

**SENATE . . . . . No. 2499**

---

---

Senate, January 30, 2020– Text of the Senate Bill relative to Energy Savings Efficiency (Energy SAVE (being the text of Senate, No. 2478, printed as amended))

---

---

**The Commonwealth of Massachusetts**

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

An Act relative to Energy Savings Efficiency (Energy SAVE).

*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 2 of chapter 25B of the General Laws, as appearing in the 2018  
2 Official Edition, is hereby amended by inserting after the definition of “Central furnace” the  
3 following 7 definitions:-

4           “Cold temperature fluorescent lamp”, a fluorescent lamp that is not a compact fluorescent  
5 lamp and is: (1) specifically designed to start at -20°F when used with a ballast conforming to the  
6 requirements of ANSI C78.81 and ANSI C78.901; and (2) expressly designated as a cold  
7 temperature lamp both in markings on the lamp and in marketing materials, including catalogs,  
8 sales literature and promotional material.

9           “Color rendering index” or “CRI”, the measure of the degree of color-shift objects  
10 undergo when illuminated by a light source as compared to the color of those same objects when  
11 illuminated by a reference source of comparable color temperature.

12           “Commercial dishwasher”, a machine designed to clean and sanitize plates, pots, pans,  
13 glasses, cups, bowls, utensils and trays by applying sprays of detergent solution with or without  
14 blasting media granules and a sanitizing rinse.

15           “Commercial fryer”, an appliance, including a cooking vessel in which: (1) oil is placed  
16 to such a depth that the cooking food is essentially supported by displacement of the cooking  
17 fluid rather than by the bottom of the vessel; and (2) heat is delivered to the cooking fluid by  
18 means of an immersed electric element of band-wrapped vessel, electric fryers, or by heat  
19 transfer from gas burners through the walls of the fryer or through tubes passing through the  
20 cooking fluid, gas fryers.

21           “Commercial hot-food holding cabinet”, a heated, fully-enclosed compartment with at  
22 least 1 solid or transparent door designed to maintain the temperature of hot food that has been  
23 cooked using a separate appliance; provided, however, that “commercial hot-food holding  
24 cabinet” shall not include heated glass merchandizing cabinets, drawer warmers or cook-and-  
25 hold appliances.

26           “Commercial oven”, a chamber designed for heating, roasting or baking food by  
27 conduction, convection, radiation or electromagnetic energy.

28           “Commercial steam cooker” or “compartment steamer”, a device with at least 1 food-  
29 steaming compartment in which the energy in the steam is transferred to the food by direct  
30 contact; provided, however, that models may include countertop models, wall-mounted models  
31 and floor models mounted on a stand, pedestal or cabinet-style base.

32           SECTION 2. Said section 2 of said chapter 25B, as so appearing, is hereby further  
33 amended by inserting after the definition of “Compensation” the following 3 definitions:-

34 “Dual-flush effective flush volume”, the average flush volume of 2 reduced flushes and 1  
35 full flush.

36 “Dual-flush water closet”, a tank-type water closet incorporating a feature that allows the  
37 user to flush the water closet with a reduced or a full volume of water.

38 “Electric vehicle supply equipment”, an electric component assembly or cluster of  
39 component assemblies designed specifically to charge batteries within electric vehicles by  
40 permitting the transfer of electric energy to a battery or other storage device in an electric  
41 vehicle.

42 SECTION 3. Said section 2 of said chapter 25B, as so appearing, is hereby further  
43 amended by striking out the definition of “High-intensity discharge lamp” and inserting in place  
44 thereof the following 2 definitions:-

45 “Faucet”, a lavatory faucet, kitchen faucet, metering faucet, public lavatory faucet or  
46 replacement aerator for a lavatory or kitchen faucet.

47 “Flow rate”, the rate of water flow of a plumbing fitting.

