

An Act creating a next-generation roadmap for Massachusetts climate policy (as of 3/16/21)

Tip: Blue text stayed the same between versions, while red text changed. Green background indicates an altered section and orange indicates that sections have been reordered. Phrases moved without changing in meaning are highlighted in both versions.

SB13 (Governor's Proposal)	SB30 (Senate Bills in the Third Reading)
<p>SECTION 1. Section 1 of chapter 21N of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by striking out the definition of "direct emissions" and inserting in place thereof the following definition:-</p> <p>Direct emissions", emissions from sources that are owned or operated, in whole or in part, by any person, entity or facility including, but not limited to, emissions from transportation or heating fuels or from any building, structure, distribution system or residential, commercial, institutional, industrial, waste management, agricultural or manufacturing process.</p>	<p>SECTION 1. Section 1 of chapter 21N of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by striking out the definition of "direct emissions" and inserting in place thereof the following definition:-</p> <p>Direct emissions", emissions from sources that are owned or operated, in whole or in part, by any person, entity or facility including, but not limited to, emissions from transportation or heating fuels or from any building, structure, distribution system or residential, commercial, institutional, industrial, waste management, agricultural or manufacturing process.</p>
<p>SECTION 2. Said section 1 of said chapter 21N, as so appearing, is hereby further amended by striking out the definition of "Greenhouse gas emissions source" and inserting in place thereof the following definition:-</p> <p>"Greenhouse gas emissions source", a source, or category of sources, of greenhouse gas emissions, including but not limited to greenhouse gas emissions from transportation fuels, heating fuels, or electricity that are used, distributed, consumed, combusted, or sold into the commonwealth, with emissions that are at a level of significance, as determined by the secretary, such that its inclusion in the programs and initiatives established under this chapter will enable the secretary to effectively reduce greenhouse gas emissions and ensure compliance with the statewide greenhouse gas emissions limits and sublimits. When used in relation to the regulation of emissions, a person or entity that sells or distributes transportation fuels, heating fuels, or electricity may be considered to be the source of greenhouse gas emissions from the use, distribution, consumption, combustion, or sale of such fuels or electricity.</p>	<p>SECTION 2. Said section 1 of said chapter 21N, as so appearing, is hereby further amended by striking out the definition of "Greenhouse gas emissions source" and inserting in place thereof the following definition:-</p> <p>"Greenhouse gas emissions source", a source, or category of sources, of greenhouse gas emissions, including but not limited to greenhouse gas emissions from transportation fuels, heating fuels, or electricity that are used, distributed, consumed, combusted, or sold into the commonwealth, with emissions that are at a level of significance, as determined by the secretary, such that its inclusion in the programs and initiatives established under this chapter will enable the secretary to effectively reduce greenhouse gas emissions and ensure compliance with the statewide greenhouse gas emissions limits and sublimits; provided, however when used in relation to the regulation of emissions, a person or entity that sells or distributes transportation fuels, heating fuels, or electricity may be considered to be the source of greenhouse gas emissions from the use, distribution, consumption, combustion, or sale of such fuels or electricity.</p>
<p>SECTION 3. Said section 1 of said section 21N, as so appearing, is hereby further amended by striking out the definition of "Indirect emissions" and inserting in place thereof the following definition:-</p> <p>"Indirect emissions", emissions associated with the consumption of any purchased electricity, fuel, steam and heating or cooling by a person, an entity or a facility in the commonwealth.</p>	<p>SECTION 3. Said section 1 of said section 21N, as so appearing, is hereby further amended by striking out the definition of "Indirect emissions" and inserting in place thereof the following definition:-</p> <p>"Indirect emissions", emissions associated with the consumption of any purchased electricity, fuel, steam and heating or cooling by a person, an entity or a facility in the commonwealth.</p>

<p>SECTION 4. Said section 1 of said section 21N, as so appearing, is hereby further amended by striking out the definition of</p> <p>"Market-based compliance mechanism" and inserting in place thereof the following 2 definitions:- "Market-based compliance mechanism", any form of market-based or priced compliance system imposed on sources or categories of sources of greenhouse gas emissions, or any pricing mechanism imposed directly on greenhouse gas emissions sources or on their distribution or sale, designed to reduce emissions as required by this chapter, which shall include, but not be limited to: (i) a system of market-based declining aggregate emissions limitations for sources or categories of sources that emit greenhouse gases; (ii) greenhouse gas emissions exchanges, banking, credits and other transactions governed by rules and protocols established by the secretary and the department, the regional greenhouse gas initiative or other similar multi-jurisdictional program that results in greenhouse gas emissions reductions; or (iii) a system of charges or exactions imposed to reduce statewide greenhouse gas emissions, in whole or in part.</p> <p>"Natural and working lands", lands within the commonwealth that: (i) are actively used by an agricultural owner or operator for an agricultural operation that includes, but is not limited to, active engagement in farming or ranching; (ii) produce forest products; (iii) consist of forests, grasslands, freshwater and riparian systems, wetlands, coastal and estuarine areas, watersheds, wildlands or wildlife habitats; or (iv) are used for recreational purposes, including parks, urban and community forests, trails or other similar open space land.</p>	<p>SECTION 4. Said section 1 of said section 21N, as so appearing, is hereby further amended by striking out the definition of</p> <p>"Market-based compliance mechanism" and inserting in place thereof the following 2 definitions:- "Market-based compliance mechanism", any form of market-based or priced compliance system imposed on sources or categories of sources of greenhouse gas emissions, or any pricing mechanism imposed directly on greenhouse gas emissions sources or on their distribution or sale, designed to reduce emissions as required by this chapter, which shall include, but not be limited to: (i) a system of market-based declining aggregate emissions limitations for sources or categories of sources that emit greenhouse gases; (ii) greenhouse gas emissions exchanges, banking, credits and other transactions governed by rules and protocols established by the secretary and the department, the regional greenhouse gas initiative or other similar multi-jurisdictional program that results in greenhouse gas emissions reductions; or (iii) a system of charges or exactions imposed to reduce statewide greenhouse gas emissions, in whole or in part.</p> <p>"Natural and working lands", lands within the commonwealth that: (i) are actively used by an agricultural owner or operator for an agricultural operation that includes, but is not limited to, active engagement in farming or ranching; (ii) produce forest products; (iii) consist of forests, grasslands, freshwater and riparian systems, wetlands, coastal and estuarine areas, watersheds, wildlands or wildlife habitats; or (iv) are used for recreational purposes, including parks, urban and community forests, trails or other similar open space land.</p>
<p>SECTION 5. Subsection (a) of section 2 of said chapter 21N, as so appearing, is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:-</p> <p>The department shall establish programs to monitor and reduce emissions of greenhouse gases and promulgate regulations regarding sources or categories of sources that emit greenhouse gases in order to achieve the greenhouse gas emissions limits and sublimits and implement the roadmap plans required by this chapter.</p>	<p>SECTION 5. Subsection (a) of section 2 of said chapter 21N, as so appearing, is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:-</p> <p>The department shall establish programs to monitor and reduce emissions of greenhouse gases and shall promulgate regulations regarding sources or categories of sources that emit greenhouse gases in order to achieve the greenhouse gas emissions limits and sublimits and implement the roadmap plans required by this chapter.</p>
<p>SECTION 6. Said section 2 of said chapter 21N, as so appearing, is hereby amended by striking out, in line 6, the word "regional".</p>	<p>SECTION 6. Said section 2 of said chapter 21N, as so appearing, is hereby amended by striking out, in line 6, the word "regional".</p>
<p>SECTION 7. Said section 2 of said chapter 21N, as so appearing, is hereby further amended by striking out, in lines 13 and 14, 18, 22, 24, and 28, each time they appear, the words "the regional" and inserting in place thereof, in each instance, the following word:- a.</p>	<p>SECTION 7. Said section 2 of said chapter 21N, as so appearing, is hereby further amended by striking out, in lines 13 and 14, 18, 22, 24, and 28, each time they appear, the words "the regional" and inserting in place thereof, in each instance, the following word:- a.</p>

