

SENATE NO. 534

AN ACT GLOBAL WARMING SOLUTIONS ACT OF 2007 EXECUTIVE SUMMARY

*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. Chapter 21L, Section 1. Short Title Chapter 21L is added to the Massachusetts
2 General Laws, and may be cited, as the Massachusetts Global Warming Solutions Act of 2007.
3 Chapter 21L, Section 2. Findings and Declarations Section 2. The Legislature finds and declares
4 all of the following:

5 (a) Global warming poses a serious threat to the economic well-being, public health, natural
6 resources, and the environment of Massachusetts. The potential adverse impacts of global
7 warming include the exacerbation of air quality problems, a loss of many of the state's
8 indigenous species of plants and animals, a rise in sea levels resulting in the displacement of
9 thousands of coastal businesses and residences, damage to marine ecosystems and the natural
10 environment, and an increase in the incidences of infectious diseases, asthma, and other human
11 health-related problems.

12 (b) Global warming will have detrimental effects on some of Massachusetts's largest industries,
13 including agriculture, syrup, tourism, skiing, recreational and commercial fishing, and forestry.
14 It will also increase the strain on electricity supplies necessary to meet the demand for summer
15 air-conditioning in the hottest parts of the state.

16 (c) Massachusetts has long been a national and international leader on energy conservation and
17 environmental stewardship efforts, including the areas of air quality protections, energy

18 efficiency requirements, renewable energy standards, natural resource conservation, and
19 greenhouse gas emission standards for passenger vehicles. The program established by this
20 chapter will continue this tradition of environmental leadership by bringing Massachusetts back
21 to the forefront of national and international efforts to reduce emissions of greenhouse gases by
22 emulating statutory action in California, the only other state to have moved forward with this
23 type of legislation.

24 (d) National and international actions are necessary to fully address the issue of global warming.
25 However, action taken by Massachusetts to reduce emissions of greenhouse gases will have far-
26 reaching effects by encouraging other states, the federal government, and other countries to act.

27 (e) By exercising a global leadership role, Massachusetts will also position its economy,
28 technology centers, financial institutions, and businesses to benefit from national and
29 international efforts to reduce emissions of greenhouse gases. More importantly, investing in the
30 development of innovative and pioneering technologies will assist Massachusetts in achieving
31 the 2020 statewide limit on emissions of greenhouse gases established by this chapter and will
32 provide an opportunity for the state to take a global economic and technological leadership role
33 in reducing emissions of greenhouse gases.

34 (f) It is the intent of the Legislature that the Department of Environmental Protection (DEP)
35 coordinate with state agencies, as well as consult with the environmental justice community,
36 industry sectors, business groups, academic institutions, environmental organizations, and other
37 stakeholders in implementing this chapter.

38 (g) It is the intent of the Legislature that the DEP consult with the Public Utilities Commission
39 in the development of emissions reduction measures, including limits on emissions of
40 greenhouse gases applied to electricity and natural gas providers regulated by the Public

41 Utilities Commission in order to ensure that electricity and natural gas providers are not
42 required to meet duplicative or inconsistent regulatory requirements.

43 (h) It is the intent of the Legislature that the DEP design emissions reduction measures to meet
44 the statewide emissions limits for greenhouse gases established pursuant to this chapter in a
45 manner that minimizes costs and maximizes benefits for Massachusetts' economy, improves
46 and modernizes Massachusetts' energy infrastructure and maintains electric system reliability,
47 and maximizes additional environmental and economic co-benefits for Massachusetts.

48 Chapter 21L, Section 3 Definition of Terms

49 Section 3. For the purposes of this chapter, the following terms have the following meanings:

50 (a) "Allowance" means an authorization to emit, during a specified year, up to one ton of carbon
51 dioxide equivalent.

52 (b) "Alternative compliance mechanism" means an action undertaken by a greenhouse gas
53 emission source that achieves the equivalent reduction of greenhouse gas emissions over the
54 same time period as a direct emission reduction, and that is approved by the DEP. "Alternative
55 compliance mechanism" includes, but is not limited to, a flexible compliance schedule,
56 alternative control technology, a process change, or a product substitution.

