

SENATE No. 2477

The Commonwealth of Massachusetts

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

SENATE, January 23, 2020.

The committee on Senate Ways and Means to whom was referred the Senate Bill to encourage the deployment of heat pumps (Senate, No. 1925) (also based on Senate, Nos. 524, 1926, 1929, 1935, 1957 and 2011), - reports, recommending that the same ought to pass with an amendment substituting a new draft entitled "An Act setting next-generation climate policy" (Senate, No. 2477).

For the committee,
Michael J. Rodrigues

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

An Act setting next-generation climate policy.

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

1 SECTION 1. Section 1 of chapter 21N of the General Laws, as appearing in the 2018
2 Official Edition, is hereby amended by striking out the definition of “Market-based compliance
3 mechanism” and inserting in place thereof the following definition:-

4 “Market-based compliance mechanism”, a pricing or compliance mechanism or system,
5 imposed on sources or categories of sources of greenhouse gas-emitting substances or on the
6 distribution or sale of greenhouse gas-emitting substances, designed to reduce emissions as
7 required by this chapter, including, but not limited to, any mechanism or system of: (i) market-
8 based declining annual aggregate emissions limitations for sources or categories of sources that
9 emit greenhouse gases; (ii) greenhouse gas emissions exchanges, banking, credits and other
10 transactions governed by rules and protocols established by the secretary, a regional program or
11 other interested states that results in the same greenhouse gas emissions reductions, over the
12 same time period, as direct compliance with a greenhouse gas emissions limit or emissions
13 reduction measure adopted pursuant to this chapter; or (iii) charges or exactions imposed to
14 reduce statewide greenhouse gas emissions in whole or in part.

15 SECTION 2. Subsection (a) of section 2 of said chapter 21N, as so appearing, is hereby
16 amended by striking out the first sentence and inserting in place thereof the following sentence:-
17 The department shall monitor and regulate emissions of greenhouse gases with the goal of
18 reducing emissions in order to achieve the greenhouse gas emissions limits adopted pursuant to
19 this chapter.

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

22 (b) To maximize the ability of the commonwealth to realize the 2050 emissions limit, the
23 secretary shall, in consultation with the department and the department of energy resources,
24 adopt the following statewide greenhouse gas emissions limits: (i) a 2020 statewide greenhouse
25 gas emissions limit; (ii) a 2025 statewide greenhouse gas emissions limit; (iii) a 2030 statewide
26 greenhouse gas emissions limit; (iv) a 2035 statewide greenhouse gas emissions limit; (v) a 2040
27 statewide greenhouse gas emissions limit; (vi) a 2045 statewide greenhouse gas emissions limit;
28 and (vii) a 2050 statewide greenhouse gas emissions limit of not more than net-zero emissions.
29 Each limit shall be accompanied by a comprehensive, clear and specific plan to realize the
30 adopted limit.

31 SECTION 4. Said chapter 21N is hereby amended by inserting after section 3 the
32 following 2 sections:-

33 Section 3A. (a) The secretary shall, in consultation with the secretary of housing and
34 economic development and the secretary of transportation, adopt sector-based statewide
35 greenhouse gas emissions sublimits as components of each statewide greenhouse gas emissions
36 limit adopted pursuant to subsection (b) of section 3. Each source or category of sources of

37 emissions shall be subject to statewide emissions sublimits, including, but not limited to, electric
38 power, transportation, commercial and industrial heating and cooling, residential heating and
39 cooling, industrial processes, solid waste, agriculture and natural gas distribution and service.

40 (b) Sector-based statewide greenhouse gas emissions sublimits for a given year shall not,
41 in the aggregate, exceed the statewide greenhouse gas emissions limit for the year and shall be
42 designed to allow the commonwealth to realize the 2050 statewide greenhouse gas emissions
43 limit.

44 Section 3B. Not later than February 1 of every third year, the secretary shall, for each
45 plan approved under section 21 of chapter 25, set a goal, expressed in tons of carbon dioxide
46 equivalent, for the succeeding plan's necessary contribution to meeting each statewide
47 greenhouse gas emissions limit and sublimit adopted pursuant to this chapter.

48 SECTION 5. Subsection (a) of section 4 of said chapter 21N, as so appearing, is hereby
49 amended by inserting after the first sentence the following 2 sentences:- The 2030 statewide
50 greenhouse gas emissions limit adopted pursuant to clause (iii) of said subsection (b) of said
51 section 3 shall be not less than 50 per cent below the 1990 emissions level. The 2040 statewide
52 greenhouse gas emissions limit adopted pursuant to clause (v) of said subsection (b) of said
53 section 3 shall be not less than 75 per cent below the 1990 emissions level.

54 SECTION 6. Said subsection (a) of said section 4 of said chapter 21N, as so appearing, is
55 hereby further amended by striking out the last sentence and inserting in place thereof the
56 following sentence:- The 2020, 2025, 2030, 2035, 2040, 2045 and 2050 statewide greenhouse
57 gas emissions limits and the accompanying plans for realizing the limits shall comply with the
58 requirements of this section and section 5.

59 SECTION 7. Subsection (b) of said section 4 of said chapter 21N, as so appearing, is
60 hereby amended by striking out, in line 17, the words "limit established in subsection (a)" and
61 inserting in place thereof the following words:- limits adopted pursuant to subsection (b) of
62 section 3.

63 SECTION 8. Subsection (g) of said section 4 of said chapter 21N, as so appearing, is
64 hereby amended by striking out, in line 42, the words "emission limit and implementing plan"
65 and inserting in place thereof the following words:- 2025, 2030, 2035, 2040, 2045 and 2050
66 statewide greenhouse gas emissions limits and the accompanying plans for realizing the limits.

