

# Chapter 298 of the Acts of 2008

## AN ACT ESTABLISHING THE GLOBAL WARMING SOLUTIONS ACT.

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

**SECTION 1.** Section 19 of chapter 6A of the General Laws, as appearing in the 2006 Official Edition, is hereby amended by striking out subsection (f) and inserting in place thereof the following 2 subsections:-

- (f) The secretary shall collaborate with other state agencies to reduce greenhouse gas emissions to achieve the greenhouse gas emission limits established in chapter 21N.
- (g) Nothing in this chapter shall be construed to confer any powers or impose any duties upon the secretary with respect to the foregoing agencies and authorities except as expressly provided by law.

**SECTION 2.** Section 1 of chapter 16 of the General Laws, as so appearing, is hereby amended by striking out subsection (d) and inserting in place thereof the following 2 subsections:-

- (d) The commissioner shall collaborate with other state agencies to reduce greenhouse gas emissions to the limits established in chapter 21N.
- (e) The commissioner may promulgate rules and regulations to effectuate the purposes of this chapter.

**SECTION 3.** Section 2 of chapter 21A of the General Laws, as so appearing, is hereby amended by adding the following clause:-

- (30) consistent with chapter 21N, oversee state agency efforts to address and diminish the impacts of climate change by coordinating state agency actions to achieve the greenhouse gas emissions limits established in chapter 21N.

**SECTION 4.** Section 8 of said chapter 21A, as so appearing, is hereby amended by inserting after the second paragraph the following paragraph:-  
The department of environmental protection shall assist in the implementation of chapter 21N.

**SECTION 5.** Section 16 of said chapter 21A, as so appearing, is hereby amended by adding the following paragraph:-  
Any person who fails to comply with or otherwise violates chapter 21N shall be liable for a civil administrative penalty not to exceed \$25,000 for each day the violation continues.

**SECTION 6.** The General Laws are hereby amended by inserting after chapter 21M the following chapter:-

Chapter 21N.  
CLIMATE PROTECTION AND GREEN ECONOMY ACT.

Section 1. As used in this chapter the following words shall have the following meanings unless the context clearly requires otherwise:-

“Allowance”, an authorization to emit, during a specified year, up to 1 ton of carbon dioxide equivalent.

“Alternative compliance mechanism”, an action undertaken by a greenhouse gas emission source that achieves the equivalent reduction of greenhouse gas emissions over the same time period as a direct emissions reduction, that is approved by the department, and that is real, permanent, quantifiable, verifiable and enforceable.

“Carbon dioxide equivalent”, the amount of carbon dioxide by weight that would produce the same global warming impact as a given weight of another greenhouse gas, based on the best available science, including from the Intergovernmental Panel on Climate Change.

“Department”, the department of environmental protection.

“Direct emissions”, emissions from sources that are owned or operated, in whole or in part, by an entity or facility including, but not limited to, emissions from factory stacks, manufacturing processes and vents, and company owned or company-leased motor vehicles.

“Direct emissions reduction”, a greenhouse gas emission reduction action made by a greenhouse gas emissions source at that source.

“Emission”, emission of a greenhouse gas into the air.

“Emissions reduction measures”, programs, measures, standards, and alternative compliance mechanisms authorized pursuant to this chapter, applicable to sources or categories of sources that are designed to reduce emissions of greenhouse gases.

“Entity”, a person that owns or operates, in whole or in part, a source of greenhouse gas emissions from a generator of electricity or a commercial or industrial site including, but not limited to, a transportation fleet.

“Executive office”, the executive office of energy and environmental affairs.

“Facility”, a building, structure or installation located on contiguous or adjacent properties of an entity.

“Greenhouse gas”, any chemical or physical substance that is emitted into the air and that the department may reasonably anticipate will cause or contribute to climate change including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.

“Greenhouse gas emissions limit”, an authorization, during a specified year, to emit up to a level of greenhouse gases specified by the secretary, expressed in tons of carbon dioxide equivalents.

“Greenhouse gas emissions source”, a source, or category of sources, of greenhouse gas emissions with emissions that are at a level of significance, as determined by the secretary, that its participation in the program established under this chapter will enable the secretary to effectively reduce greenhouse gas emissions and monitor compliance with the statewide greenhouse gas emissions limit.

“Indirect emissions”, emissions associated with the consumption of purchased electricity, steam and heating or cooling by an entity or facility.

“Leakage”, the offset of a reduction in emissions of greenhouse gases within the commonwealth by an increase in emissions of greenhouse gases outside the commonwealth.