48 SECTION 4. Said section 2 of said chapter 25B, as so appearing, is hereby further  
49 amended by inserting after the definition of “F96T12 Lamp” the following 4 definitions:-

50 “General service lamp”, a lamp as set forth in the action published at 82 Fed. Reg. 7276,  
51 7321-22 (January 19, 2017) and modified by the action published at 82 Fed. Reg. 7322, 7333  
52 (January 19, 2017).

53 “Hand-held showerhead”, a showerhead that can be held or fixed in place for the purpose  
54 of spraying water onto a bather and that is connected to a flexible hose.

55           “High color rendering index fluorescent lamp”, a fluorescent lamp with a color rendering  
56 index of 87 or greater that is not a compact fluorescent lamp.

57           “Impact-resistant fluorescent lamp”, a fluorescent lamp that is not a compact fluorescent  
58 lamp that: (1) has a coating or equivalent technology that is compliant with NSF/ANSI 51 and is  
59 designed to contain the glass if the glass envelope of the lamp is broken; and (2) is designated  
60 and marketed for the intended application with: (a) the designation on the lamp packaging; and  
61 (b) marketing materials that identify the lamp as being impact-resistant, shatter-resistant, shatter-  
62 proof or shatter-protected.

63           SECTION 5. Said section 2 of said chapter 25B, as so appearing, is hereby further  
64 amended by inserting after the definition of “Metal halide lamp fixture” the following  
65 definition:-

66           “Metering faucet”, a fitting that, when turned on, will gradually shut itself off over a  
67 period of several seconds.

68           SECTION 6. Said section 2 of said chapter 25B, as so appearing, is hereby further  
69 amended by inserting after the definition of “New appliance” the following 4 definitions:-

70           “On demand”, when the water cooler heats water as it is requested.

71           “Plumbing fitting”, a device that controls and guides the flow of water in a supply  
72 system.

73           “Plumbing fixture”, an exchangeable device that connects to a plumbing system to  
74 deliver and drain away water and waste.

75           “Portable electric spa”, a factory-built electric spa or hot tub that may include any  
76 combination of integral controls, water heating or water circulating equipment.

77           SECTION 7. Said section 2 of said chapter 25B, as so appearing, is hereby further  
78 amended by inserting after the definition of “Probe-start metal halide ballast” the following  
79 definition:-

80           “Public lavatory faucet”, a fitting intended to be installed in nonresidential bathrooms  
81 that are accessible to walk-in traffic.

82           SECTION 8. Said section 2 of said chapter 25B, as so appearing, is hereby further  
83 amended by inserting after the definition of “Refrigerator-freezer” the following definition:-

84           “Replacement aerator”, an aerator sold as a replacement, separate from the faucet to  
85 which it is intended to be attached.

86           SECTION 9. Said section 2 of said chapter 25B, as so appearing, is hereby further  
87 amended by inserting after the definition of “Residential furnace or boiler” the following 2  
88 definitions:-

89           “Residential ventilating fan”, a ceiling, wall-mounted or remotely mounted in-line fan  
90 designed to be used in a bathroom or utility room, whose purpose is to move air from inside the  
91 building to the outdoors.

92           “Showerhead”, a device through which water is discharged for a shower bath and  
93 includes a handheld showerhead, but does not include a safety showerhead.

94 SECTION 10. Said section 2 of said chapter 25B, as so appearing, is hereby further  
95 amended by inserting after the definition of “Single-voltage external AC to DC power supply”  
96 the following 3 definitions:-

97 “Spray sprinkler body”, the exterior case or shell of a sprinkler incorporating a means of  
98 connection to the piping system designed to convey water to a nozzle or orifice.

99 “Standby power”, the average power in standby mode, measured in watts.