SECTION 8. Section 3 of said chapter 21N, as so appearing, is hereby amended by striking out subsection (b) and inserting in place thereof the following subsection:-

(b) The secretary shall, in consultation with the department and the department of energy resources, adopt the following statewide greenhouse gas emissions limits: (i) an interim 2025 statewide greenhouse gas emissions limit; (ii) an interim 2030 statewide greenhouse gas emissions limit; (iii) an interim 2035 statewide greenhouse gas emissions limit; (iv) an interim 2040 statewide greenhouse gas emissions limit; (v) an interim 2045 statewide greenhouse gas emissions limit; and (vi) a 2050 statewide emissions limit that achieves at least net zero statewide greenhouse gas emissions; provided, however, that in no event shall the level of emissions in 2050 be higher than a level 85 per cent below the 1990 level. Each limit shall be accompanied by publication of a comprehensive, clear and specific roadmap plan to realize said limit.

SECTION 9. Said chapter 21N is hereby further amended by inserting after section 3 the following 2 sections:-

Section 3A. (a) The secretary shall, in consultation with the secretary of housing and economic development and the secretary of transportation, adopt sector-based statewide greenhouse gas emissions sublimits as components of each statewide greenhouse gas emissions limit adopted pursuant to subsection (b) of section 3 for the sectors of electric power, transportation, commercial and industrial heating and cooling, residential heating and cooling, industrial processes, and natural gas distribution and service. In order to achieve the greenhouse gas emissions limits established by this chapter, the secretary may adopt sector-based statewide greenhouse gas emissions sublimits for any other sector or source the secretary may designate.

(b) Sector-based statewide greenhouse gas emissions sublimits for a given year shall not, in the aggregate, exceed the statewide greenhouse gas emissions limit for the year and shall be designed to maximize the ability of the commonwealth to meet the 2050 statewide greenhouse gas emissions limit established in subsection (b) of section 3; provided, however, that a sublimit shall not be binding for a given year for which the commonwealth is in compliance with the statewide greenhouse gas limit adopted pursuant to subsection (b) of section 3.

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

SECTION 8. Section 3 of said chapter 21N, as so appearing, is hereby amended by striking out subsection (b) and inserting in place thereof the following subsection:-

(b) The secretary shall, in consultation with the department and the department of energy resources, adopt the following statewide greenhouse gas emissions limits: (i) an interim 2025 statewide greenhouse gas emissions limit; (ii) an interim 2030 statewide greenhouse gas emissions limit; (iii) an interim 2035 statewide greenhouse gas emissions limit; (iv) an interim 2040 statewide greenhouse gas emissions limit; (v) an interim 2045 statewide greenhouse gas emissions limit; and (vi) a 2050 statewide emissions limit that achieves at least net zero statewide greenhouse gas emissions; provided, however, that in no event shall the level of emissions in 2050 be higher than a level 85 per cent below the 1990 level. Each limit shall be accompanied by publication of a comprehensive, clear and specific roadmap plan to realize said limit.

SECTION 9. Said chapter 21N is hereby further amended by inserting after section 3 the following 2 sections:-

Section 3A. (a) The secretary shall, in consultation with the secretary of housing and economic development and the secretary of transportation, adopt sector-based statewide greenhouse gas emissions sublimits as components of each statewide greenhouse gas emissions limit adopted pursuant to subsection (b) of section 3 for the sectors of electric power, transportation, commercial and industrial heating and cooling, residential heating and cooling, industrial processes, and natural gas distribution and service. In order to achieve the greenhouse gas emissions limits established by this chapter, the secretary may adopt sector-based statewide greenhouse gas emissions sublimits for any other sector or source the secretary may designate.

(b) Sector-based statewide greenhouse gas emissions sublimits for a given year shall not, in the aggregate, exceed the statewide greenhouse gas emissions limit for the year and shall be designed to maximize the ability of the commonwealth to meet the 2050 statewide greenhouse gas emissions limit established in subsection (b) of section 3; provided, however, that a sublimit shall not be found to have been binding for a given prior year if the commonwealth is found to have complied with the statewide greenhouse gas limit adopted pursuant to subsection (b) of section 3 for the same year.

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

SECTION 10. Said chapter 21N is hereby further amended by striking out sections 4 to 6, inclusive, as appearing in the 2018 Official Edition, and inserting in place thereof the following 3 sections:-

Section 4. (a) The secretary shall adopt the 2020 statewide greenhouse gas emissions limit that 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 limits, sublimits, and roadmap plans required by this chapter, including, but not limited to, electrical generation, load based-standards or requirements, the provision of reliable and affordable electrical service and statewide fuel supplies. The 2025, 2030, 2035, 2040, 2045 and 2050 statewide greenhouse gas emissions limits and the accompanying roadmap plans for realizing the limits shall comply with the requirements of this section and section 5.

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

(c) 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.

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

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

(f) The secretary shall conduct public hearings on the proposed 2025, 2030, 2035, 2040, 2045 and 2050 statewide greenhouse gas emissions limits and the accompanying roadmap plans for realizing the limits. 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.

(g) Not more than 18 months after the last day of 2020, 2025, 2030, 2035, 2040, 2045, 2050 and any other calendar year for which a statewide greenhouse gas emissions limit is adopted pursuant to statute or regulation, the secretary shall issue a statement in writing to the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on telecommunications, utilities and energy and the joint committee on environment, natural resources and agriculture. The statement shall indicate, drawing upon the best available data and measurements, the degree of compliance achieved by the

SECTION 10. Said chapter 21N is hereby further amended by striking out sections 4 to 6, inclusive, as appearing in the 2018 Official Edition, and inserting in place thereof the following 3 sections:-

Section 4. (a) The secretary shall adopt the 2020 statewide greenhouse gas emissions limit that 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 limits, sublimits, and roadmap plans required by this chapter, including, but not limited to, electrical generation, load based-standards or requirements, the provision of reliable and affordable electrical service and statewide fuel supplies. The 2025, 2030, 2035, 2040, 2045 and 2050 statewide greenhouse gas emissions limits and the accompanying roadmap plans for realizing the limits shall comply with the requirements of this section and section 5.

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

(c) 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.

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

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

(f) The secretary shall conduct public hearings on the proposed 2025, 2030, 2035, 2040, 2045 and 2050 statewide greenhouse gas emissions limits and the accompanying roadmap plans for realizing the limits. 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.

(g) Not more than 18 months after the last day of 2020, 2025, 2030, 2035, 2040, 2045, 2050 and any other calendar year for which a statewide greenhouse gas emissions limit is adopted pursuant to statute or regulation, the secretary shall issue a statement in writing to the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on telecommunications, utilities and energy and the joint committee on environment, natural resources and agriculture. The statement shall indicate, drawing upon the best available data and measurements, the degree of compliance achieved by the

commonwealth with the statewide greenhouse gas emissions limit. The statement shall reasonably quantify the extent to which emissions exceeded or did not exceed the limit and shall consider the lessons to be learned from any success or failure to comply with said limit. If emissions exceeded the limit, the statement shall describe remedial steps that might be taken to offset the excess emissions and ensure compliance with the next upcoming limit adopted pursuant to statute or regulation.