“Market-based compliance mechanism”, (i) a system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases; or (ii) greenhouse gas emissions exchanges, banking, credits and other transactions governed by rules and protocols established by the secretary or the regional greenhouse gas initiative, that result in the same greenhouse gas emissions reduction, over the same time period, as direct compliance with a greenhouse gas emissions limit or emission reduction measure adopted by the executive office pursuant to this chapter.

“Person”, an agency or political subdivision of the commonwealth, a state, public or private corporation or authority or an individual, trust firm, joint stock company, partnership, association or other entity or group thereof or an officer, employee or agent thereof.

“Secretary”, the secretary of energy and environmental affairs.

“Statewide greenhouse gas emissions”, the total annual emissions of greenhouse gases in the commonwealth, including all emissions of greenhouse gases from the generation of electricity delivered to and consumed in the commonwealth, accounting for transmission and distribution line losses, whether the electricity is generated in the commonwealth or imported; provided, however, that statewide greenhouse gas emissions shall be expressed in tons of carbon dioxide equivalents.

“Statewide greenhouse gas emissions limit”, the maximum allowable level of statewide greenhouse gas emissions in a given year, as determined by the secretary.

Section 2. (a) The department shall monitor and regulate emissions of greenhouse gases with the goal of reducing those emissions. The department shall adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with this chapter. The regulations shall: (1) establish a regional greenhouse gas registry and reporting system for greenhouse gas emission sources; provided, however, that in establishing the greenhouse gas registry and reporting system, the department may collaborate with other states or a regional consortium; (2) annually require the owner or operator of any facility that is required to report air emissions data to the department pursuant to Title V of the federal Clean Air Act and that has stationary emissions sources that emit greenhouse gases to report annually to the regional registry direct stack emissions of greenhouse gases from such sources; (3) require the owner or operator of a facility that has stationary emissions sources that emit greenhouse gases in excess of 5,000 tons of greenhouse gases per year in carbon dioxide equivalents to report annually to the regional registry direct emissions of greenhouse gases from such sources; provided, however, that the department shall develop a simplified estimation form to assist facilities in determining who shall report emissions and shall consider, on an annual basis, requiring the expansion of reporting to the regional greenhouse gas registry; (4) provide for the voluntary reporting of emissions of greenhouse gases to the regional greenhouse gas registry by entities and facilities that are not required to submit information pursuant to clauses (2) and (3); provided, however, that the greenhouse gas emissions reported shall be of a type and format that the regional greenhouse gas registry can accommodate; (5) require reporting of greenhouse gas

emissions from generation sources producing all electricity consumed, including transmission and distribution line losses from electricity generated within the commonwealth or imported from outside the commonwealth; provided, however, that this requirement shall apply to all retail sellers of electricity, including electric utilities, municipal electric departments and municipal light boards as defined in section 1 of chapter 164A; (6) ensure rigorous and consistent accounting of emissions and provide reporting tools and formats to ensure collection of necessary data; and (7) ensure that greenhouse gas emissions sources maintain comprehensive records of all reported greenhouse gas emissions.

(b) The department shall: (1) consult with the secretary on periodic review and updates of emission reporting requirements, as necessary; and (2) review existing and proposed state, federal and international greenhouse gas emissions reporting programs and make reasonable efforts to promote consistency among the programs established pursuant to this chapter and other programs and to streamline reporting requirements on greenhouse gas emissions sources.

(c) The department shall triennially publish a state greenhouse gas emissions inventory that includes comprehensive estimates of the quantity of greenhouse gas emissions in the commonwealth for the last 3 years in which data is available.

Section 3. (a) The department shall, pursuant to chapter 30A, determine the statewide greenhouse gas emissions level in calendar year 1990 and reasonably project what the emissions level will be in calendar year 2020 if no measures are imposed to lower emissions other than those formally adopted and implemented as of January 1, 2009. This projection shall hereafter be referred to as the projected 2020 business as usual level.

(b) The secretary shall, in consultation with the department and the department of energy resources, adopt the following statewide greenhouse gas emissions limits: (1) a 2020 statewide emissions limit and a plan to achieve that limit pursuant to section 4; (2) an interim 2030 emissions limit accompanied by plans to achieve this limit in accordance with said section 4; provided, however, that the 2030 interim emissions limits shall maximize the ability of the commonwealth to meet the 2050 emissions limit; (3) an interim 2040 emissions limit accompanied by plans to achieve this limit in accordance with said section 4; provided, however, that the 2040 interim emissions limit shall maximize the ability of the commonwealth to meet the 2050 emissions limit; and (4) a 2050 statewide emissions limit that is at least 80 per cent below the 1990 level.