67 SECTION 9. Said section 4 of said chapter 21N, as so appearing, is hereby further
68 amended by striking out subsection (h) and inserting in place thereof the following section:-

69 (h) Not more than 18 months after the last day of 2020, 2025, 2030, 2035, 2040, 2045,
70 2050 and any other calendar year for which a statewide greenhouse gas emissions limit is
71 adopted pursuant to statute or regulation, the secretary shall file a formal certificate of
72 compliance with the climate policy commission established under chapter 21P, the clerks of the
73 house of representatives and the senate, the house and senate committees on ways and means, the
74 joint committee of telecommunications, utilities and energy and the joint committee on the
75 environment, natural resources and agriculture. The certificate shall certify, drawing upon the
76 best available data and measurements, the commonwealth's compliance with, or failure to
77 comply with, the statewide greenhouse gas emissions limit. The certificate shall include a
78 quantification of the extent to which emissions exceed or do not exceed the limit and an analysis
79 of the lessons learned from the success or failure to comply with the limit. If emissions exceeded
80 the limit, the certificate shall include comprehensive, clear and specific remedial steps to offset

81 the excess emissions and ensure compliance with the next upcoming limit adopted pursuant to
82 statute or regulation.

83 SECTION 10. Said chapter 21N is hereby further amended by striking out sections 5 to 7,
84 inclusive, as so appearing, and inserting in place thereof the following 3 sections:-

85 Section 5. (a) The secretary shall monitor the implementation of plans and regulations
86 relative to climate change. To the extent practicable, the plans required by subsection (b) of
87 section 3 for 2025, 2030, 2035, 2040, and 2045 shall be consistent with each other, cumulative in
88 effect and constructed to realize the 2050 statewide greenhouse gas emissions limit imposed by
89 said subsection (b) of said section 3. Each plan, including the 2050 plan, shall: (i) address each
90 sector subject to a statewide greenhouse gas emissions sublimit imposed by section 3A of this
91 chapter; (ii) indicate for each sector how, to what extent and when the commonwealth will act to
92 reduce its emissions in order to realize the 2050 statewide greenhouse gas emissions limit; (iii)
93 quantify the emissions reductions to be realized due to the electric and gas energy efficiency
94 programs established under sections 19 and 21 of chapter 25; (iv) set numerical benchmarks and
95 track adoption within the commonwealth of emissions reduction products, solutions and
96 improvements used to achieve the statewide greenhouse gas emissions limits and sublimits,
97 including, but not be limited to, electric vehicles, electric vehicle charging stations, solar
98 photovoltaic and solar thermal technologies, energy storage capacity and air-source and ground-
99 source heat pumps; (v) consider whether activities undertaken to comply with statewide
100 greenhouse gas emissions limits and sublimits disproportionately impact moderate-income and
101 low-income communities and recommend actions that may be taken to eliminate any such
102 impacts; (vi) consider overall societal benefits, including reductions of other air pollutants,
103 diversification of energy sources and other benefits to the economy, environment and public

104 health; (vii) consider whether activities undertaken to comply with statewide greenhouse gas
105 emissions limits and sublimits minimize costs and administrative burdens and maximize total
106 benefits to the commonwealth; (viii) consider whether activities undertaken to comply with
107 statewide greenhouse gas emissions limits and sublimits minimize leakage; (ix) ensure that
108 greenhouse gas emissions reductions are real, permanent, quantifiable, verifiable and
109 enforceable; and (x) make recommendations for future policy action.

110 Section 6. The secretary shall promulgate all regulations necessary to achieve the limits
111 imposed by subsection (b) of section 3 and sublimits imposed by section 3A. The regulations
112 shall be designed to ensure that the commonwealth achieves the required emissions reductions
113 equitably and in a manner that protects and, where feasible, improves the condition of low-
114 income and moderate-income persons while creating, where feasible, additional employment and
115 economic development in the commonwealth.

116 Section 7. (a) The secretary shall promulgate regulations establishing market-based
117 compliance mechanisms for: (i) the transportation sector; provided, however, that the regulations
118 shall, at a minimum, be designed to reduce emissions from passenger vehicles and light duty
119 trucks; (ii) the commercial, industrial and institutional sectors, including, but not limited to,
120 buildings and industrial, manufacturing and other business processes; and (iii) the residential
121 building sector.

122 (b) Market-based compliance mechanisms established pursuant to this section shall be
123 designed to: (i) maximize the ability of the commonwealth to achieve the statewide greenhouse
124 gas emissions limits established pursuant to this chapter; (ii) ensure that the commonwealth
125 achieves the required emissions reductions equitably and in a manner that protects and, where

126 feasible, improves the condition of low-income and moderate-income persons; (iii) prevent
127 increases in the emissions of toxic air contaminants and criteria air pollutants, including, but not
128 limited to emissions of nitrous oxide, sulfur dioxide and mercury; (iv) identify manufacturing
129 sectors, economic sectors, economic subsectors or individual employers at risk of adverse
130 impacts due to such mechanisms and mitigate the impacts; and (v) maximize additional
131 environmental and economic benefits for the commonwealth.

132 (c) The executive office and the department may work with the participating regional
133 greenhouse gas initiative states, other interested states and Canadian provinces to develop a plan
134 to expand market-based compliance mechanisms such as the regional greenhouse gas initiative to
135 other sources and sectors necessary or desirable to facilitate the achievement of the statewide
136 greenhouse gas emissions limits.

137 (d) The secretary may adopt regulations governing the use of market-based compliance
138 mechanisms by regulated entities subject to the statewide greenhouse gas emissions limits and
139 mandatory emissions reporting requirements to achieve compliance with such limits.

140 (e) The executive office shall monitor compliance with this chapter and enforce any rule,
141 regulation, order, emissions limit, emissions reduction measure or market-based compliance
142 mechanism adopted by the secretary or department under this chapter. The department may
143 impose a civil administrative penalty pursuant to section 16 of chapter 21A for a violation of any
144 rule, regulation, order, emissions limitation, emissions reduction measure or other measure
145 adopted by the secretary pursuant to this chapter.