57 (c) "Carbon dioxide equivalent" means the amount of carbon dioxide by weight that would
58 produce the same global warming impact as a given weight of another greenhouse gas, based on
59 the best available science, including from the Intergovernmental Panel on Climate Change.

60 (d) "Cost-effective" or "cost-effectiveness" means the cost per unit of reduced emissions of
61 greenhouse gases adjusted for its global warming potential.

62 (e) "Direct emission reduction" means a greenhouse gas emission reduction action made by a
63 greenhouse gas emission source at that source.

64 (f) “Emissions reduction measure” means programs, measures, standards, and alternative
65 compliance mechanisms authorized pursuant to this chapter, applicable to sources or categories
66 of sources, that are designed to reduce emissions of greenhouse gases.

67 (g) “Greenhouse gas” or “greenhouse gases” includes all of the following gases: carbon dioxide,
68 methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

69 (h) “Greenhouse gas emissions limit” means an authorization, during a specified year, to emit
70 up to a level of greenhouse gases specified by the DEP, expressed in tons of carbon dioxide
71 equivalents.

72 (i) “Greenhouse gas emission source” or “source” means any source, or category of sources, of
73 greenhouse gas emissions whose emissions are at a level of significance, as determined by the
74 DEP, that its participation in the program established under this chapter will enable the DEP to
75 effectively reduce greenhouse gas emissions and monitor compliance with the statewide
76 greenhouse gas emissions limit.

77 (j) “Leakage” means a reduction in emissions of greenhouse gases within the state that is offset
78 by an increase in emissions of greenhouse gases outside the state.

79 (k) “Market-based compliance mechanism” means either of the following:

80 (1) A system of market-based declining annual aggregate emissions limitations for sources
81 or categories of sources that emit greenhouse gases.

82 (2) Greenhouse gas emissions exchanges, banking, credits, and other transactions, governed
83 by rules and protocols established by the Massachusetts DEP or the Regional Greenhouse
84 Gas Initiative, that result in the same greenhouse gas emission reduction, over the same time
85 period, as direct compliance with a greenhouse gas emission limit or emission reduction
86 measure adopted by the DEP pursuant to this chapter.

87 (l) “Statewide greenhouse gas emissions” means the total annual emissions of greenhouse gases
88 in the state, including all emissions of greenhouse gases from the generation of electricity
89 delivered to and consumed in Massachusetts, accounting for transmission and distribution line
90 losses, whether the electricity is generated in state or imported. Statewide emissions shall be
91 expressed in tons of carbon dioxide equivalents.

92 (m) “Statewide greenhouse gas emissions limit” or “statewide emissions limit” means the
93 maximum allowable level of statewide greenhouse gas emissions in 2020, as determined by the
94 DEP pursuant to Section 5 of this chapter.

95 Chapter 21L, Section 4. Mandatory Greenhouse Gas Reporting Section 4. The DEP is the state
96 agency charged with monitoring and regulating emissions of greenhouse gasses with the
97 specific goal of reducing those emissions.

98 (a) On or before January 1, 2009, the DEP shall adopt regulations to require the reporting and
99 verification of statewide greenhouse gas emissions and to monitor and enforce compliance with
100 this program.

101 (b) The regulations shall do all of the following:

102 (1) Require the monitoring and annual reporting of greenhouse gas emissions from
103 greenhouse gas emission sources beginning with the sources or categories of sources that
104 contribute the most to statewide emissions.

105 (2) Account for greenhouse gas emissions from all electricity consumed in the state,
106 including transmission and distribution line losses from electricity generated within the state
107 or imported from outside the state. This requirement applies to all retail sellers of electricity,
108 including electric utilities, municipal electric departments, and municipal light boards as
109 defined in Chapter 164A, Section 1 of the Massachusetts General Laws.

