

SENATE No. 2498

Senate, January 30, 2020– Text of the Senate to accelerate the transition of cars, trucks and buses to carbon-free power (being the text of Senate, No. 2476, printed as amended)

The Commonwealth of Massachusetts

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

An Act to accelerate the transition of cars, trucks and buses to carbon-free power.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Section 16 of chapter 25A of the General Laws, as appearing in the 2018
2 Official Edition, is hereby amended by inserting after the word “section”, in line 1, the following
3 words:- and section 18.

4 SECTION 2. Subsection (a) of said section 16 of said chapter 25A, as so appearing, is
5 hereby amended by adding the following definition:-

6 “Zero-emission vehicle”, a motor vehicle that produces no engine exhaust carbon
7 emissions.

8 SECTION 3. Said chapter 25A is hereby further amended by adding the following
9 section:-

10 Section 18. (a) The commissioner shall, subject to appropriation, establish a program to
11 provide rebates or other financial incentives to consumers who purchase or lease and register and
12 insure in the commonwealth a zero-emission vehicle. Vehicles qualifying for rebates under this

13 section shall: (i) be manufactured primarily for use on public streets, roads and highways; (ii)
14 have an engine that is not modified from the original manufacturer's specifications; and (iii) have
15 been acquired for use or lease by the consumer and not for resale.

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

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

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

28 SECTION 4. Section 7A of chapter 90 of the General Laws, as appearing in the 2018
29 Official Edition, is hereby amended by inserting after the fifth paragraph the following
30 paragraph:-

31 Not later than January 1, 2022, and annually thereafter, the registry shall issue to a
32 municipality, upon request, the following aggregate data for the previous 12 months: (i) the
33 number of vehicles registered in said municipality, including the total numbers of gas-powered
34 vehicles, hybrid vehicles and zero-emission vehicles; and (ii) the average number of miles driven

35 by such gas-powered, hybrid and zero-emission vehicles, respectively. The data shall be
36 protective of privacy information.

37 SECTION 5. Section 94 of chapter 143 of the General Laws, as so appearing, is hereby
38 amended by adding the following 2 subsections:-

39 (s) In consultation with the department of energy resources, to adopt and fully integrate
40 into the state building code requirements that new construction of commercial and residential
41 buildings with not less than 10 parking spaces, as well as major reconstruction, renovation and
42 repair of such buildings, include building electrical service and conduit systems sufficient to
43 support the minimum number of zero-emission vehicle parking spaces; provided, however, that
44 the minimum number of zero-emission vehicle parking spaces shall be at least 1 parking space
45 or not less than 5 per cent of the total number of parking spaces, whichever is greater. For the
46 purposes of this section, “zero-emission vehicle” shall mean a motor vehicle that produces no
47 engine exhaust emissions.

48 (t) In consultation with the department of energy resources, to adopt and fully integrate
49 into the state building code requirements that new construction of parking facilities with not less
50 than 10 parking spaces, as well as major reconstruction, renovation and repair of such facilities,
51 include building electrical service and conduit systems sufficient to support the minimum
52 number of zero-emission vehicle parking spaces; provided, however, that the minimum number
53 of zero-emission vehicle parking spaces shall be at least 1 parking space or not less than 5 per
54 cent of the total number of parking spaces, whichever is greater.

55 SECTION 6. Section 3 of chapter 448 of the acts of 2016 is hereby amended by striking
56 out, in lines 3 and 4, the words “may include requirements for electric vehicle charging for

57 residential and appropriate commercial” and inserting in place thereof the following words:-
58 shall include requirements for electric vehicle charging for appropriate residential and
59 commercial.