146 SECTION 11. The General Laws are hereby amended by inserting after chapter 21O the
147 following chapter:--

148 Chapter 21Q.

149 Climate Policy Commission.

150 Section 1. As used in this chapter, the following terms shall have the following meanings
151 unless the context clearly requires otherwise:

152 “Commission”, the climate policy commission established pursuant to section 2.

153 “Greenhouse gas emissions”, emission of a greenhouse gas as defined in section 1 of
154 chapter 21N.

155 “State agency”, a state agency as defined in section 1 of chapter 29.

156 Section 2. (a) There shall be established a state agency known as the climate policy
157 commission. The commission shall be an independent public entity not subject to the supervision
158 and control of any other executive office, department, commission, board, bureau, agency or
159 political subdivision of the commonwealth.

160 (b) There shall be a board, with duties and powers established pursuant to this chapter,
161 that shall govern the commission and that shall consist of: the secretary of energy and
162 environmental affairs, who shall serve ex officio; 2 members appointed by the attorney general
163 who shall have expertise in energy economics, public health, climate science or statistics, 1 of
164 whom shall be selected from a list of not less than 3 individuals nominated by the energy
165 efficiency advisory council under section 22 of chapter 25; and 6 members appointed by the
166 governor, 4 of whom shall be selected from a list comprised of 1 individual nominated by each
167 president or chancellor of an institution of higher education in the commonwealth classified by
168 the Carnegie Classification System as a doctorate-granting university with very high research

169 activity, 1 of whom shall have expertise in energy economics, public health, climate science or
170 statistics and 1 of whom shall be selected from a list of not less than 3 individuals nominated by
171 the greenhouse gas emissions reduction measures advisory committee established under section
172 8 of chapter 21N. All persons appointed to the commission shall be selected without regard to
173 political affiliation and solely on the basis of the qualifications and experience that the
174 appointing authorities determine are necessary to fulfilling the mission of the commission.

175 A vacancy occurring on the commission shall be filled within 90 days by the original
176 appointing authority. A person appointed to fill a vacancy shall serve initially only for the
177 unexpired term. Members of the commission shall be eligible for reappointment. The
178 commission shall annually elect 1 of its members to serve as chair and 1 member to serve as
179 vice-chair.

180 Members shall serve without pay, but shall be reimbursed for actual expenses necessarily
181 incurred in the performance of their duties. No appointed member shall hold full or part-time
182 employment in the executive branch of state government. Each member of the commission shall
183 be a resident of the commonwealth.

184 (c) Any action of the commission may take effect immediately and need not be published
185 or posted unless otherwise provided by law. Meetings of the commission shall be subject to
186 sections 18 to 25, inclusive, of chapter 30A; provided, however, that said sections 18 to 25,
187 inclusive, of said chapter 30A shall not apply to any meeting of members of the commission
188 serving ex officio in the exercise of their duties as officers of the commonwealth if no matters
189 relating to the official business of the commission are discussed and decided at the meeting. The
190 commission shall be subject to all other provisions of said chapter 30A and records pertaining to

191 the administration of the commission shall be subject to section 42 of chapter 30 and section 10
192 of chapter 66. All moneys of the commission shall be considered to be public funds for purposes
193 of chapter 12A. Except as otherwise provided in this section, the operations of the commission
194 shall be subject to chapter 268A and chapter 268B.

195 The commission shall not be required to obtain the approval of any officer or employee
196 of any executive agency in connection with the collection or analysis of any information. The
197 commission shall not be required to obtain the approval of any officer or employee of any
198 executive agency with respect to the substance of any reports that the commission has prepared
199 under this chapter before publication.

200 (d) The commission shall appoint an executive director by a majority vote. The executive
201 director shall be selected without regard to political affiliation and solely on the basis of the
202 qualifications and experience that the commission determines necessary to fulfill the mission of
203 the commission. The executive director shall supervise the administrative affairs and general
204 management and operations of the commission and also serve as secretary of the commission, ex
205 officio. The executive director shall receive a salary commensurate with the duties of the office.
206 The executive director may, with the approval of the commission, appoint other officers and
207 employees of the commission necessary to the functioning of the commission.

208 The executive director shall not be required to obtain the approval of any other executive
209 agency in connection with appointment of employees. Sections 9A, 45, 46 and 46C of chapter
210 30, chapter 31 and chapter 150E shall not apply to the executive director of the commission.
211 Sections 45, 46 and 46C of chapter 30 shall not apply to any employee of the commission. The

212 executive director may establish personnel regulations for the officers and employees of the
213 commission.

214 Annually, not later than the first Wednesday in February, the executive director shall file
215 a personnel report with the senate and house committees on ways and means containing the job
216 classifications, duties and salary of each officer and employee within the commission, together
217 with personnel regulations applicable to the officers and employees. The executive director shall
218 file amendments to the report with the senate and house committees on ways and means
219 whenever any changes become effective.

220 If the position of executive director is vacant, a successor shall be appointed in the same
221 manner as the original appointment for the unexpired term. The executive director shall serve for
222 a term of 5 years. No person shall be appointed as the executive director for more than 2
223 consecutive 5-year terms.

224 The commission may remove the executive director from office, for cause, by a majority
225 vote. The reasons for removal of the executive director shall be stated in writing and shall
226 include the basis for such removal.

227 The executive director shall, with the approval of the commission: (i) plan, direct,
228 coordinate and execute administrative functions in conformity with the policies and directives of
229 the commission; (ii) employ professional and clerical staff as necessary; (iii) report to the
230 commission on all operations under their control and supervision; (iv) prepare an annual budget
231 and manage the administrative expenses of the commission; and (v) undertake any other
232 activities necessary to implement the powers and duties under this chapter.