110 (3) Ensure rigorous and consistent accounting of emissions, and provide reporting tools and
111 formats to ensure collection of necessary data.

112 (4) Ensure that greenhouse gas emission sources maintain comprehensive records of all
113 reported greenhouse gas emissions.

114 (c) The DEP shall do both of the following:

115 (1) Periodically review and update its emission reporting requirements, as necessary.

116 (2) Review existing and proposed international, federal, and state greenhouse gas emission
117 reporting programs and make reasonable efforts to promote consistency among the
118 programs established pursuant to this part and other programs, and to streamline reporting
119 requirements on greenhouse gas emission sources.

120 Chapter 21L, Section 5. Statewide Greenhouse Gas Emissions Limit

121 Section 5A. By January 1, 2009, the DEP shall, after one or more public workshops, with public
122 notice, and an opportunity for all interested parties to comment, determine what the statewide
123 greenhouse gas emissions level was in 2002, and approve in a public hearing, a statewide
124 greenhouse gas emissions limit that is equivalent to 90 percent of that level, to be achieved by
125 2020. In order to ensure the most accurate determination feasible, the DEP shall evaluate the
126 best available scientific, technological, and economic information on greenhouse gas emissions
127 to determine the 1990 level of greenhouse gas emissions.

128 Section 5B. (a) The statewide greenhouse gas emissions limit shall remain in effect unless
129 otherwise amended or repealed.

130 (b) It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue
131 in existence and be used to maintain and continue reductions in emissions of greenhouse gases

132 beyond 2020 with a goal of achieving reductions in emissions such that total statewide
133 emissions of greenhouse gasses are at levels approximately 15% of those in 2002.

134 (c) The DEP shall make recommendations to the Governor and the Legislature on how to
135 continue reductions of greenhouse gas emissions beyond 2020 so as to achieve levels of
136 emissions such that total statewide emissions of greenhouse gasses are at levels approximately
137 15% of those in 2002 as determined in Section 5A

138 Chapter 21L, Section 6. Greenhouse Gas Emissions Reductions Section 6A. The DEP shall
139 adopt rules and regulations in an open public process to achieve the maximum technologically
140 feasible and cost-effective greenhouse gas emission reductions from sources or categories of
141 sources, subject to the criteria and schedules set forth in this part.

142 (a) On or before July 31, 2008, the DEP shall publish and make available to the public a list of
143 discrete early action greenhouse gas emission reduction measures that can be implemented prior
144 to the measures and limits adopted pursuant to Section 5.

145 (b) On or before January 1, 2009, the DEP shall adopt regulations to implement the measures
146 identified on the list published pursuant to subsection (a).

147 (c) The regulations adopted by the DEP pursuant to this section shall achieve the maximum
148 technologically feasible and cost-effective reductions in greenhouse gas emissions from those
149 sources or categories of sources, in furtherance of achieving the statewide greenhouse gas
150 emissions limit.

151 (d) The regulations adopted pursuant to this section shall be enforceable no later than January 1,
152 2010.

153 Section 6B. (a) On or before January 1, 2009, the DEP shall prepare and approve a scoping
154 plan, as that term is understood by the DEP, for achieving the maximum technologically feasible

155 and cost-effective reductions in greenhouse gas emissions from sources or categories of sources
156 of greenhouse gases by 2020 under this chapter. The DEP shall consult with all state agencies
157 and regional authorities and agreements with jurisdiction over sources of greenhouse gases on
158 all elements of its plan that pertain to energy related matters including, but not limited to,
159 electrical generation, load based-standards or requirements, the provision of reliable and
160 affordable electrical service, and statewide fuel supplies to ensure the greenhouse gas emissions
161 reduction activities to be adopted and implemented by the DEP are complementary, non-
162 duplicative, and can be implemented in an efficient and cost-effective manner.