(c) Emissions levels and limits associated with the electric sector shall be established by the executive office and the department, in consultation with the department of energy resources, based on consumption and purchases of electricity from the regional electric grid, taking into account the regional greenhouse gas initiative and the renewable portfolio standard.

(d) The department shall promulgate regulations establishing a desired level of declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions.

Section 4. (a) The secretary shall adopt the 2020 statewide greenhouse gas emissions limit pursuant to subsection (b) of section 3 which shall be between 10 per cent and 25

per cent below the 1990 emissions level and a plan for achieving said reduction. The secretary shall consult with all state agencies and regional authorities with jurisdiction over sources of greenhouse gases on all elements of the emissions limit and plan that pertain to energy-related matters including, but not limited to, electrical generation, load based-standards or requirements, the provision of reliable and affordable electrical service and statewide fuel supplies, to ensure the greenhouse gas emissions reduction activities to be adopted and implemented by the secretary are complementary, non-duplicative and can be implemented in an efficient and cost-effective manner. The 2020 statewide emissions limit and implementation plan shall comply with this section.

(b) The secretary shall analyze the feasibility of measures to comply with the emissions limit established in subsection (a). Such measures shall include, but not be limited to, the electric generating facility aggregate limit established pursuant to section 12, direct emissions reduction measures from other sectors of the economy, alternative compliance mechanisms, market-based compliance mechanisms and potential monetary and nonmonetary incentives for sources and categories of sources that the secretary finds are necessary or desirable to facilitate the achievement of reductions of greenhouse gas emissions limits.

(c) The secretary shall consider all relevant information pertaining to greenhouse gas emissions reduction goals and programs in other states and nations.

(d) The secretary shall evaluate the total potential costs and economic and noneconomic benefits of various reduction measures to the economy, environment and public health, using the best available economic models, emissions estimation techniques and other scientific methods.

(e) The secretary shall take into account the relative contribution of each source or source category to statewide greenhouse gas emissions and shall recommend a de minimis threshold of greenhouse gas emissions below which emissions reduction requirements shall not apply.

(f) The secretary shall identify opportunities for emissions reduction measures from all verifiable and enforceable voluntary actions.

(g) The secretary shall conduct public hearings on the proposed 2020 emission limit and implementing plan. The secretary shall conduct a portion of these workshops in regions that have the most significant exposure to air pollutants, including, but not limited to, communities with minority populations, communities with low-income populations, or both.

(h) The secretary shall update its plan for achieving the maximum technologically feasible reductions of greenhouse gas emissions at least once every 5 years, including the plans to implement the 2030, 2040 and 2050 statewide emission limits.

Section 5. The secretary shall monitor the implementation of regulations relative to climate change and shall, every 5 years, publish a report which shall include recommendations regarding such implementation. The report shall include, without limitation: (i) whether regulations or other measures undertaken, including distribution of emissions allowances, are equitable and minimize costs and maximize the total benefits to the commonwealth and encourage early action to reduce greenhouse gas emissions; (ii) whether activities undertaken to comply with state regulations and efforts disproportionately impact low-income communities; (iii) whether entities that have

voluntarily reduced their greenhouse gas emissions prior to the implementation of this chapter receive appropriate credit for early voluntary reductions; (iv) whether activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and reduce toxic air contaminant emissions; (v) consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources and other benefits to the economy, environment and public health; (vi) whether state actions minimize the administrative burden of implementing and complying with these regulations; (vii) whether state actions minimize leakage; (viii) consider the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases; (ix) whether greenhouse gas emissions reductions achieved are real, permanent, quantifiable, verifiable and enforceable; and (x) recommendations for future policy action. The report shall be filed with the clerk of the house of representatives, the clerk of the senate, the chairs of the house and senate committees on ways and means, the chairs of the joint committee of telecommunications, utilities and energy and the chairs of the joint committee on the environment, natural resources and agriculture.

Section 6. In implementing its plan for statewide greenhouse gas emissions limits, the commonwealth and its agencies shall promulgate regulations that reduce energy use, increase efficiency and encourage renewable sources of energy in the sectors of energy generation, buildings and transportation.