60 SECTION 7. Said chapter 448 is hereby further amended by inserting after section 6 the
61 following 2 sections:-

62 Section 6A. (a) The department of energy resources, in consultation with the
63 Massachusetts Department of Transportation and the executive office for administration and
64 finance, shall create and maintain an inventory of motor vehicles owned or leased by the
65 commonwealth. The inventory shall include a critical replacement list consisting of non-zero
66 emission vehicles that, if the non-zero emission vehicle needed to be replaced, replacement with
67 a zero-emission vehicle is operationally feasible and results in a positive lifecycle cost benefit.
68 The critical replacement list shall include, but not be limited to, vehicles that are approaching the
69 end of their useful lives or are otherwise reasonable candidates for replacement and whose
70 replacement presents a high or medium priority opportunity for near-term electrification as
71 indicated in the study completed pursuant to section 6 and published on December 22, 2017 or
72 any successive analysis or study required by law or commissioned by the department of energy
73 resources or Massachusetts Department of Transportation. Not less than every 3 years, the
74 department of energy resources, in consultation with the Massachusetts Department of
75 Transportation, shall revise and update the analysis of opportunities for near-term electrification
76 of vehicles owned, purchased or leased by the commonwealth. For the purposes of this section,
77 “commonwealth” shall include, but not be limited to, the Massachusetts Bay Transportation
78 Authority, Massachusetts Port Authority and Massachusetts Water Resources Authority, but
79 shall not include municipalities, regional school districts and regional transit authorities

80 authorized pursuant to chapter 161B of the General Laws. Nothing in this section shall prevent or
81 limit the commonwealth from purchasing a zero-emission vehicle for a vehicle or purpose not
82 identified on the critical replacement list.

83 (b) Not later than January 1, 2024, each purchase or lease by the commonwealth of a
84 motor vehicle identified on the critical replacement list under subsection (a) by the
85 commonwealth, including, but not limited to, the Massachusetts Port Authority and
86 Massachusetts Water Resources Authority, but not including the Massachusetts Bay
87 Transportation Authority, municipalities, regional school districts and regional transit authorities
88 authorized pursuant to chapter 161B of the General Laws, shall be a zero-emission vehicle. The
89 commonwealth shall prioritize the deployment of zero-emission vehicles in underserved
90 communities and communities with a high percentage of low-income households.

91 (c) Beginning January 1, 2030, each purchase or lease of a passenger bus by the
92 Massachusetts Bay Transportation Authority shall be a zero-emission vehicle; provided,
93 however, that the Massachusetts Bay Transportation Authority shall seek to replace non-zero
94 emission passenger buses with zero-emission passenger buses before January 1, 2030.

95 (d) The Massachusetts Bay Transportation Authority shall operate exclusively zero-
96 emission passenger buses not later than December 31, 2040; provided, however, that a non-zero
97 emission passenger bus purchased before January 1, 2030 may be operated after December 31,
98 2040 if its operation is strictly necessary to maintain service levels and prompt plans are in place
99 to replace the bus with a zero-emission passenger bus.

100 (e) The secretary of transportation and the Massachusetts Bay Transportation Authority,
101 in consultation with the executive office of energy and environmental affairs, shall develop and

102 complete a plan to operate exclusively zero-emission passenger buses not later than December
103 31, 2040. With respect to early implementation, the plan shall mandate that a majority of buses
104 purchased or leased serve routes serving low-income households and households in underserved
105 communities. Not later than December 31, 2021, the plan shall be filed with the clerks of the
106 senate and house of representatives and the joint committee on transportation and be made
107 publicly available on the Massachusetts Department of Transportation’s website.

108 Every 5 years until the Massachusetts Bay Transportation Authority operates exclusively
109 zero-emission passenger buses, the secretary shall submit to the clerks of the senate and house of
110 representatives and the joint committee on transportation and post on the Massachusetts
111 Department of Transportation’s website updated progress reports on the implementation of this
112 subsection, including, but not limited to, the number of zero-emission passenger buses operated,
113 the number of non-zero emission passenger buses operated, the number of zero-emission
114 passenger buses operated on routes serving low-income households and households in
115 underserved communities, the number of non-zero emission passenger buses operated on routes
116 serving low-income households and households in underserved communities, barriers to
117 increased numbers of zero-emission passenger buses, if any, and recommended legislative or
118 regulatory action needed to address barriers or otherwise promote compliance with this section
119 and the cost of simultaneously operating zero-emission passenger buses, including, but not
120 limited to, staffing, training, maintenance and other mechanical equipment, facilities, financing
121 and premiums attributable to the purchase of zero-emission passenger buses. For the purposes of
122 this section, “zero-emission vehicle” shall mean a motor vehicle that produces no engine exhaust
123 emissions. For the purposes of this subsection, “low-income” shall have the same meaning as
124 defined under section 1 of chapter 40T of the General Laws.