100 “State-regulated general service lamp”, includes: (1) shatter-resistant incandescent lamps,  
101 3-way incandescent lamps and high lumen output incandescent lamps rated at more than 2600  
102 lumens or, in the case of a modified spectrum lamp, more than 1950 lumens and less than or  
103 equal to 3,300 lumens; (2) incandescent reflector lamps that are: (a) ER30, BR30, BR40 or ER40  
104 lamps rated at 50 Watts or less; (b) BR30, BR40 or ER40 lamps rated at 65 watts; and (c) R20  
105 lamps rated at 45 watts or less; and (3) incandescent lamps that are: (a) T shape lamps rated at ≤  
106 40 Watts or ≥ 10 inches in length; (b) B, BA, CA, F, G-16½, G-25, G-30 and S shape lamps; and  
107 (c) M-14 lamps rated at ≤ 40 Watts.

108 SECTION 11. Said section 2 of said chapter 25B, as so appearing, is hereby further  
109 amended by inserting after the definition of “State plumbing code” the following definition:-

110 “Storage-type”, thermally conditioned water that is stored in a tank in the water cooler  
111 and is available instantaneously, including, but not limited to, point of use, dry storage  
112 compartment and bottled water coolers.

113 SECTION 12. Said section 2 of said chapter 25B, as so appearing, is hereby further  
114 amended by inserting after the definition of “Transformer” the following 4 definitions:-

115 “Trough-type urinal”, a urinal designed for simultaneous use by 2 or more persons.

116 “Urinal”, a plumbing fixture that receives only liquid body waste and conveys the waste  
117 through a trap into a drainage system.

118 “Water closet”, a plumbing fixture with a water-containing receptor that receives liquid  
119 and solid body waste through an exposed integral trap into a drainage system.

120 “Water cooler”, a freestanding device that consumes energy to cool or heat potable water;  
121 provided, however, that the device is not wall-mounted, under-sink or otherwise building  
122 integrated.

123 SECTION 13. Said section 2 of said chapter 25B, as so appearing, is hereby further  
124 amended by adding the following definition:-

125 “Water use”, the quantity of water flowing through a showerhead, faucet, water closet or  
126 urinal at point of use.

127 SECTION 14. The first paragraph of section 3 of said chapter 25B, as so appearing, is  
128 hereby amended by adding the following 15 clauses:-

129 (k) commercial hot-food holding cabinets.

130 (l) computers and computer monitors.

131 (m) state-regulated general service lamps.

132 (n) high CRI, cold temperature and impact-resistant fluorescent lamps.

133 (o) plumbing fittings.

- 134 (p) plumbing fixtures.
- 135 (q) portable electric spas.
- 136 (r) water coolers.
- 137 (s) residential ventilating fans.
- 138 (t) commercial ovens.
- 139 (u) commercial dishwashers.
- 140 (v) commercial fryers.
- 141 (w) commercial steam cookers.
- 142 (x) spray sprinkler bodies.
- 143 (w) electric vehicle supply equipment.

144 SECTION 15. Section 5 of said chapter 25B, as so appearing, is hereby amended by  
145 striking out, in line 24, the figure “(s)” and inserting in place thereof the following figure:- (w).

146 SECTION 16. The third paragraph of said section 5 of said chapter 25B, as so appearing,  
147 is hereby amended by adding the following 15 clauses:-

148 (6) Commercial hot-food holding cabinets shall meet the qualification criteria in Version  
149 2.0 of the United States Environmental Protection Agency’s ENERGY STAR program product  
150 specifications for commercial hot-food holding cabinets.

151 (7) Computers and computer monitors shall meet the requirements of section 1605.3 of  
152 Title 20 of the California Code of Regulations, as in effect on the date of enactment of this



153 clause, as measured in accordance with test methods prescribed in section 1604 of said Title 20  
154 of the California Code of Regulations; provided, however, that the regulations shall define  
155 “computer” and “computer monitor” to have the same meaning as set forth in section 1602(v) of  
156 said Title 20 of the California Code of Regulations; provided further, that the referenced portions  
157 of the California Code of Regulations shall be those adopted on or before the effective date of  
158 this clause; provided further, that the commissioner shall have authority to amend the rules so  
159 that the definitions of “computer” and “computer monitor” and the minimum efficiency  
160 standards for computers and computer monitors conform to subsequently adopted modifications  
161 to the referenced sections of the California Code of Regulations.

