
778 households or low and moderate income households at affordable rents or sales prices, in
779 perpetuity or for such other term as may be approved by the department, consistent with funding
780 sources; and (E) assure that proceeds from the disposition of public housing and funds generated
781 from new affordable and market-rate housing created to replace public housing, unless restricted
782 to a particular use, shall be allocated to the reconstruction, rehabilitation or repair of public
783 housing developments; (iv) assure that if a participating housing authority redevelops its public
784 housing units, all households residing in the units at the time of planned redevelopment shall
785 receive relocation assistance, if eligible, under this chapter or other applicable statutes; provided
786 however, that such households shall have the right to return to the redeveloped public housing,
787 unless such household is determined to be in unlawful occupancy prior to the approval of the
788 housing authority's application, has materially breached the lease agreement or has been evicted
789 for cause, under applicable law, subject to units of the appropriate size and requirements being
790 available; provided further, that such households shall have priority for placement over new
791 applicants; (v) comply with chapter 334 of the acts of 2006; and (vi) comply with the audit
792 requirements of section 29.

793 (d) The department shall maximize tenant participation and management by low- and
794 very low-income individuals in the rehabilitation, upgrade, and transition of public housing
795 through education, training, and jobs, all of which are to be funded by the Workforce Training
796 Fund established in section 2RR of chapter 29.

797 SECTION 62. Chapter 21N of the General Laws is hereby amended by inserting after
798 section 11 the following section:-

799 Section 12. To achieve the mobilization required to reach 100% renewable electricity and
800 energy by 2030, a just transition for workers is necessary. The attorney general must ensure that
801 the following criteria are met amidst this energy transition:

802 (a) Any job created in the transition to 100% renewables must be a high-quality union job
803 with guaranteed wage and benefit parity for workers affected by the transition.

804 (b) Workers affected by the energy transition, including but not limited to fossil fuel
805 workers, mechanics, laborers, are to be prioritized for training and advancement opportunities
806 that allow for them to shift to renewable energy jobs.

807 (c) After the training referenced in subsection b has been completed, workers affected by
808 the transition are guaranteed a job created in the mobilization to 100% renewables, and will be
809 prioritized over other applicants.

810 (d) The commonwealth, through the powers of the attorney general, will fund and
811 provide pensions for workers impacted by the transition age 50 or older who elect to retire early
812 in lieu of participation in the training programs described in subsection (b).

813 (e) The commonwealth, through the department of labor services, will fund training and
814 advancement opportunities, pensions, and the wage and benefit parity for each worker affected
815 by the transition.