233 The commission may approve the use of funds from receipt of up to 2 per cent, not to
234 exceed \$5,000,000, of any monies collected by the commonwealth from market-based
235 compliance mechanisms used to address greenhouse gas emissions, including, but not limited to,
236 the regional greenhouse gas initiative established under section 22 of chapter 21A, to support the
237 annual budget of the commission, in addition to funds from any other source and any funds
238 appropriated therefor by the general court. The commission shall not be required to obtain the
239 approval of another executive agency in connection with the development and administration of
240 its annual budget.

241 The commission shall adopt and amend rules and regulations for the administration of its
242 duties and powers and to effectuate this chapter pursuant to chapter 30A.

243 Section 3. The commission shall be responsible for tracking and assessing public and
244 private sector progress, or lack thereof, towards meeting any and all limits, sublimits, goals and
245 milestones set by statute or regulation with respect to greenhouse gas emissions and reductions
246 thereto and facilitating such progress.

247 The focus of the commission shall be comprehensive and economy-wide, including, but
248 not limited to, the specific sectors of electric power, transportation, commercial and industrial
249 heating and cooling, residential heating and cooling, industrial processes, solid waste, agriculture
250 and natural gas transmission, distribution and service.

251 The commission shall:

252 (i) assess and comment and issue recommendations on the content, design, management
253 and likely effectiveness of specific policies, programs and initiatives proposed or undertaken to
254 reduce or avoid greenhouse gas emissions or substitute non-emitting energy sources;

255 (ii) assess and comment and issue recommendations on any roadmap, plan, policy,
256 program, initiative, regulation, law or certification issued, proposed, prepared, noticed,
257 undertaken or completed by the commonwealth or any of its political subdivisions with respect
258 to matters within the purview of the commission, including the implications for, and risks to,
259 underserved communities and communities with a high percentage of low-income households,
260 populations and regions of the commonwealth;

261 (iii) monitor the adoption of the best available technology and the best standards and
262 practices for reducing greenhouse gas emissions or substituting non-emitting energy sources;

263 (iv) conduct hearings and undertake inquiries;

264 (v) make recommendations to state agencies with respect to changes in an agency's data
265 collection practices or scope;

266 (vi) review all certificates of compliance issued by the secretary of energy and
267 environmental affairs under section 4 of chapter 21N or by the department of public utilities
268 under section 21 of chapter 25;

269 (vii) meet at least annually with the advisory council established under section 7; and

270 (viii) gather, serve as a central repository for and disseminate data and analysis to the
271 public and policymakers from any and all sources that the commission deems relevant to
272 carrying out its charge.

273 Section 4. (a) The commission shall hold not less than 3 public hearings in
274 geographically diverse locations on each certification filed under section 4 of chapter 21N, not

275 less than 2 of which shall be held in underserved communities and communities with a high
276 percentage of low-income households.

277 (b) Not later than 60 days after the department of public utilities issues a certificate of
278 compliance under section 21 of chapter 25, the commission shall, hold a public hearing
279 examining the degree to which the activities undertaken pursuant to each plan contributed to
280 meeting statewide greenhouse gas emission limits imposed by statute or regulation.

281 For each public hearing, the commission may require witnesses and testimony from
282 stakeholders, as deemed appropriate by the commission.

283 Section 5. The commission shall periodically report to the governor, the senate president,
284 the speaker of the house of representatives, the senate and house committees on ways and means,
285 the senate and house committees on global warming and climate change, the joint committee on
286 telecommunications, utilities and energy and the joint committee on environment, natural
287 resources and agriculture on the matters within its purview, including but not limited to, the
288 commonwealth's progress towards meeting any and all limits, sublimits, goals and milestones set
289 by statute or regulation with respect to greenhouse gas emissions and the reduction of
290 greenhouse gas emissions; provided, however, that the commission shall report not less than
291 twice a year. The reports shall be public and shall be posted on the commission's website.

292 Section 6. The commission shall have the authority to examine, retain and publish all
293 documents and data produced, collected or kept by any state agency that the commission deems
294 relevant to carrying out its charge; provided, however, that a document that a state agency deems
295 not to be a public record under section 3 of chapter 66 shall remain not a public record under the
296 control of the commission.

297 Section 7. There shall be an advisory council to the commission. The advisory council
298 shall provide advice and input on the overall operation and policy of the commission. The
299 council shall be appointed by the governor and comprised of members representing the following
300 sectors: environmental protection, low-income and moderate-income population advocacy,
301 electric power generation and distribution, transportation, consumer protection, housing,
302 commercial development, industrial and manufacturing, transportation and local government.

303 SECTION 12. Section 9 of chapter 23J of the General Laws, as appearing in the 2018
304 Official Edition, is hereby amended by striking out, in line 33, the words “and (iii) by” and
305 inserting in place thereof the following words:- (iii) funding research, design and evaluation of
306 pilots to promote energy innovation; and (iv).

307 SECTION 13. Said section 9 of said chapter 23J, as so appearing, is hereby further
308 amended by inserting after the word “facilities”, in line 45, the following words:- and with the
309 distribution and consumption of fossil fuels, including, but not limited to, oil and gases that
310 contain methane and other hydrocarbon fuels.

311 SECTION 14. Chapter 25 of the General Laws is hereby amended by inserting after
312 section 1 the following section:-

313 Section 1A. In discharging its responsibilities under this chapter and chapter 164, the
314 department shall, with respect to itself and the entities it regulates, prioritize safety, security,
315 reliability of service, affordability and reductions in greenhouse gas emissions to meet statewide
316 greenhouse gas emission limits established pursuant to section 3 of chapter 21N.

317 SECTION 15. Section 19 of said chapter 25, as appearing in the 2018 Official Edition, is
318 hereby amended by inserting after the word “practicable”, in line 29, the following words:- ;

319 provided, however, that when determining cost-effectiveness, the calculation of program benefits
320 shall include calculations of the social value of greenhouse gas emissions reductions.

321 SECTION 16. Said section 19 of said chapter 25, as so appearing, is hereby further
322 amended by inserting after the word “practicable”, in line 41, the following words:- ; provided,
323 however, that when determining cost-effectiveness, the calculation of program benefits shall
324 include calculations of the social value of greenhouse gas emissions reductions.