(h) The interim 2030 statewide greenhouse gas emissions limit shall be at least 45 per cent and not more than 50 per cent below the 1990 level, and the interim 2040 statewide greenhouse gas emissions limit shall be at least 65 per cent and not more than 75 per cent below the 1990 level.

Section 5. To the extent practicable, the roadmap plans required by subsection (b) of section 3 for 2025, 2030, 2035, 2040 and 2045 shall be consistent with each other, cumulative in effect and constructed to realize the 2050 statewide greenhouse gas emissions limit imposed by said subsection (b) of said section 3. Each plan, including the 2050 plan, shall (i) address each sector subject to a statewide greenhouse gas emissions sublimit imposed by section 3A; (ii) indicate for each sector how, to what extent, and when the commonwealth will act to reduce its emissions in order to realize the 2050 statewide greenhouse gas emissions limit; (iii) consider 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 greenhouse gas emissions reductions; (iv) consider 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) consider whether state actions minimize the administrative burden of implementing and complying with these plans and regulations; (vii) consider 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) consider whether greenhouse gas emissions reductions achieved are real, permanent, quantifiable, verifiable, and enforceable; (x) quantify the emissions reductions to be realized due to the electric and gas energy efficiency programs established under sections 19 and 21 of chapter 25; (xi) set numerical benchmarks and track adoption within the commonwealth of emissions reduction products, solutions, and improvements used to achieve the statewide greenhouse gas emissions limits and sublimits, including, but not limited to, electric vehicles, electric vehicle charging stations, solar photovoltaic and solar thermal technologies, offshore wind facilities, the release of measurable greenhouse gases from and carbon sequestration by natural and working lands and the products derived from these lands to the maximum extent practicable, energy storage capacity, air-source and ground-source heat pumps and anaerobic digestion; (xii) summarize the steps taken by the commonwealth to improve or

commonwealth with the statewide greenhouse gas emissions limit. The statement shall reasonably quantify the extent to which emissions exceeded or did not exceed the limit and shall consider the lessons to be learned from any success or failure to comply with said limit. If emissions exceeded the limit, the statement shall describe remedial steps that might be taken to offset the excess emissions and ensure compliance with the next upcoming limit adopted pursuant to statute or regulation.

(h) The interim 2030 statewide greenhouse gas emissions limit shall be at least 50 per cent below the 1990 level, and the interim 2040 statewide greenhouse gas emissions limit shall be at least 75 per cent below the 1990 level.

Section 5. To the extent practicable, the roadmap plans required by subsection (b) of section 3 for 2025, 2030, 2035, 2040 and 2045 shall be consistent with each other, cumulative in effect and constructed to realize the 2050 statewide greenhouse gas emissions limit imposed by said subsection (b) of said section 3. Each plan, including the 2050 plan, shall (i) address each sector subject to a statewide greenhouse gas emissions sublimit imposed by section 3A; (ii) indicate for each sector how, to what extent, and when the commonwealth will act to reduce its emissions in order to realize the 2050 statewide greenhouse gas emissions limit; (iii) consider 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 greenhouse gas emissions reductions; (iv) consider 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) consider whether state actions minimize the administrative burden of implementing and complying with these plans and regulations; (vii) consider 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) consider whether greenhouse gas emissions reductions achieved are real, permanent, quantifiable, verifiable, and enforceable; (x) quantify the emissions reductions to be realized due to the electric and gas energy efficiency programs established under sections 19 and 21 of chapter 25; (xi) set numerical benchmarks and track adoption within the commonwealth of emissions reduction products, solutions, and improvements used to achieve the statewide greenhouse gas emissions limits and sublimits, including, but not limited to, electric vehicles, electric vehicle charging stations, solar photovoltaic and solar thermal technologies, offshore wind facilities, the release of measurable greenhouse gases from and carbon sequestration by natural and working lands and the products derived from these lands to the maximum extent practicable, energy storage capacity, air-source and ground-source heat pumps and anaerobic digestion; (xii) summarize the steps taken by the commonwealth to improve or mitigate economic, environmental and public health impacts on low-

mitigate economic, environmental and public health impacts on low- or moderate-income individuals and environmental justice populations; (xiii) (A) contain a statewide baseline measurement and measure the current carbon flux on natural and working lands; (B) adopt statewide goals to reduce greenhouse gas emissions and increase carbon sequestration on natural and working lands; and (C) develop a natural and working lands plan that outlines actions to meet these statewide goals, including, but not limited to, land protection, management and restoration and state and local legislation, laws and regulations, programs, grants, loans, incentives and public-private partnerships, and provide guidance and strategies for state agencies, authorities, municipalities, regional planning agencies, nonprofit organizations, landowners and operators; provided, however, that said plan shall be developed and informed by a stakeholder process and that the baseline, goal and plan shall be integrated into the inventory, baseline assessment, plan and reporting requirements pursuant to this chapter and shall be consistent with state climate change adaptation and resiliency policies; (xiv) include the results of quantitative modeling and analysis of the commonwealth's energy economy and greenhouse gas emissions in their state and regional context, including, but not limited to, the regional electric distribution and transmission grid; provided, however, that said modeling and analysis may be conducted in conjunction with other states or regional entities as part of an analysis of reducing regional emissions to a level consistent with this chapter; provided further, that the secretary is authorized to utilize back-cast methodology; (xv) publish the results of any modeling and analysis performed pursuant to this section and, to the maximum extent permitted by law, make available for public inspection and use the model, all model assumptions, and all input and output data; provided, that the secretary may protect from public disclosure, trade secrets, confidential, competitively sensitive or other proprietary information provided in the course of proceedings in the same manner as provided in section 5D of chapter 25; and (xvi) make recommendations for future policy action. Each roadmap plan shall be filed with the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on telecommunications, utilities and energy and the joint committee on environment, natural resources and agriculture.

Section 6. The secretary shall establish programs to reduce emissions of greenhouse gases and promulgate regulations regarding sources or categories of sources that emit greenhouse gases in order to achieve the greenhouse gas emissions limits and sublimits and implement the roadmap plans required by this chapter. Said regulations shall achieve required emissions reductions equitably and in a manner that protects low- and moderate-income persons and environmental justice populations.

or moderate-income individuals and environmental justice populations; (xiii) (A) contain a statewide baseline measurement and measure the current carbon flux on natural and working lands; (B) adopt statewide goals to reduce greenhouse gas emissions and increase carbon sequestration on natural and working lands; and (C) develop a natural and working lands plan that outlines actions to meet these statewide goals, including, but not limited to, land protection, management and restoration and state and local legislation, laws and regulations, programs, grants, loans, incentives and public-private partnerships, and provide guidance and strategies for state agencies, authorities, municipalities, regional planning agencies, nonprofit organizations, landowners and operators; provided, however, that said plan shall be developed and informed by a stakeholder process and that the baseline, goal and plan shall be integrated into the inventory, baseline assessment, plan and reporting requirements pursuant to this chapter and shall be consistent with state climate change adaptation and resiliency policies; (xiv) include the results of quantitative modeling and analysis of the commonwealth's energy economy and greenhouse gas emissions in their state and regional context, including, but not limited to, the regional electric distribution and transmission grid; provided, however, that said modeling and analysis may be conducted in conjunction with other states or regional entities as part of an analysis of reducing regional emissions to a level consistent with this chapter; provided further, that the secretary is authorized to utilize back-cast methodology; (xv) publish the results of any modeling and analysis performed pursuant to this section and, to the maximum extent permitted by law, make available for public inspection and use the model, all model assumptions, and all input and output data; provided, that the secretary may protect from public disclosure, trade secrets, confidential, competitively sensitive or other proprietary information provided in the course of proceedings in the same manner as provided in section 5D of chapter 25; and (xvi) make recommendations for future policy action. Each roadmap plan shall be filed with the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on telecommunications, utilities and energy and the joint committee on environment, natural resources and agriculture.