162 (8) State-regulated general service lamps shall meet or exceed a lamp efficacy of 45  
163 lumens per watt, when tested in accordance with the applicable federal test procedures for  
164 general service lamps, prescribed in Section 430.23 (gg) of Title 10 of the Code of Federal  
165 Regulations.

166 (9) High CRI, cold temperature and impact-resistant fluorescent lamps shall meet the  
167 minimum efficiency requirements contained in Section 430.32(n)(4) of Title 10 of the Code of  
168 Federal Regulations as in effect on January 3, 2019, when tested in accordance with the test  
169 procedure prescribed in Appendix R to Subpart B of Part 430 of Title 10 of the Code of Federal  
170 Regulations as in effect on January 3, 2019.

171 (10) Plumbing fittings shall meet the following requirements:

172 (a) when tested in accordance with the flow rate test procedure prescribed in Appendix S  
173 to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations: the flow rate of lavatory  
174 faucets and replacement aerators shall not be greater than 1.5 gallons per minute, hereafter

175 referred to as “gpm”, at 60 pounds per square inch (hereafter referred to as “psi”); for sprayheads  
176 with independently controlled orifices and manual controls, the maximum flow rate of each  
177 orifice that manually turns on or off shall not exceed the maximum flow rate for a lavatory  
178 faucet; and for sprayheads with collectively controlled orifices and manual controls, the  
179 maximum flow rate of a sprayhead that manually turns on or off shall be the product of: (i) the  
180 maximum flow rate for a lavatory faucet; and (ii) the number of component lavatories (rim space  
181 of the lavatory in inches [millimeters] divided by 20 inches [508 millimeters]);

182 (b) the flow rate of residential kitchen faucets and replacement aerators shall not be  
183 greater than 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi when tested in  
184 accordance with the flow rate test procedure prescribed in Appendix S to Subpart B of Part 430  
185 of Title 10 of the Code of Federal Regulations;

186 (c) the flow rate of public lavatory faucets and replacement aerators shall not be greater  
187 than 0.5 gpm at 60 psi when tested in accordance with the flow rate test procedure prescribed in  
188 Appendix S to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations; and

189 (d) the flow rate of showerheads shall not be greater than 2.0 gpm at 80 psi when tested  
190 in accordance with the flow rate test procedure prescribed in Appendix S to Subpart B of Part  
191 430 of Title 10 of the Code of Federal Regulations, effective on January 3, 2019.

192 (11) Plumbing fixtures shall meet the following requirements:

193 (a) the water consumption of urinals and water closets, other than those designed and  
194 marketed exclusively for use at prisons or mental health care facilities, shall be not greater than  
195 the values shown in items (a)(i) to (a)(iv), inclusive, when tested in accordance with the water  
196 consumption test prescribed in Appendix T to Subpart B of Part 430 of Title 10 of the Code of

197 Federal Regulations and waste extraction test for water closets (Section 7.9) of ASME  
198 A112.19.2/CSA B45.1-2018.

199 (i) Wall-mounted urinals, except for trough-type urinals, shall have a maximum flush  
200 volume of 0.5 gallons per flush.

201 (ii) Floor-mounted urinals, except for trough-type urinals, shall have a maximum flush  
202 volume of 0.5 gallons per flush.

203 (iii) water closets, except for dual-flush tank-type water closets, shall have a maximum  
204 flush volume of 1.28 gallons per flush.

205 (iv) dual-flush tank-type water closets shall have a maximum effective flush volume of  
206 1.28 gallons per flush.

207 (12) Portable electric spas shall meet the requirements of the American National  
208 Standard for Portable Electric Spa Energy Efficiency, ANSI/APSP/ICC-14-2019.