325 SECTION 17. Said section 19 of said chapter 25, as so appearing, is hereby further
326 amended by inserting after the word “program”, in line 58, the following words:- “; provided,
327 however, that when determining cost-effectiveness, the calculation of program and system
328 benefits shall include calculations of the social value of greenhouse gas emissions reductions.

329 SECTION 18. Section 21 of said chapter 25, as so appearing, is hereby amended by
330 inserting after the word “supply”, in line 5, the following words:- ; provided, however, that when
331 determining cost-effectiveness, the calculation of system benefits shall include calculations of
332 the social value of greenhouse gas emissions reductions.

333 SECTION 19. Said section 21 of said chapter 25, as so appearing, is hereby further
334 amended by inserting after the figure “22”, in line 17, the following words:- ; provided, however,
335 that when determining cost-effectiveness, the calculation of system benefits shall include
336 calculations of the social value of greenhouse gas emissions reductions.

337 SECTION 20. Said section 21 of said chapter 25, as so appearing, is hereby further
338 amended by inserting after the word “bodies”, in line 21, the following words:- ; provided,
339 however, that when determining cost-effectiveness, the calculation of system benefits shall
340 include calculations of the social value of greenhouse gas emissions reductions.

341 SECTION 21. Said section 21 of said chapter 25, as so appearing, is hereby further
342 amended by inserting after the word “supply”, in line 25, the following words:- ; provided,
343 however, that when determining cost-effectiveness, the calculation of system benefits shall
344 include calculations of the social value of greenhouse gas emissions reductions.

345 SECTION 22. Said section 21 of said chapter 25, as so appearing, is hereby further
346 amended by striking out, in line 69, the words “and (ix)”, and inserting in place thereof the
347 following words:- (ix) an estimate of the social value of greenhouse gas emissions reductions
348 that will result from the plan, including a numerical value of the plan’s contribution to meeting
349 each statewide greenhouse gas emissions limit and sublimit set by statute or regulation, together
350 with provisions for giving each value prominent display in communications and plan documents;
351 and (x).

352 SECTION 23. Said section 21 of said chapter 25, as so appearing, is hereby further
353 amended by striking out, in line 73, the word “reducing”, the second time it appears, and
354 inserting in place thereof the following words:- greenhouse gas emissions or.

355 SECTION 24. Said section 21 of said chapter 25, as so appearing, is hereby further
356 amended by inserting after the word “program”, in line 81, the first time it appears, the following
357 words:- ; provided, however, that when determining cost-effectiveness, the calculation of
358 program benefits shall include calculations of the social value of greenhouse gas emissions
359 reductions.

360 SECTION 25. Said section 21 of said chapter 25, as so appearing, is hereby further
361 amended by inserting after the word “accordingly”, in line 113, the following words:- “;

362 provided, however, that when determining cost-effectiveness, the calculation of program benefits
363 shall include calculations of the social value of greenhouse gas emissions reductions”.

364 SECTION 26. Subsection (d) of said section 21 of said chapter 25, as so appearing, is
365 hereby amended by adding the following 2 paragraphs:-

366 (4) The plans shall be constructed to meet the goal set by the secretary pursuant to section
367 3B of chapter 21N.

368 (5) Not later than 15 months after the conclusion of the final year of each plan, the
369 department shall issue a formal certificate of compliance, drawing upon the most accurate and
370 most complete data and measurements available, that certifies and quantifies the degree to which
371 the activities undertaken pursuant to each plan contributed to meeting greenhouse gas emission
372 limits imposed by statute or regulation.

373 SECTION 27. Section 22 of said chapter 25, as so appearing, is hereby amended by
374 inserting after the word “date”, in line 63, the following words:- , a quantification of the degree
375 to which the activities undertaken pursuant to each plan contribute to meeting any and all
376 greenhouse gas emission limits imposed by statute or regulation.

377 SECTION 28. Said section 22 of said chapter 25, as so appearing, is hereby further
378 amended by inserting after the word “year”, in line 69, the following words:- and a quantification
379 of the degree to which the activities undertaken pursuant to each plan contribute to meeting any
380 and all greenhouse gas emission limits imposed by statute or regulation.

381 SECTION 29. Section 6 of chapter 25A of the General Laws, as so appearing, is hereby
382 amended by striking out clauses (12) and (13) and inserting in place thereof the following 3
383 clauses:-

384 (12) intervene and advocate on behalf of small commercial and industrial users before
385 the department of public utilities in any dispute between such businesses and generation or
386 distribution companies, as defined pursuant to section 1 of chapter 164;

387 (13) plan, develop, oversee and operate the commercial sustainable energy program, with
388 the Massachusetts Development Finance Agency, in accordance with the provisions of chapter
389 23M. In accordance with this section, the department shall approve each commercial PACE
390 project prior to the issuance of a PACE bond under chapter 23M and in so doing shall consider
391 whether the energy cost savings of the commercial energy improvements over the useful life of
392 such improvements exceed the costs of such improvements; and

393 (14) develop and adopt, as an appendix to the state building code, in consultation with the
394 board of building regulations and standards, a municipal opt-in specialized stretch energy code
395 that includes, but is not limited to, a definition of net-zero building.

396 SECTION 30. Subsection (c) of section 10 of said chapter 25A, as so appearing, is
397 hereby amended by striking out, in line 38, the words “and (6)” and inserting in place thereof the
398 following words:- (6) opt-in to the specialized stretch energy code promulgated pursuant to
399 clause (14) of section 6; and (7).

400 SECTION 31. Said chapter 25A is hereby further amended by inserting after
401 section 17 the following section:-

402 Section 18. (a) For the purposes of this section, the following words shall have the
403 following meanings unless the context clearly requires otherwise:-

404 “Energy”, electricity, natural gas, steam, hot or chilled water, heating oil, propane or
405 other product designated by the department used for heating, cooling, lighting, water heating or
406 for powering or fueling other end uses.