Section 7. (a) The secretary, in consultation with the executive office of administration and finance, may consider the use of market-based compliance mechanisms to address climate change concerns; provided, however, that prior to the use of any market-based compliance mechanism, to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the secretary shall: (1) consider the potential for direct, indirect and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution; (2) design any market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants, with particular attention paid to emissions of nitrous oxide, sulfur dioxide and mercury; and (3) maximize additional environmental and economic benefits for the commonwealth, as appropriate.

(b) The secretary may adopt regulations governing how market-based compliance mechanisms may be used by regulated entities subject to greenhouse gas emissions limits and mandatory emissions reporting requirements to achieve compliance with their greenhouse gas emissions limits.

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

(d) The executive office shall monitor compliance with and enforce any rule, regulation, order, emissions limitation, emissions reduction measure or market-based compliance mechanism adopted by the executive office or department pursuant to this chapter. The department may impose a civil administrative penalty pursuant to section 16 of chapter

21A for a violation of any rule, regulation, order, emissions limitation, emissions reduction measure or other measure adopted by the executive office pursuant to this chapter.

Section 8. The secretary shall convene an advisory committee to advise the executive office in overseeing the greenhouse emissions reduction measures. The advisory committee shall consist of representatives from the following sectors: commercial, industrial and manufacturing; transportation; low-income consumers; energy generation and distribution; environmental protection; energy efficiency and renewable energy; local government; and academic institutions.

Section 9. Nothing in this chapter shall affect the authority of the public utility commission or the obligation of an electrical utility to provide customers with safe and reliable electric service. Nothing in this chapter shall preclude, prohibit or restrict the construction of a new facility or the expansion of an existing facility subject to regulation under this chapter, if all applicable requirements are met and the facility is in compliance with regulations adopted pursuant to this chapter.

**SECTION 7.** Section 61 of chapter 30 of the General Laws is hereby amended by inserting after the first paragraph, as appearing in the 2006 Official Edition, the following paragraph:-

In considering and issuing permits, licenses and other administrative approvals and decisions, the respective agency, department, board, commission or authority shall also consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise.

**SECTION 8.** Nothing in this act shall restrict the secretary of energy and environmental affairs from adopting greenhouse gas emissions limits or emissions reduction measures prior to January 1, 2011, that are consistent with general or special laws or rules or regulations, imposing those limits prior to January 1, 2012, or providing early reduction credit, where appropriate, nor shall this act prevent the imposition of more stringent limits on emissions.

**SECTION 9.** Notwithstanding any general or special law to the contrary, the secretary shall convene an advisory committee to analyze strategies for adapting to the predicted impacts of climate change in the commonwealth. The advisory committee shall be chaired by the secretary, or his designee, and comprised of representatives with expertise in the following areas: transportation and built infrastructure; commercial, industrial and manufacturing activities; low income consumers; energy generation and distribution; land conservation; water supply and quality; recreation; ecosystems dynamics; coastal zone and oceans; rivers and wetlands; and local government.

The committee shall file a report of its findings and recommendations regarding strategies for adapting to climate change not later than December 31, 2009.

**SECTION 10.** Notwithstanding any general or special law to the contrary, the executive office of energy and environmental affairs shall promulgate regulations pursuant to section 2 of chapter 21N of the General Laws not later than January 1, 2009.

**SECTION 11.** Clauses (2) and (3) of the third sentence of subsection (a) of said section 2 of said chapter 21N shall take effect not later than April 15, 2009.

**SECTION 12.** Clauses (4) and (5) of said third sentence of said subsection (a) of said section 2 of said chapter 21N shall be implemented not later than July 1, 2009.

**SECTION 13.** The first inventory required pursuant to subsection (c) of said section 2 of said chapter 21N shall be published not later than December 31, 2010.

**SECTION 14.** Subsection (a) of section 3 of said chapter 21N shall be implemented not later than July 1, 2009.

**SECTION 15.** Clause (1) of subsection (b) of said section 3 of said chapter 21N shall be implemented not later than January 1, 2011.

**SECTION 16.** The department of environmental protection shall promulgate regulations pursuant to subsection (d) of said section 3 of said chapter 21N not later than January 1, 2012, which regulations shall take effect on January 1, 2013, and shall expire on December 31, 2020.

**SECTION 17.** The 2020 statewide greenhouse gas initiative required to be adopted pursuant to subsection (a) of section 4 of said chapter 21N shall be adopted not later than January 1, 2011.

**SECTION 18.** Notwithstanding any general or special law to the contrary, the executive office of energy and environmental affairs shall publish the report required pursuant to section 5 of said chapter 21N not later than January 1, 2014.

*Approved August 7, 2008*

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