Section 6. The secretary shall establish programs to reduce emissions of greenhouse gases and promulgate regulations regarding sources or categories of sources that emit greenhouse gases in order to achieve the greenhouse gas emissions limits and sublimits and implement the roadmap plans required by this chapter. Said regulations shall achieve required emissions reductions equitably and in a manner that protects low- and moderate-income persons and environmental justice populations.

<p>SECTION 11. Subsection (a) of section 7 of said chapter 21N, as so appearing, is hereby amended by striking out, in line 6, the word "limit" and inserting in place thereof the following word:- limits.</p>	<p>SECTION 11. Subsection (a) of section 7 of said chapter 21N, as so appearing, is hereby amended by striking out, in line 6, the word "limit" and inserting in place thereof the following word:- limits.</p>
<p>SECTION 11A. SECTION 11A. Section 7 of said chapter 21N, as so appearing, is hereby amended by striking out subsection (b) and inserting in place thereof the following subsection:- (b) The secretary and the department may adopt regulations governing market-based compliance mechanisms to reduce greenhouse gas emissions from sources or categories of sources in order to achieve the statewide greenhouse gas emissions limits and sublimits required by this chapter.</p>	<p>SECTION 11A. SECTION 11A. Section 7 of said chapter 21N, as so appearing, is hereby amended by striking out subsection (b) and inserting in place thereof the following subsection:- (b) The secretary and the department may adopt regulations governing market-based compliance mechanisms to reduce greenhouse gas emissions from sources or categories of sources in order to achieve the statewide greenhouse gas emissions limits and sublimits required by this chapter.</p>
<p>SECTION 11B. SECTION 11B. Subsection (d) of said section 7 of said chapter 21N, as so appearing, is hereby amended by inserting after the word "office" in line 28 the following words:- and the department.</p>	<p>SECTION 11B. SECTION 11B. Subsection (d) of said section 7 of said chapter 21N, as so appearing, is hereby amended by inserting after the word "office" in line 28 the following words:- and the department.</p>
<p>SECTION 12. Section 9 of said chapter 21N, as so appearing, is hereby amended by striking out, in line 2, the word "electrical" and inserting in place thereof the following word:- electric.</p>	<p>SECTION 12. Section 9 of said chapter 21N, as so appearing, is hereby amended by striking out, in line 2, the word "electrical" and inserting in place thereof the following word:- electric.</p>
<p>SECTION 13. Section 9 of chapter 23J of the General Laws, as so appearing, is hereby amended by striking out, in line 33, the words "and (iii) by" and inserting in place thereof the following words:- (iii) funding research, design and evaluation of pilots to promote energy innovation; and (iv).</p>	<p>SECTION 13. Section 9 of chapter 23J of the General Laws, as so appearing, is hereby amended by striking out, in line 33, the words "and (iii) by" and inserting in place thereof the following words:- (iii) funding research, design and evaluation of pilots to promote energy innovation; and (iv).</p>
<p>SECTION 14. Said chapter 23J is hereby further amended by adding the following section:-</p> <p>Section 13. (a) There shall be within the center a clean energy equity workforce and market development program to provide workforce training, educational and professional development, job placement, startup opportunities and grants promoting participation in the commonwealth's energy efficiency, clean energy, and clean heating and cooling industries to: (i) certified minority-owned and women-owned small business enterprises; (ii) individuals residing within an environmental justice community; and (iii) current and former workers from the fossil fuel industry. The program shall: (i) identify the employment potential of the energy efficiency and clean energy industries and the skills and training needed for workers in those fields; (ii) maximize energy efficiency and clean energy employment opportunities for certified minority²⁰⁸ owned and women-owned small business enterprises and individuals residing within an environmental justice community; (iii) identify barriers to deployment of clean energy and energy storage resources to certified minority-owned and women-owned small business enterprises; (iv) recommend near-term deployment targets consistent with the state's clean energy and climate change requirements and awarding incentives to deploy said resources; and (v) make recommendations to the general court for policies to promote employment growth and access to jobs in the clean energy industry.</p> <p>(b) The department of public utilities shall annually direct the electric and gas distribution companies and municipal aggregators with certified energy plans to jointly transfer funds collected pursuant to section 19 of chapter 25 to the center for the purposes of</p>	<p>SECTION 14. Said chapter 23J is hereby further amended by adding the following section:-</p> <p>Section 13. (a) There shall be within the center a clean energy equity workforce and market development program to provide workforce training, educational and professional development, job placement, startup opportunities and grants promoting participation in the commonwealth's energy efficiency, clean energy, and clean heating and cooling industries to: (i) certified minority-owned and women-owned small business enterprises; (ii) individuals residing within an environmental justice community; and (iii) current and former workers from the fossil fuel industry. The program shall: (i) identify the employment potential of the energy efficiency and clean energy industries and the skills and training needed for workers in those fields; (ii) maximize energy efficiency and clean energy employment opportunities for certified minority²⁰⁸ owned and women-owned small business enterprises and individuals residing within an environmental justice community; (iii) identify barriers to deployment of clean energy and energy storage resources to certified minority-owned and women-owned small business enterprises; (iv) recommend near-term deployment targets consistent with the state's clean energy and climate change requirements and awarding incentives to deploy said resources; and (v) make recommendations to the general court for policies to promote employment growth and access to jobs in the clean energy industry.</p> <p>(b) The department of public utilities shall annually direct the electric and gas distribution companies and municipal aggregators with certified energy plans to jointly transfer funds collected pursuant to section 19 of chapter 25 to the center for the purposes of</p>

implementing the clean energy equity workforce and market development program; provided, that the electric and gas distribution companies and municipal aggregators with certified energy plans shall transfer no less than \$12,000,000 no later than December 31 each year. Such transfer shall not reduce the amount expended on low-income programs pursuant to subsection (c) of said section 19 of said chapter 25.

implementing the clean energy equity workforce and market development program; provided, that the electric and gas distribution companies and municipal aggregators with certified energy plans shall transfer no less than \$12,000,000 no later than December 31 each year. Such transfer shall not reduce the amount expended on low-income programs pursuant to subsection (c) of said section 19 of said chapter 25.

SECTION 15. Chapter 25 of the General Laws is hereby amended by inserting after section 1 the following section:-

SECTION 15. Chapter 25 of the General Laws is hereby amended by inserting after section 1 the following section:-

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

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

SECTION 16. Section 19 of said chapter 25, as appearing in the 2018 Official Edition, is hereby amended by inserting after the word "practicable", in line 29, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.

SECTION 16. Section 19 of said chapter 25, as appearing in the 2018 Official Edition, is hereby amended by inserting after the word "practicable", in line 29, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.

SECTION 17. Said section 19 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "practicable", in line 41, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.

SECTION 17. Said section 19 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "practicable", in line 41, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.

SECTION 18. Said section 19 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "program", in line 58, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.

SECTION 18. Said section 19 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "program", in line 58, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.