407 “Energy use benchmarking tool”, the ENERGY STAR Portfolio Manager, an online
408 energy use benchmarking tool used by the United States Environmental Protection Agency for
409 reporting and managing the energy performance, water efficiency and greenhouse gas emissions
410 of building, or a tool capable of: (i) performing all the functions relevant to compliance with this
411 section; (ii) allowing for reporting by third parties, including, but not limited to, gas distribution
412 and electric distribution companies; and (iii) exchanging information and data with the ENERGY
413 STAR Portfolio Manager.

414 “Gross floor area”, the total number of square feet measured between the principal
415 exterior surfaces of enclosing fixed walls.

416 “Non-residential building”, a building or multiple buildings on a parcel of which not less
417 than 50 per cent of the gross floor area, including hallways or other common space, but
418 excluding parking, is used for commercial, retail, office, professional, educational or other non-
419 residential purposes or any grouping of non-residential buildings designated by the department as
420 an appropriate reporting unit for the purposes of this chapter; provided, however, that “non-
421 residential building” shall not include a state-owned building.

422 “Owner,” the owner of record of a building, or a designated agent thereof, including, but
423 not limited to, the association or organization of unit owners responsible for management in the

424 case of a condominium, the board of directors in the case of a cooperative apartment corporation,
425 and the net lessee in the case of a building subject to a net lease with a term of not less than 49
426 years, inclusive of all renewal options.

427 “Residential building”, a building or multiple buildings on a parcel comprised of 35 or
428 more individual dwelling units of which not less than 50 per cent of the gross floor area,
429 including hallways and other common space serving residents, but excluding parking, is used for
430 dwelling purposes or any grouping of residential buildings designated by the department or a
431 municipality as an appropriate reporting unit for the purposes of this chapter; provided, however,
432 that “residential building” shall not include a state-owned building.

433 “State-owned building”, a building: (i) owned by the commonwealth or an agency or
434 political subdivision thereof; or (ii) for which the commonwealth or an agency or political
435 subdivision thereof regularly pays all annual energy bills.

436 “Tenant”, any tenant, tenant-stockholder of a cooperative apartment corporation or
437 condominium unit owner.

438 (b) For any building identified in subsection (c), the department shall undertake energy
439 use benchmarking to determine whether the building utilizes more or less energy, and emits
440 more or less greenhouse gas, than buildings of comparable size, occupancies and uses. To
441 conduct the benchmarking, the department shall create, procure or designate an energy use
442 benchmarking tool and shall provide technical support and assistance on the use of the
443 benchmarking tool to the owners of buildings subject to this section.

444 (c)(1) Not later than May 1 of each year, the owner of each residential building, each
445 non-residential building consisting of not less than 35,000 square feet of gross floor area and

446 each state-owned building consisting of not less than 35,000 square feet of gross floor area shall
447 utilize the energy use benchmarking tool to accurately report to the department, or cause to be
448 accurately reported to the department, the building's energy use for the previous calendar year
449 and any other building characteristics determined by the department to be necessary to establish
450 the absolute and relative energy use of the building. The owner of a building subject to this
451 subsection may authorize a gas or electric distribution company or other third party to report
452 building-specific data to the department, but such authorization shall not relieve an owner from
453 compliance with this section. The department shall establish a deadline extension process for
454 owners who, in the judgment of the department, demonstrate cause for a deadline extension. To
455 administer this section, the department may establish building types, including, but not limited
456 to, classifications by region, size and occupancy and use, including whether tenant-occupied
457 units or spaces are separately metered, and may establish varying reporting requirements for each
458 type.

459 (2) Annually, an owner of a building with separately-metered and tenant-occupied units
460 or spaces shall request from each tenant of the building all information necessary to comply with
461 the requirements of paragraph (1) and each tenant shall report the required information to the
462 owner. Between January 1 and March 31, an owner shall, in a manner approved by the
463 department, request information relative to a tenant's energy use in the previous calendar year.
464 Upon receipt of an informational request pursuant to this subsection, a tenant of a building shall
465 report to the owner the required information not later than May 31. If a separately-metered tenant
466 has occupied all or a portion of a building subject to the reporting requirements of this section
467 and has vacated the space before reporting energy use to the owner, the owner may immediately
468 request such information for any period of occupancy relevant to the owner's obligation to report

469 and the tenant shall respond within 30 days. The department shall develop values or formulas
470 that an owner may use to estimate whole-building energy use where the owner has made good-
471 faith efforts to obtain required energy use information from a current or former tenant and has
472 been unsuccessful. Failure of a tenant to report energy use information shall not relieve an owner
473 from complying with this section. Failure of an owner to report energy use information to the
474 department shall not impose liability on a tenant.

475 (3) The department shall allow a city or town to collect the energy use information
476 required under paragraph (1) in lieu of collection by the department and to require owners of
477 appropriate buildings within its borders to report the information to the city or town if the
478 municipality: (i) notifies the department by October 31 that it will assume the reporting
479 responsibilities required under this section; and (ii) utilizes an energy use benchmarking tool.
480 Annually, not later than April 1, a city or town that collects energy use information under this
481 paragraph shall collect and forward to the department, on a building-by-building basis, the
482 required energy use information from the previous calendar year. The department may designate
483 standardized units of measure and standardized formats to be utilized by a city or town in the
484 reporting and collection of building energy use information. The department shall make
485 reasonable efforts to streamline reporting requirements in a city or town that collects energy use
486 information under this paragraph.

487 (4) If an occupied building subject to the requirements of this section is transferred, the
488 buyer shall make reasonable efforts to report energy use information for the building for the
489 entire calendar year, if practicable.