163 (b) The plan shall identify and make recommendations on direct emission reduction measures,
164 alternative compliance mechanisms, market-based compliance mechanisms, and potential
165 monetary and non-monetary incentives for sources and categories of sources that the DEP finds
166 are necessary or desirable to facilitate the achievement of the maximum feasible and cost-
167 effective reductions of greenhouse gas emissions by 2020.

168 (c) In making the determinations required by subsection (b), the DEP shall consider all relevant
169 information pertaining to greenhouse gas emissions reduction programs in other states,
170 localities, and nations, including California, Canada, and the European Union.

171 (d) The DEP shall evaluate the total potential costs and total potential economic and non-
172 economic benefits of the plan for reducing greenhouse gases to Massachusetts' economy,
173 environment, and public health, using the best available economic models, emission estimation
174 techniques, and other scientific methods.

175 (e) In developing its plan, the DEP shall take into account the relative contribution of each
176 source or source category to statewide greenhouse gas emissions, and shall recommend a de-

177 minimis threshold of greenhouse gas emissions below which emission reduction requirements
178 will not apply.

179 (f) In developing its plan, the DEP shall identify opportunities for emission reductions measures
180 from all verifiable and enforceable voluntary actions..

181 (g) The DEP shall conduct a series of public workshops to give interested parties an
182 opportunity to comment on the plan. The DEP shall conduct a portion of these workshops in
183 regions of the state that have the most significant exposure to air pollutants, including, but not
184 limited to, communities with minority populations, communities with low-income populations,
185 or both.

186 (h) The DEP shall update its plan for achieving the maximum technologically feasible and cost-
187 effective reductions of greenhouse gas emissions at least once every five years.

188 Section 6C. (a) On or before January 1, 2011, the DEP shall adopt greenhouse gas emission
189 limits and emission reduction measures by regulation to achieve the maximum technologically
190 feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving
191 the statewide greenhouse gas emissions limit, to become operative beginning on January 1,
192 2012.

193 (b) In adopting regulations pursuant to this section and section 7 to the extent feasible and in
194 furtherance of achieving the statewide greenhouse gas emissions limit, the DEP shall do all of
195 the following:

196 (1) Design the regulations, including distribution of emissions allowances where
197 appropriate, in a manner that is equitable, seeks to minimize costs and maximize the total
198 benefits to Massachusetts, and encourages early action to reduce greenhouse gas emissions.

- 199 (2) Ensure that activities undertaken to comply with the regulations do not
200 disproportionately impact low-income communities.
- 201 (3) Ensure that entities that have voluntarily reduced their greenhouse gas emissions prior to
202 the implementation of this section receive appropriate credit for early voluntary reductions.
- 203 (4) Ensure that activities undertaken pursuant to the regulations complement, and do not
204 interfere with, efforts to achieve and maintain federal and state ambient air quality standards
205 and to reduce toxic air contaminant emissions.
- 206 (5) Consider overall societal benefits, including reductions in other air pollutants,
207 diversification of energy sources, and other benefits to the economy, environment, and
208 public health.
- 209 (6) Minimize the administrative burden of implementing and complying with these
210 regulations.
- 211 (7) Minimize leakage.
- 212 (8) Consider the significance of the contribution of each source or category of sources to
213 statewide emissions of greenhouse gases.
- 214 (c) In furtherance of achieving the statewide greenhouse gas emissions limit, by January 1,
215 2011, the DEP may adopt a regulation that establishes a system of market-based declining
216 annual aggregate emission limits for sources or categories of sources that emit greenhouse gas
217 emissions, applicable from January 1, 2012, to December 31, 2020, inclusive, that the DEP
218 determines will achieve the maximum technologically feasible and cost-effective reductions in
219 greenhouse gas emissions, in the aggregate, from those sources or categories of sources.

220 (d) Any market-based mechanism will be designed to work alongside but in no way undermine
221 any existing greenhouse gas emissions markets in which the state, suppliers of electricity,
222 generators of electricity, or industries, within the state may be participating.