<p>SECTION 19. Said section 19 of said chapter 25, as so appearing, is hereby further amended by adding the following subsection:-</p> <p>(d) Notwithstanding any provision of this section to the contrary, the department shall annually direct the electric and gas distribution companies and municipal aggregators with certified energy plans to jointly transfer, on or before December 31, not less than \$12,000,000 in funds collected pursuant to this section to the Massachusetts clean energy center for the clean energy equity workforce and market development program pursuant to subsection (b) of section 13 of chapter 23J; provided, however, such transfer shall not reduce the amount expended on low-income programs pursuant to subsection (c).</p>	<p>SECTION 19. Said section 19 of said chapter 25, as so appearing, is hereby further amended by adding the following subsection:-</p> <p>(d) Notwithstanding any provision of this section to the contrary, the department shall annually direct the electric and gas distribution companies and municipal aggregators with certified energy plans to jointly transfer, on or before December 31, not less than \$12,000,000 in funds collected pursuant to this section to the Massachusetts clean energy center for the clean energy equity workforce and market development program pursuant to subsection (b) of section 13 of chapter 23J; provided, however, such transfer shall not reduce the amount expended on low-income programs pursuant to subsection (c).</p>
<p>SECTION 20. Section 21 of said chapter 25, as so appearing, is hereby amended by inserting after the word "supply", in line 5, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions.</p>	<p>SECTION 20. Section 21 of said chapter 25, as so appearing, is hereby amended by inserting after the word "supply", in line 5, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions.</p>
<p>SECTION 21. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the figure "22", in line 17, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>	<p>SECTION 21. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the figure "22", in line 17, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>
<p>SECTION 22. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "bodies", in lines 20 and 21, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>	<p>SECTION 22. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "bodies", in lines 20 and 21, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>
<p>SECTION 23. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "supply", in line 25, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>	<p>SECTION 23. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "supply", in line 25, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>
<p>SECTION 24. Said section 21 of said chapter 25, as so appearing, is hereby further amended by striking out, in line 69, the words "and (ix)" and inserting in place thereof the following words:- (ix) an estimate of the social value of greenhouse gas emissions reductions that will result from the plan, including a numerical value of the plan's contribution to meeting each statewide greenhouse gas emissions limit and sublimit set by statute or regulation, together with provisions for giving each value prominent display in communications and plan documents; and (x).</p>	<p>SECTION 24. Said section 21 of said chapter 25, as so appearing, is hereby further amended by striking out, in line 69, the words "and (ix)" and inserting in place thereof the following words:- (ix) an estimate of the social value of greenhouse gas emissions reductions that will result from the plan, including a numerical value of the plan's contribution to meeting each statewide greenhouse gas emissions limit and sublimit set by statute or regulation, together with provisions for giving each value prominent display in communications and plan documents; and (x).</p>
<p>SECTION 25. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the words "peak load," in line 73, the following words:- reducing greenhouse gas emissions,.</p>	<p>SECTION 25. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the words "peak load," in line 73, the following words:- reducing greenhouse gas emissions,.</p>

<p>SECTION 26. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "program", in line 81, the first time it appears, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>	<p>SECTION 26. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "program", in line 81, the first time it appears, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>
<p>SECTION 26A. SECTION 26A. Said section 21 of said chapter 25, as so appearing, is hereby further amended by striking out, in lines 109 to 111, the words "identified and shall capture all energy efficiency and demand reduction resources that are cost effective or less expensive than supply" and inserting in place thereof the following words:- have complied with the requirements of this section.</p>	<p>SECTION 26A. SECTION 26A. Said section 21 of said chapter 25, as so appearing, is hereby further amended by striking out, in lines 109 to 111, the words "identified and shall capture all energy efficiency and demand reduction resources that are cost effective or less expensive than supply" and inserting in place thereof the following words:- complied with the requirements of this section.</p>
<p>SECTION 27. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "accordingly", in line 113, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>	<p>SECTION 27. Said section 21 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "accordingly", in line 113, the following words:- ; provided, however, that when determining cost-effectiveness, the calculation of program benefits shall include calculations of the social value of greenhouse gas emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling.</p>
<p>SECTION 28. Subsection (d) of said section 21 of said chapter 25, as so appearing, is hereby amended by adding the following 2 paragraphs:-</p> <p>(4) Notwithstanding the requirements of subsection (b)(1), the plans shall be constructed to meet or exceed the goal set by the secretary pursuant to section 3B of chapter 21N.</p> <p>(5) Not later than 15 months after the conclusion of the final year of each plan, the department, drawing upon the most accurate and most complete data and measurements then available, shall issue a statement in writing to the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on telecommunications, utilities and energy and the joint committee on the environment, natural resources and agriculture, indicating the degree to which the activities undertaken pursuant to the performance of each plan met the goal for the plan set by the secretary pursuant to section 3B of chapter 21N.</p>	<p>SECTION 28. Subsection (d) of said section 21 of said chapter 25, as so appearing, is hereby amended by adding the following 2 paragraphs:-</p> <p>(4) Notwithstanding the requirements of subsection (b)(1), the plans shall be constructed to meet or exceed the goal set by the secretary pursuant to section 3B of chapter 21N.</p> <p>(5) Not later than 15 months after the conclusion of the final year of each plan, the department, drawing upon the most accurate and most complete data and measurements then available, shall issue a statement in writing to the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on telecommunications, utilities and energy and the joint committee on the environment, natural resources and agriculture, indicating the degree to which the activities undertaken pursuant to the performance of each plan met the goal for the plan set by the secretary pursuant to section 3B of chapter 21N.</p>
<p>SECTION 29. Section 22 of said chapter 25, as so appearing, is hereby amended by inserting after the word "date", in line 63, the following words:- , a quantification of the degree to which the activities undertaken pursuant to each plan contribute to meeting any and all greenhouse gas emission limits and sublimits imposed by statute or regulation.</p>	<p>SECTION 29. Section 22 of said chapter 25, as so appearing, is hereby amended by inserting after the word "date", in line 63, the following words:- , a quantification of the degree to which the activities undertaken pursuant to each plan contribute to meeting any and all greenhouse gas emission limits and sublimits imposed by statute or regulation.</p>
<p>SECTION 30. Said section 22 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "year", in line 69, the following words:- and a quantification of the degree to which the activities undertaken pursuant to each plan contribute to meeting any and all greenhouse gas emission limits and sublimits imposed by statute or regulation.</p>	<p>SECTION 30. Said section 22 of said chapter 25, as so appearing, is hereby further amended by inserting after the word "year", in line 69, the following words:- and a quantification of the degree to which the activities undertaken pursuant to each plan contribute to meeting any and all greenhouse gas emission limits and sublimits imposed by statute or regulation.</p>