490 (d) Annually, not later than October 1, the department shall make available on its website
491 energy use information for the preceding calendar year for each building subject to this section.
492 For each building, the information made available shall include, but not be limited to: (i) the
493 municipality in which is the building is located; (ii) the building's energy intensity in kBTU per
494 square foot and greenhouse gas emissions per square foot in pounds of carbon dioxide equivalent
495 per square foot; (iii) the breakdown of the building's energy sources into electricity, gas, steam
496 and other sources; and (iv) an energy performance rating or assessment score, where available, as
497 determined by the energy use benchmarking tool. The department shall maintain a privacy and
498 quality assurance process to improve the accuracy and completeness of the available
499 information, including an opportunity for the owner to review and comment on the information.
500 The department shall provide owners the opportunity to submit contextual information related to
501 energy use in their buildings and shall disclose such information upon request by the owner.

502 (e) The department shall prepare an annual comprehensive report on the energy
503 performance of buildings utilizing the information and data collected pursuant to this section.
504 The report shall be protective of privacy information and include, but not be limited to, an
505 analysis of energy performance and greenhouse gas emissions by building size, occupancy, use,
506 energy source, region and, when available, energy performance and greenhouse gas emissions
507 over time. The report shall be posted on the department's website and filed with the house and
508 senate committees on ways and means and the joint committee on telecommunication, utilities
509 and energy not later than December 31.

510 (f) On the basis of the comprehensive reports prepared by the department pursuant to
511 subsection (e) and other information and data as deemed necessary by the secretary of energy
512 and environmental affairs, the secretary shall conduct annual reviews of improvements or the

513 lack thereof in the energy performance of buildings specified in subsection (c). If the reviews
514 indicate a lack of substantial improvement from year to year in the energy performance of a
515 building subject to this section, the secretary may recommend energy actions, assessments,
516 audits and performance standards to improve the energy performance of the building.

517 (g) The department shall ensure that electric distribution companies and municipal
518 aggregators provide to owners subject to this section up-to-date information regarding energy
519 efficiency opportunities or actions available to increase energy efficiency, including incentives in
520 utility-administered or other energy efficiency programs and changes in energy assessment
521 technology. The department shall prioritize those buildings that have not displayed improvement
522 year-to-year in reducing energy usage.

523 (g) Nothing in this section shall preempt a city or town from maintaining an energy use
524 benchmarking program.

525 SECTION 32. Section 93 of chapter 143 of the General Laws, as appearing in the 2018
526 Official Edition, is hereby amended by striking out, in line 6, the word “eleven” and inserting in
527 place thereof the following figure:- 15.

528 SECTION 33. Said section 93 of said chapter 143, as so appearing, is hereby further
529 amended by striking out, in line 8, the word “both” and inserting in place thereof the following
530 words:- 1 of whom shall be the commissioner of energy resources or a designee and all 3.

531 SECTION 34. Said section 93 of said chapter 143, as so appearing, is hereby further
532 amended by striking out, in line 9, the word “nine” and inserting in place thereof the following
533 figure:- 12.

534 SECTION 35. Said section 93 of said chapter 143, as so appearing, is hereby further
535 amended by inserting after the word “department”, in line 17, the following words:- “, 1 of
536 whom shall be an expert in commercial building energy efficiency, 1 of whom shall be an expert
537 in residential building energy efficiency, 1 of whom shall be an expert in advanced building
538 technology”.

539 SECTION 36. The second paragraph of said section 93 of said chapter 143, as so
540 appearing, is hereby further amended by adding the following sentence:- The board shall keep
541 detailed and accurate minutes of its meetings and shall publish such minutes within 30 days of
542 each meeting.

543 SECTION 37. Said section 93 of said chapter 143, as so appearing, is hereby further
544 amended by inserting after the word “designee”, in line 46, the following words:- “, in
545 consultation with the commissioner of energy resources, ”.

546 SECTION 38. Section 94 of said chapter 143, as so appearing, is hereby amended by
547 striking out, in lines 110 to 113, inclusive, the words “, together with any more stringent energy-
548 efficiency provisions that the board, in consultation with the department of energy resources,
549 concludes are warranted”.

550 SECTION 39. Section 96 of said chapter 143, as so appearing, is hereby amended by
551 inserting, in line 7, after the word “to” the following words:- , the specialized stretch energy code
552 developed and adopted by the department of energy resources.

553 SECTION 40. Section 97 of said chapter 143, as so appearing, is hereby amended by
554 striking out, in line 22, the words “a reasonable time” and inserting in place thereof the following
555 words:- 45 days.

556 SECTION 41. Section 94 of said chapter 164, as so appearing, is hereby amended by
557 inserting after the word “charge”, in line 54, the following words:- or the impact of said rate,
558 price or charge on statewide greenhouse gas emissions and on the ability of the commonwealth
559 to achieve greenhouse gas emission limits and sublimits imposed by statute or regulation.

560 SECTION 42. Said section 94 of said chapter 164, as so appearing, is hereby further
561 amended by inserting after the word “contract”, in line 71, the following words:- , or the
562 emissions impacts of such contract,

563 SECTION 43. Section 94A of chapter 164, as so appearing, is hereby amended by
564 inserting after the word “review”, in line 17, the following words:- , taking into account the
565 impact of the contract on statewide greenhouse gas emissions and on the ability of the
566 commonwealth to achieve greenhouse gas emission limits and sublimits imposed by statute or
567 regulation.

568 SECTION 44. Section 16 of chapter 298 of the acts of 2008 is hereby amended by
569 striking out the words “, and shall expire on December 31, 2020”.

570 SECTION 45. Section 11 of chapter 75 of the acts of 2016 is hereby amended by adding
571 the following 2 subsections:-

572 (d) For any solar incentive program developed pursuant to this section, the department of
573 energy resources shall set aside a portion of each capacity block to be allocated to solar tariff
574 generation units that primarily serve low-income customers, including, but not limited to, low-
575 income solar tariff generation units, low-income property solar tariff generation units and low-
576 income community solar tariff generation units, as defined by the department, respectively.