223 (e) Any regulation adopted by the DEP pursuant to this section or section 7 shall ensure all of
224 the following:

225 (1) The greenhouse gas emission reductions achieved are real, permanent, quantifiable,
226 verifiable, and enforceable by the DEP.

227 (2) If applicable, the greenhouse gas emission reduction occurs over the same time period
228 and is equivalent in amount to any direct emission reduction required pursuant to this
229 section.

230 (f) The DEP shall rely upon the best available economic and scientific information and its
231 assessment of existing and projected technological capabilities when adopting the regulations
232 required by this section.

233 (g) The DEP shall consult with the Public Utilities Commission in the development of the
234 regulations as they affect electricity and natural gas providers in order to minimize duplicative
235 or inconsistent regulatory requirements.

236 (h) After January 1, 2011, the DEP may revise regulations adopted pursuant to this section and
237 adopt additional regulations to further the provisions of this chapter.

238 Section 6D. Nothing in this chapter restricts the DEP from adopting greenhouse gas emission
239 limits or emission reduction measures prior to January 1, 2011, imposing those limits or
240 measures prior to January 1, 2012, or providing early reduction credit where appropriate, nor
241 shall this chapter be seen as preventing any more stringent limits on emissions.

242 Section 6E. The DEP shall consult with other states, and the federal government, and other
243 nations to identify the most effective strategies and methods to reduce greenhouse gases,
244 manage greenhouse gas control programs, and to facilitate the development of integrated
245 regional, national, and international greenhouse gas reduction programs.

246 Section 6F. The DEP shall ensure that the greenhouse gas emission reduction rules, regulations,
247 programs, mechanisms, and incentives under its jurisdiction, where applicable and to the extent
248 feasible, direct public and private investment toward the most disadvantaged communities in
249 Massachusetts and provide an opportunity for small businesses, schools, affordable housing
250 associations, and other community institutions to participate in and benefit from statewide
251 efforts to reduce greenhouse gas emissions.

252 Chapter 21L, Section 7. Market Based Compliance Mechanisms

253 Section 7A. (a) The DEP may include in the regulations adopted pursuant to Section 6 the use
254 of market-based compliance mechanisms to comply with the regulations.

255 (b) Prior to the inclusion of any market-based compliance mechanism in the regulations, to the
256 extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the
257 DEP shall do all of the following:

258 (1) Consider the potential for direct, indirect, and cumulative emission impacts from these
259 mechanisms, including localized impacts in communities that are already adversely
260 impacted by air pollution.

261 (2) Design any market-based compliance mechanism to prevent any increase in the
262 emissions of toxic air contaminants or criteria air pollutants, with particular attention paid to
263 emissions of nitrous oxide, sulfur dioxide, and mercury.

264 (3) Maximize additional environmental and economic benefits for Massachusetts, as
265 appropriate.

266 (c) The DEP shall adopt regulations governing how market-based compliance mechanisms
267 may be used by regulated entities subject to greenhouse gas emission limits and mandatory
268 emission reporting requirements to achieve compliance with their greenhouse gas emissions
269 limits.

270 Section 7B. Nothing in this part or Section 6 confers any authority on the DEP to make less
271 stringent any programs administered by other state agencies for the reduction of greenhouse gas
272 emissions

273 Chapter 21L, Section 8: Enforcement

274 Section 8. (a) The DEP shall monitor compliance with and enforce any rule, regulation, order,
275 emission limitation, emissions reduction measure, or market-based compliance mechanism
276 adopted by the DEP pursuant to this chapter..

277 (b) In the instance of any violation, by either an incorporated entity or an individual, of any rule,
278 regulation, order, emission limitation, emissions reduction measure, or other measure adopted
279 by the DEP pursuant to this chapter, the violating entity shall be subject to those penalties set
280 forth in Chapter 21I sections A and B of the Massachusetts General Laws.

281 Chapter 21L, Section 9: Miscellaneous Provisions

282 Section 9A. If the regulations adopted pursuant to vehicular emissions of greenhouse gas do not
283 remain in effect, the DEP shall implement alternative regulations to control mobile sources of
284 greenhouse gas emissions to achieve equivalent or greater reductions.