<p>SECTION 31. Section 6 of chapter 25A of the General Laws, as so appearing, is hereby amended by striking out clauses (12) and (13) and inserting in place thereof the following 3 clauses:-</p> <p>(12) intervene and advocate on behalf of small commercial and industrial users before the department of public utilities in any dispute between such businesses and generation or distribution companies, as defined pursuant to section 1 of chapter 164;</p> <p>(13) plan, develop, oversee and operate the commercial sustainable energy program, with the Massachusetts Development Finance Agency, in accordance with the provisions of chapter 23M. In accordance with this section, the department shall approve each commercial PACE project prior to the issuance of a PACE bond under chapter 23M and in so doing shall consider whether the energy cost savings of the commercial energy improvements over the useful life of such improvements exceed the costs of such improvements; and</p> <p>(14) develop and promulgate, in consultation with the state board of building regulations and standards, a specialized stretch energy code that includes a higher performing municipal opt-in standard which is designed to achieve compliance with the commonwealth's statewide greenhouse gas emission limits and sublimits established pursuant to chapter 21N.</p>	<p>SECTION 31. Section 6 of chapter 25A of the General Laws, as so appearing, is hereby amended by striking out clauses (12) and (13) and inserting in place thereof the following 3 clauses:-</p> <p>(12) intervene and advocate on behalf of small commercial and industrial users before the department of public utilities in any dispute between such businesses and generation or distribution companies, as defined pursuant to section 1 of chapter 164;</p> <p>(13) plan, develop, oversee and operate the commercial sustainable energy program, with the Massachusetts Development Finance Agency, in accordance with the provisions of chapter 23M. In accordance with this section, the department shall approve each commercial PACE project prior to the issuance of a PACE bond under chapter 23M and in so doing shall consider whether the energy cost savings of the commercial energy improvements over the useful life of such improvements exceed the costs of such improvements; and</p> <p>(14) develop and promulgate, in consultation with the state board of building regulations and standards, a municipal opt-in specialized stretch energy code that includes, but is not limited to, net-zero building performance standards and a definition of net-zero building, designed to achieve compliance with the commonwealth's statewide greenhouse gas emission limits and sublimits established pursuant to chapter 21N.</p>
<p>SECTION 32. Section 11F of said chapter 25A, as so appearing, is hereby amended by striking out, in line 18 and 19, the words "2029; and (5)" and inserting in place thereof the following words:- 2024; (5) an additional 3 per cent of sales each year thereafter until December 31, 2029; and (6).</p>	<p>SECTION 32. Section 11F of said chapter 25A, as so appearing, is hereby amended by striking out, in line 18 and 19, the words "2029; and (5)" and inserting in place thereof the following words:- 2024; (5) an additional 3 per cent of sales each year thereafter until December 31, 2029; and (6).</p>

SECTION 33. Said chapter 25A is hereby further amended by inserting after section 11F½ the following section:-

Section 11F3/4. (a) Each municipal lighting plant shall establish a greenhouse gas emissions standard, which shall be known as the "Municipal Lighting Plant GGES."

(b) A Municipal Lighting Plant GGES shall set the minimum percentage of non-carbon emitting energy sold by each municipal lighting plant to all retail end-user customers purchasing electricity pursuant to rates established pursuant to section 58 of chapter 164 as follows: (i) 50 per cent non-carbon emitting energy by 2030; (ii) 75 non-carbon emitting energy per cent by 2040; and (iii) energy sales achieving net-zero greenhouse gas emissions by 2050.

(c) For the purposes of this section, "non-carbon emitting" shall mean:

(i) energy from facilities using the following generation technologies, but only to the extent that any renewable energy credits, emission free energy certificates or other evidentiary non-carbon emitting documentation associated therewith have not been sold, retired, claimed or otherwise represented by another party as part of electrical energy output or sales or used to satisfy obligations in jurisdictions other than the commonwealth: (1) solar photovoltaic; (2) solar thermal electric; (3) hydroelectric, including imports into the New England wholesale electric market as administered by ISO New England Inc.; (4) nuclear; (5) marine or hydrokinetic energy; (6) geothermal energy; (7) landfill methane; (8) anaerobic digester gas; (9) wind energy; and (10) any other generation qualifying for renewable portfolio standards pursuant to section 11F or the department of environmental protection's clean energy standard regulation pursuant to 310 C.M.R. 7.75;

(ii) generation that has net lifecycle greenhouse gas emissions, over a 20-year life cycle, that yield at least a 50 per cent reduction of greenhouse gas emissions per unit of useful energy relative to the lifecycle greenhouse gas emissions from the aggregate use of the operation of a new combined cycle natural gas electric generating facility using the most efficient commercially-available technology as of the date of the statement of qualification application to the department of environmental protection for the portion of electricity delivered by the generation unit;

(iii) clean energy credits, such as renewable energy certificates, emission free energy certificates or other evidentiary non-carbon emitting documentation derived from each megawatt hour of generation from a resource, that are produced, documented or classified in the the New England Power Pool Generation Information System, or NEPOOL GIS, that have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than the commonwealth;

(iv) generation from resources otherwise determined by the department; or

SECTION 33. Said chapter 25A is hereby further amended by inserting after section 11F½ the following section:-

Section 11F3/4. (a) Each municipal lighting plant shall establish a greenhouse gas emissions standard, which shall be known as the "Municipal Lighting Plant GGES."

(b) A Municipal Lighting Plant GGES shall set the minimum percentage of non-carbon emitting energy sold by each municipal lighting plant to all retail end-user customers purchasing electricity pursuant to rates established pursuant to section 58 of chapter 164 as follows: (i) 50 per cent non-carbon emitting energy by 2030; (ii) 75 non-carbon emitting energy per cent by 2040; and (iii) energy sales achieving net-zero greenhouse gas emissions by 2050.

(c) For the purposes of this section, "non-carbon emitting" shall mean:

(i) energy from facilities using the following generation technologies, but only to the extent that any renewable energy credits, emission free energy certificates or other evidentiary non-carbon emitting documentation associated therewith have not been sold, retired, claimed or otherwise represented by another party as part of electrical energy output or sales or used to satisfy obligations in jurisdictions other than the commonwealth: (1) solar photovoltaic; (2) solar thermal electric; (3) hydroelectric, including imports into the New England wholesale electric market as administered by ISO New England Inc.; (4) nuclear; (5) marine or hydrokinetic energy; (6) geothermal energy; (7) landfill methane; (8) anaerobic digester gas; (9) wind energy; and (10) any other generation qualifying for renewable portfolio standards pursuant to section 11F or the department of environmental protection's clean energy standard regulation pursuant to 310 C.M.R. 7.75;

(ii) generation that has net lifecycle greenhouse gas emissions, over a 20-year life cycle, that yield at least a 50 per cent reduction of greenhouse gas emissions per unit of useful energy relative to the lifecycle greenhouse gas emissions from the aggregate use of the operation of a new combined cycle natural gas electric generating facility using the most efficient commercially-available technology as of the date of the statement of qualification application to the department of environmental protection for the portion of electricity delivered by the generation unit;

(iii) clean energy credits, such as renewable energy certificates, emission free energy certificates or other evidentiary non-carbon emitting documentation derived from each megawatt hour of generation from a resource, that are produced, documented or classified in the the New England Power Pool Generation Information System, or NEPOOL GIS, that have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than the commonwealth;

(iv) generation from resources otherwise determined by the department; or

(v) any combination of clauses (i) to (iv), inclusive.

(d) In satisfying the minimum percentages set forth in subsection (b), municipal lighting plants may either purchase or generate non-carbon emitting energy. Non-carbon emitting energy from resources using the types of technology set forth in this section, acquired via ownership interest or purchase pursuant to contracts executed prior to the effective date of this section, shall qualify in calculating the minimum percentages contained in subsection (b).

(e) A municipal lighting plant shall file an annual report with the department, using a form specified by the department, demonstrating compliance with this section. If a municipal lighting plant fails to comply with the requirements of this section, it shall make a one-time alternative compliance payment, to be known as the "Municipal Lighting Plant ACP" for the year of non-compliance, and on the anniversary of each year that said non-compliance continues thereafter, in the amount 0.25 times the Renewable Portfolio Standard ACP set forth in the department's regulations at 225 C.M.R. 14.00 et seq. per kilowatt hour based on the amount of such deficiency, escalated annually by the Consumer Price Index, but in no event shall said ACP exceed \$0.010 per kilowatt hour. Such Municipal Lighting Plant ACP shall be deposited into a fund that shall be maintained and administered by the municipal light plant and such fund shall be used by the municipal light plant to fund greenhouse gas emissions reduction and related programs in its service territory.