577 (e) In implementing the set-aside required by subsection (d), the department of energy
578 resources shall hold not less than 3 public hearings in communities with a high proportion of
579 low-income customers, as defined by the department. The department shall develop and execute
580 an outreach program to educate and inform low-income customers and residents of low-income
581 and moderate-income housing about the benefits and savings associated with participation in the
582 solar incentive programs established pursuant to this section.

583 SECTION 46. The department of public utilities may, upon application of a gas company
584 as defined in section 1 of chapter 164 of the General Laws, authorize 1 or more pilot projects for
585 the development of utility-scale renewable thermal energy. Such application shall be filed with
586 the department on or before Jan. 1, 2023. The department may, under a pilot, approve recovery
587 of costs for projects situated in the commonwealth that demonstrate the costs and benefits of: (i)
588 utility-scale renewable thermal energy sources, systems or technologies capable of substituting
589 for fossil-based natural gas; or (ii) utility-scale renewable thermal energy replacements for, or
590 alternative uses of, infrastructure constructed originally to generate, transmit or distribute fossil-
591 based natural gas; provided, however, that such substitute renewable thermal energy sources,
592 systems or technologies, and such replacements or alternative uses, have a reasonable likelihood
593 of facilitating substantial reductions in greenhouse gas emissions. In determining whether to
594 approve a pilot project, the department shall consider the reasonableness of the size, scope and
595 scale of the pilot project and related budget and whether the benefits of the proposed pilot justify
596 the proposed cost to both participating and non-participating customers; provided, however, that
597 the calculation of benefits shall include calculations of the social value of greenhouse gas
598 emissions reductions. The department may promulgate rules or regulations to implement this
599 section.

600 SECTION 47. To develop the specialized stretch energy code required by section 6 of
601 chapter 25A, the department of energy resources shall: (i) hold not less than 3 public hearings, 1
602 of which shall be held in an underserved community or community with a high percentage of
603 low-income households; and (ii) consider the development of a tiered implementation plan for
604 the adoption of the stretch energy code including, but not limited to, phasing in requirements
605 based on building type or uses.

606 SECTION 48. The secretary of energy and environmental affairs shall set the first goal
607 required by section 3B of chapter 21N of the General Laws not later than February 1, 2021.

608 SECTION 49. The 2025 and 2030 statewide greenhouse gas emission limits required by
609 subsection (b) of section 3 of chapter 21N of the General Laws, the 2025 and 2030 sector-based
610 emissions sublimits required by section 3A of said chapter 21N and the 2030 emissions reduction
611 plan required by said section 3 to realize the 2025 and 2030 limit and sublimits shall be adopted
612 and published not later than January 1, 2022.

613 SECTION 50. The 2035 statewide greenhouse gas emissions limit required by subsection
614 (b) of section 3 of chapter 21N of the General Laws, the 2035 sector-based emissions sublimits
615 required by section 3A of said chapter 21N and the emissions reduction plan required by said
616 section 3 to realize the 2035 limit and sublimits shall be adopted and published not later than
617 January 1, 2028.

618 SECTION 51. The 2040 statewide greenhouse gas emissions limit required by subsection
619 (b) of section 3 of chapter 21N of the General Laws, the 2040 sector-based emissions sublimits
620 required by section 3A of said chapter 21N and the emissions reduction plan required by said

621 section 3 to realize the 2040 limit and sublimits shall be adopted and published not later than
622 January 1, 2033.

623 SECTION 52. The 2045 statewide greenhouse gas emissions limit required by subsection
624 (b) of section 3 of chapter 21N of the General Laws, the 2045 sector-based emissions sublimit
625 required by section 3A of said chapter 21N and the emissions reduction plan required by said
626 section 3 to realize the 2045 limit and sublimits shall be adopted and published not later than
627 January 1, 2038.

628 SECTION 53. The 2050 sector-based emissions sublimits required by section 3A of
629 chapter 21N and the emissions reduction plan required by subsection (b) of section 3 of said
630 chapter 21N to realize the 2050 limit and sublimits shall be adopted and published not later than
631 January 1, 2023; provided, however, that the sublimits and plan shall be subject to revision and
632 improvement by emissions reduction sublimits and plans adopted and published for 2030, 2035,
633 2040 and 2045.

634 SECTION 54. The regulations required pursuant to clause (i) of subsection (a) of section
635 7 of chapter 21N of the General Laws shall be promulgated and in effect not later than January 1,
636 2022.

637 SECTION 55. The regulations required pursuant to clause (ii) of subsection (a) of section
638 7 of chapter 21N of the General Laws shall be promulgated and in effect not later than January 1,
639 2025.

640 SECTION 56. The regulations required pursuant to clause (iii) of subsection (a) of
641 section 7 of chapter 21N of the General Laws shall be promulgated and in effect not later than
642 January 1, 2030.

643 SECTION 57. Not later than June 30, 2021, the department of energy resources shall: (i)
644 create, procure or designate the energy use benchmarking tool required by subsection (b) of
645 section 18 of chapter 25A of the General Laws; and (ii) commence providing technical assistance
646 and support to owners of buildings covered by said subsection (b) of said section 18 of said
647 chapter 25A.

648 SECTION 58. The first year of energy use reporting required by subsection (c) of section
649 18 of chapter 25A of the General Laws shall be for the calendar year beginning on January 1,
650 2022. In said reporting year, the department of energy resources may make available on its
651 website limited energy use information, including, but not limited to, whether the information
652 provided for a given building is accurate and complete.

653 SECTION 59. Notwithstanding section 2 of chapter 21Q of the General Laws, 3
654 members of the climate policy commission shall be initially appointed for terms of 1 year, 3
655 members shall be appointed for terms of 3 years and 3 members shall be appointed for terms of 5
656 years, with the length of each term to be determined by the elected chair.

657 SECTION 60. Section 30 shall take effect on January 1, 2028.

658 SECTION 61. Section 42 shall only apply to contracts entered into on or after the
659 effective date of this act.