209 (13) Water coolers shall have on mode with no water draw energy consumption, a test  
210 that records the 24-hour energy consumption of a water cooler with no water drawn during the  
211 test period, less than or equal to the following, as measured in accordance with the test criteria  
212 prescribed in Version 2.0 of the ENERGY STAR program product specifications for water  
213 coolers:

214 (a) 0.16 kilowatt-hours per day for cold-only and cook-and-cold units;

215 (b) 0.87 kilowatt-hours per day for hot-and-cold units—storage type; and

216 (c) 0.18 kilowatt-hours per day for hot and cold units—on demand.

217 (14) Residential ventilating fans shall meet the qualification criteria in Version 4.1 of the  
218 ENERGY STAR Program Requirements Product Specification for Residential Ventilating Fans.

219 (15) Commercial ovens included in the scope of Version 2.2 of the ENERGY STAR  
220 Program Requirements Product Specification for Commercial Ovens shall meet the qualification  
221 criteria of that specification.

222 (16) Commercial dishwashers included in the scope of Version 2.0 of the ENERGY  
223 STAR Program Requirements Product Specification for Commercial Dishwashers shall meet the  
224 qualification criteria of that specification.

225 (17) Commercial fryers included in the scope of Version 2.0 of the ENERGY STAR  
226 Program Requirements Product Specification for Commercial Fryers shall meet the qualification  
227 criteria of that specification.

228 (18) Commercial steam cookers shall meet the requirements of Version 1.2 of the  
229 ENERGY STAR Program Requirements for Commercial Steam Cookers.

230 (19) Spray sprinkler bodies that are not specifically excluded from the scope of Version  
231 1.0 of the WaterSense Specification for Spray Sprinkler Bodies shall include an integral pressure  
232 regulator and shall meet the water efficiency and performance criteria and other requirements of  
233 that specification.

234 (20) Electric vehicle supply equipment included in the scope of Version 1.0 (Rev. Apr-  
235 2017) of the ENERGY STAR Program Requirements Product Specification for Electric Vehicle  
236 Supply Equipment shall meet the qualification criteria of that specification.

237 SECTION 17. Said section 5 of said chapter 25B, as so appearing, is hereby further  
238 amended by inserting after the fourth paragraph the following paragraph:-

239 On or after January 1, 2022, no new cold temperature fluorescent lamp, commercial  
240 dishwasher, commercial fryer, commercial hot-food holding cabinet, commercial oven,  
241 commercial steam cooker, computer or computer monitor, electric vehicle supply equipment,  
242 faucet, high CRI fluorescent lamp, impact-resistant fluorescent lamp, portable electric spa,  
243 residential ventilating fan, showerhead, spray sprinkler body, urinal, water closet or water cooler  
244 may be sold or offered for sale, lease or rent in the commonwealth unless the efficiency of the  
245 new product meets or exceeds the efficiency standards set forth in the regulations adopted  
246 pursuant to this section.

247 SECTION 18. Section 9 of said chapter 25B, as so appearing, is hereby amended by  
248 adding the following paragraph:-

249 If any of the energy or water conservation standards issued or approved for publication  
250 by the Office of the United States Secretary of Energy as of January 1, 2018 pursuant to the  
251 Energy Policy and Conservation Act, 10 C.F.R. §§ 430-431, are withdrawn, repealed or  
252 otherwise voided, the minimum energy or water efficiency level permitted for products  
253 previously subject to federal energy or water conservation standards shall be the previously  
254 applicable federal standards and no such product may be sold or offered for sale in the  
255 commonwealth unless it meets or exceeds such standards.

256 SECTION 19. No state-regulated general service lamp may be sold or offered for sale in  
257 the commonwealth unless the efficiency of the new product meets or exceeds the efficiency  
258 standards provided in section 5 of chapter 25B of the General Laws.

SECTION 20. Section 19 shall take effect 6 months after the effective date of this act.