(v) any combination of clauses (i) to (iv), inclusive.

(d) In satisfying the minimum percentages set forth in subsection (b), municipal lighting plants may either purchase or generate non-carbon emitting energy. Non-carbon emitting energy from resources using the types of technology set forth in this section, acquired via ownership interest or purchase pursuant to contracts executed prior to the effective date of this section, shall qualify in calculating the minimum percentages contained in subsection (b).

(e) A municipal lighting plant shall file an annual report with the department, using a form specified by the department, demonstrating compliance with this section. If a municipal lighting plant fails to comply with the requirements of this section, it shall make a one-time alternative compliance payment, to be known as the "Municipal Lighting Plant ACP" for the year of non-compliance, and on the anniversary of each year that said non-compliance continues thereafter, in the amount 0.25 times the Renewable Portfolio Standard ACP set forth in the department's regulations at 225 C.M.R. 14.00 et seq. per kilowatt hour based on the amount of such deficiency, escalated annually by the Consumer Price Index, but in no event shall said ACP exceed \$0.010 per kilowatt hour. Such Municipal Lighting Plant ACP shall be deposited into a fund that shall be maintained and administered by the municipal light plant and such fund shall be used by the municipal light plant to fund greenhouse gas emissions reduction and related programs in its service territory.

SECTION 34. Clause (i) of subsection (c) of section 11F3/4 of said chapter 25A, as appearing in section 33, is hereby amended by striking out the words "and (10)" and inserting in place thereof, the following words:- (10) biomass fuel; and (11).

SECTION 34. Clause (i) of subsection (c) of section 11F3/4 of said chapter 25A, as appearing in section 33, is hereby amended by striking out the words "and (10)" and inserting in place thereof, the following words:- (10) biomass fuel; and (11).

SECTION 35. Section 2 of chapter 25B of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by inserting after the definition of "Central furnace" the following 6 definitions:-

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

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

"Commercial fryer", an appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is essentially supported by displacement of the cooking fluid rather than by the bottom of the vessel and heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel, such as electric fryers, or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid, such as gas fryers.

"Commercial hot-food holding cabinet", a heated, fully-enclosed compartment with 1 or more solid or transparent doors designed to maintain the temperature of hot food that has been cooked using a separate appliance; provided, however, that a "commercial hot-food holding cabinet" shall not include heated glass merchandizing cabinets, drawer warmers or cook-and-396 hold appliances.

"Commercial oven" means a chamber designed for heating, roasting, or baking food by conduction, convection, radiation, and/or electromagnetic energy.

"Commercial steam cooker" or "compartment steamer", a device with 1 or more food400 steaming compartments in which the energy in the steam is transferred to the food by direct contact; provided, however, that "commercial steam cooker" or "compartment steamer" may include countertop models, wall-mounted models, and floor models mounted on a stand, pedestal or cabinet-style base.

SECTION 36. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Compensation" the following 3 definitions:-

"Dual-flush effective flush volume", the average flush volume of 2 reduced flushes and 1 full flush.

"Dual-flush water closet", a tank-type water closet incorporating a feature that allows the user to flush the water closet with either a reduced or a full volume of water.

"Electric vehicle supply equipment", an electric component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles by permitting the transfer

SECTION 35. Section 2 of chapter 25B of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by inserting after the definition of "Central furnace" the following 6 definitions:-

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

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

"Commercial fryer", an appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is essentially supported by displacement of the cooking fluid rather than by the bottom of the vessel and heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel, such as electric fryers, or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid, such as gas fryers.

"Commercial hot-food holding cabinet", a heated, fully-enclosed compartment with 1 or more solid or transparent doors designed to maintain the temperature of hot food that has been cooked using a separate appliance; provided, however, that a "commercial hot-food holding cabinet" shall not include heated glass merchandizing cabinets, drawer warmers or cook-and-396 hold appliances.

"Commercial oven" means a chamber designed for heating, roasting, or baking food by conduction, convection, radiation, and/or electromagnetic energy.

"Commercial steam cooker" or "compartment steamer", a device with 1 or more food400 steaming compartments in which the energy in the steam is transferred to the food by direct contact; provided, however, that "commercial steam cooker" or "compartment steamer" may include countertop models, wall-mounted models, and floor models mounted on a stand, pedestal or cabinet-style base.

SECTION 36. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Compensation" the following 3 definitions:-

"Dual-flush effective flush volume", the average flush volume of 2 reduced flushes and 1 full flush.

"Dual-flush water closet", a tank-type water closet incorporating a feature that allows the user to flush the water closet with either a reduced or a full volume of water.

"Electric vehicle supply equipment", an electric component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles by permitting the transfer

<p>of electric energy to a battery or other storage device in an electric vehicle.</p>	<p>of electric energy to a battery or other storage device in an electric vehicle.</p>
<p>SECTION 37. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Electricity ratio (ER)" the following 2 definitions:-</p> <p>"Faucet", a lavatory faucet, kitchen faucet, metering faucet, public lavatory faucet or replacement aerator for a lavatory or kitchen faucet.</p> <p>"Flow rate", the rate of water flow of a plumbing fitting.</p>	<p>SECTION 37. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Electricity ratio (ER)" the following 2 definitions:-</p> <p>"Faucet", a lavatory faucet, kitchen faucet, metering faucet, public lavatory faucet or replacement aerator for a lavatory or kitchen faucet.</p> <p>"Flow rate", the rate of water flow of a plumbing fitting.</p>
<p>SECTION 38. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by striking out the definition of "High-intensity discharge lamp".</p>	<p>SECTION 38. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by striking out the definition of "High-intensity discharge lamp".</p>
<p>SECTION 39. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "F96T12 amp" the following 3 definitions:-</p> <p>"General service lamp", the same meaning as set forth in 10 CFR 430.2.</p> <p>"Hand-held showerhead" means a showerhead that can be held or fixed in place for the purpose of spraying water onto a bather and that is connected to a flexible hose.</p> <p>"High color rendering index fluorescent lamp", a fluorescent lamp with a color rendering index of 87 or greater that is not a compact fluorescent lamp.</p>	<p>SECTION 39. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "F96T12 amp" the following 3 definitions:-</p> <p>"General service lamp", the same meaning as set forth in 10 CFR 430.2.</p> <p>"Hand-held showerhead" means a showerhead that can be held or fixed in place for the purpose of spraying water onto a bather and that is connected to a flexible hose.</p> <p>"High color rendering index fluorescent lamp", a fluorescent lamp with a color rendering index of 87 or greater that is not a compact fluorescent lamp.</p>
<p>SECTION 40. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Metal halide lamp fixture" the following definition:-</p> <p>"Metering faucet", a fitting that, when turned on, will gradually shut itself off over a period of several seconds.</p>	<p>SECTION 40. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Metal halide lamp fixture" the following definition:-</p> <p>"Metering faucet", a fitting that, when turned on, will gradually shut itself off over a period of several seconds.</p>
<p>SECTION 41. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "New appliance" the following 4 definitions:-</p> <p>"On demand", when the water cooler heats water as it is requested.</p> <p>"Plumbing fitting", a device that controls and guides the flow of water in a supply system.</p> <p>"Plumbing fixture", an exchangeable device, which connects to a plumbing system to deliver and drain away water and waste.</p> <p>"Portable electric spa", a factory-built electric spa or hot tub which may or may not include any combination of integral controls, water heating or water circulating equipment.</p>	<p>SECTION 41. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "New appliance" the following 4 definitions:-</p> <p>"On demand", when the water cooler heats water as it is requested.</p> <p>"Plumbing fitting", a device that controls and guides the flow of water in a supply system.</p> <p>"Plumbing fixture", an exchangeable device, which connects to a plumbing system to deliver and drain away water and waste.</p> <p>"Portable electric spa", a factory-built electric spa or hot tub which may or may not include any combination of integral controls, water heating or water circulating equipment.</p>