125 (f) Not later than January 1, 2021, the Massachusetts Department of Transportation, in
126 consultation with the department of energy resources, shall develop recommendations for the
127 siting of zero-emission vehicle charging facilities to serve state-owned or leased zero-emission
128 vehicles and zero-emission passenger buses across the commonwealth. The recommendations
129 shall consider locations across the commonwealth, including within municipal light plant
130 territories, and shall consider the benefit and potential cost savings to ratepayers for potential
131 locations.

132 Section 6B. The department of energy resources, in consultation with the Massachusetts
133 Department of Transportation, shall conduct, publish and periodically update a study of the
134 opportunities for near-term electrification of vehicles owned or leased by municipalities, regional
135 school districts and regional transit authorities authorized pursuant to chapter 161B of the
136 General Laws. The study shall include, but not be limited to: (i) an analysis of the cost of vehicle
137 electrification, associated equipment and supplies and possible methods of meeting such costs,
138 including, but not limited to, state financial support, federal financial support and procurements
139 by regional planning agencies and other entities made up of local and regional governments; (ii)
140 recommendations for the allowance within the fleets of non-electric emergency vehicles; and (iii)
141 opportunities to pair electrification with renewable energy resources, energy storage or demand
142 response technology and policy. The department of energy resources shall publish the study on
143 its website not later than 18 months after the effective date of this section and shall thereafter
144 publish revisions of the study on its website not less than every 3 years. The study and
145 subsequent revisions shall be submitted to the clerks of the senate and house of representatives,
146 the joint committee on transportation and the joint committee on telecommunications, utilities
147 and energy and posted on the department of energy resource's website.

148 SECTION 8. Notwithstanding any general or special law to the contrary, not later than 1
149 year after the effective date of this act, the department of energy resources shall publish a guide
150 to assist cities and towns in developing processes and policies to expand electric vehicle parking
151 in municipally-owned parking spaces and lots including, but not limited to, an analysis or guide
152 to pricing incentives for parking for zero-emission vehicles and reserved parking for zero-
153 emission vehicles. The guide shall include a review of similar programs established in other
154 states. For the purposes of this section, “zero-emission vehicle” shall mean a motor vehicle that
155 produces no engine exhaust emissions.

156 SECTION 9. The Massachusetts Bay Transportation Authority, in consultation with the
157 executive office of energy and environmental affairs, shall develop a plan to reduce the carbon
158 emissions of its commuter rail and light rail operations, including a numerical value of the plan’s
159 contribution to meeting statewide greenhouse gas emissions limits and sublimits set by statute or
160 regulation. The plan shall include: (i) an analysis of the cost and benefits of meeting the
161 statewide greenhouse gas emissions limits and sublimits; (ii) energy conservation methodologies,
162 including, but not limited to, regenerative braking, flywheel, battery or capacitor storage and the
163 use of alternative methods for generating electricity; (iii) evaluation of increased electricity
164 demands resulting from steps taken by the authority to reduce greenhouse gas emissions; (iv)
165 feasibility studies, where necessary; and (v) a recommended schedule for implementation.

166 The authority shall post its plan on the authority’s website not later than 6 months from
167 the effective date of this act.

168 SECTION 10. The Massachusetts Department of Transportation shall install and
169 maintain electric vehicle charging stations at all service plazas located on the Massachusetts
170 Turnpike for public use not later than December 31, 2022.

171 SECTION 11. The motor vehicle inventory required by section 6A of chapter 448 of the
172 acts of 2016 shall be established not later than June 1, 2021.

173 SECTION 12. Amendments to the state building and electric code required under section
174 5 shall be in effect not later than January 1, 2021.