285 Section 9B. (a) The DEP, by January 1, 2008, shall convene an environmental justice advisory
286 committee, of at least three members, to advise it in developing the scoping plan pursuant to

287 Section 6B and any other pertinent matter in implementing this chapter. The advisory
288 committee shall be comprised of representatives from communities in the state with the most
289 significant exposure to air pollution, including, but not limited to, communities with minority
290 populations or low-income populations, or both.

291 (b) The DEP shall appoint the advisory committee members from nominations received from
292 public interest groups, environmental justice organizations and community groups.

293 (c) The DEP shall provide reasonable per diem for attendance at advisory committee meetings
294 by advisory committee members from nonprofit organizations.

295 (d) The DEP shall appoint an Economic and Technology Advancement Advisory Committee to
296 advise the DEP on activities that will facilitate investment in and implementation of
297 technological research and development opportunities, including, but not limited to, identifying
298 new technologies, research, demonstration projects, funding opportunities, developing state,
299 national, and international partnerships and technology transfer opportunities, and identifying
300 and assessing research and advanced technology investment and incentive opportunities that
301 will assist in the reduction of greenhouse gas emissions. The committee may also advise the
302 DEP on state, regional, national, and international economic and technological developments
303 related to greenhouse gas emission reductions.

304 Section 9C. (a) All state agencies shall consider and implement strategies to reduce their
305 greenhouse gas emissions.

306 (b) Nothing in this chapter shall relieve any person, entity, or public agency of compliance with
307 other applicable federal, state, or local laws or regulations, including state air and water quality
308 requirements, and other requirements for protecting public health or the environment.

309 Section 9D. (a) Nothing in this chapter affects the authority of the Public Utilities Commission.

310 (b) Nothing in this chapter affects the obligation of an electrical utility to provide customers
311 with safe and reliable electric service.

312 Section 9E. Nothing in this chapter shall preclude, prohibit, or restrict the construction of any
313 new facility or the expansion of an existing facility subject to regulation under this chapter, if all
314 applicable requirements are met and the facility is in compliance with regulations adopted
315 pursuant to this chapter.

316 Section 9F. The provisions of this chapter are severable. If any provision of this chapter or its
317 application is held invalid, that invalidity shall not affect other provisions or applications that
318 can be given effect without the invalid provision or application.

319 Section 9G. (a)The DEP may adopt by regulation, after a public workshop, a schedule of fees to
320 be paid by the sources of greenhouse gas emissions regulated pursuant to this chapter. The
321 revenues collected pursuant to this section, shall be deposited into the Renewable Energy Trust
322 and are available upon appropriation, by the Legislature, for purposes of carrying out this
323 chapter..

324 (b) those funds deposited are available for appropriation by the legislature, but only in amounts
325 not to exceed those deposited into the fund under subsection(a) of section 9G.

326 Section 9H. (a) Nothing in this chapter shall limit the existing authority of a state entity to adopt
327 and implement greenhouse gas emissions reduction measures.

328 (b) Nothing in this chapter shall relieve any state entity of its legal obligations to comply with
329 existing law or regulation.

330 Section 9I. (a) In the event of extraordinary circumstances or catastrophic events, the Governor
331 may adjust the applicable deadlines for individual regulations, or for the state in the aggregate,
332 to the earliest feasible date after that deadline.

333 (b) The adjustment period may not exceed one year unless the Governor makes an additional
334 adjustment pursuant to subsection

335 (a) of section 9I.

336 (c) Nothing in this section shall be seen to limit the powers and duties of the Governor as
337 executive during times of emergency.

338 (d) The Governor shall, within 10 days of invoking subsection (a), provide written notification
339 to the Legislature of the action undertaken.

340 (e) The governor shall, within 90 days of invoking subsection (a), provide a detailed, written,
341 and publicly available explanation of his reasons for invoking subsection (a) to the legislature.