<p>SECTION 42. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Prob-start metal halide ballast" the following definition:-</p> <p>"Public lavatory faucet", a plumbing fitting intended to be installed in nonresidential bathrooms that are accessible to walk-in traffic.</p>	<p>SECTION 42. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Prob-start metal halide ballast" the following definition:-</p> <p>"Public lavatory faucet", a plumbing fitting intended to be installed in nonresidential bathrooms that are accessible to walk-in traffic.</p>
<p>SECTION 43. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Refrigerator-freezer" the following definition:-</p> <p>"Replacement aerator", an aerator sold as a replacement, separate from the faucet to which it is intended to be attached.</p>	<p>SECTION 43. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Refrigerator-freezer" the following definition:-</p> <p>"Replacement aerator", an aerator sold as a replacement, separate from the faucet to which it is intended to be attached.</p>
<p>SECTION 44. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Residential furnace or boiler" the following 2 definitions:-</p> <p>"Residential ventilating fan", a ceiling, wall-mounted, or remotely mounted in-line fan designed to be used in a bathroom or utility room, whose purpose is to move air from inside the building to the outdoors.</p> <p>"Showerhead", a device through which water is discharged for a shower bath and includes a handheld showerhead, but does not include a safety showerhead.</p>	<p>SECTION 44. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Residential furnace or boiler" the following 2 definitions:-</p> <p>"Residential ventilating fan", a ceiling, wall-mounted, or remotely mounted in-line fan designed to be used in a bathroom or utility room, whose purpose is to move air from inside the building to the outdoors.</p> <p>"Showerhead", a device through which water is discharged for a shower bath and includes a handheld showerhead, but does not include a safety showerhead.</p>
<p>SECTION 45. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Single-voltage external AC to DC power supply" the following 3 definitions:-</p> <p>"Spray sprinkler body" the exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to convey water to a nozzle or orifice.</p> <p>"Standby power", the average power in standby mode, measured in watts.</p> <p>"State-regulated general service lamp", includes:</p> <p>(1) Shatter-resistant incandescent lamps, 3-way incandescent lamps and high lumen output incandescent lamps rated at more than 2600 lumens or, in the case of a modified spectrum lamp, more than 1950 lumens, and less than or equal to 3,300 lumens.</p> <p>(2) Incandescent reflector lamps that are:</p> <p>(a) ER30, BR30, BR40, or ER40 lamps rated at 50 Watts or less;</p> <p>(b) BR30, BR40, or ER40 lamps rated at 65 watts;</p> <p>(c) R20 lamps rated at 45 watts or less.</p> <p>(3) Incandescent lamps that are:</p> <p>(a) T shape lamps rated at ≤ 40 Watts or ≥ 10 inches in length;</p> <p>(b) B, BA, CA, F, G-16½, G-25, G-30 and S shape lamps;</p>	<p>SECTION 45. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Single-voltage external AC to DC power supply" the following 3 definitions:-</p> <p>"Spray sprinkler body" the exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to convey water to a nozzle or orifice.</p> <p>"Standby power", the average power in standby mode, measured in watts.</p> <p>"State-regulated general service lamp", includes:</p> <p>(1) Shatter-resistant incandescent lamps, 3-way incandescent lamps and high lumen output incandescent lamps rated at more than 2600 lumens or, in the case of a modified spectrum lamp, more than 1950 lumens, and less than or equal to 3,300 lumens.</p> <p>(2) Incandescent reflector lamps that are:</p> <p>(a) ER30, BR30, BR40, or ER40 lamps rated at 50 Watts or less;</p> <p>(b) BR30, BR40, or ER40 lamps rated at 65 watts;</p> <p>(c) R20 lamps rated at 45 watts or less.</p> <p>(3) Incandescent lamps that are:</p> <p>(a) T shape lamps rated at ≤ 40 Watts or ≥ 10 inches in length;</p> <p>(b) B, BA, CA, F, G-16½, G-25, G-30 and S shape lamps;</p>

<p>(c)M-14 lamps rated at ≤ 40 Watts.</p>	<p>(c)M-14 lamps rated at ≤ 40 Watts.</p>
<p>SECTION 46. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "State plumbing code" the following definition:-</p> <p>"Storage-type", thermally conditioned water that is stored in a tank in the water cooler and is available instantaneously, including, but not limited to, point of use, dry storage compartment and bottled water coolers.</p>	<p>SECTION 46. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "State plumbing code" the following definition:-</p> <p>"Storage-type", thermally conditioned water that is stored in a tank in the water cooler and is available instantaneously, including, but not limited to, point of use, dry storage compartment and bottled water coolers.</p>
<p>SECTION 47. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Transformer" the following 4 definitions:-</p> <p>"Trough-type urinal", a urinal designed for simultaneous use by 2 or more persons.</p> <p>"Urinal", a plumbing fixture that receives only liquid body waste and conveys the waste through a trap into a drainage system.</p> <p>"Water closet", a plumbing fixture with a water-containing receptor that receives liquid and solid body waste through an exposed integral trap into a drainage system.</p> <p>"Water cooler", a freestanding device that consumes energy to cool or heat potable water; provided however, that such device shall not be wall-mounted, under-sink or otherwise building integrated.</p>	<p>SECTION 47. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Transformer" the following 4 definitions:-</p> <p>"Trough-type urinal", a urinal designed for simultaneous use by 2 or more persons.</p> <p>"Urinal", a plumbing fixture that receives only liquid body waste and conveys the waste through a trap into a drainage system.</p> <p>"Water closet", a plumbing fixture with a water-containing receptor that receives liquid and solid body waste through an exposed integral trap into a drainage system.</p> <p>"Water cooler", a freestanding device that consumes energy to cool or heat potable water; provided however, that such device shall not be wall-mounted, under-sink or otherwise building integrated.</p>
<p>SECTION 48. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Water heater" the following definition:-</p> <p>"Water use", the quantity of water flowing through a showerhead, faucet, water closet or urinal at point of use.</p>	<p>SECTION 48. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Water heater" the following definition:-</p> <p>"Water use", the quantity of water flowing through a showerhead, faucet, water closet or urinal at point of use.</p>
<p>SECTION 49. Section 3 of said chapter 25B, as so appearing, is hereby amended by inserting after clause (j) the following 15 clauses:-</p> <p>(k) commercial hot-food holding cabinets.</p> <p>(l) computers and computer monitors.</p> <p>(m) state-regulated general service lamps.</p> <p>(n) high CRI fluorescent lamps.</p>	<p>SECTION 49. Section 3 of said chapter 25B, as so appearing, is hereby amended by inserting after clause (j) the following 15 clauses:-</p> <p>(k) commercial hot-food holding cabinets.</p> <p>(l) computers and computer monitors.</p> <p>(m) state-regulated general service lamps.</p> <p>(n) high CRI fluorescent lamps.</p>

(o) plumbing fittings.	(o) plumbing fittings.
(p) plumbing fixtures.	(p) plumbing fixtures.
(q) portable electric spas.	(q) portable electric spas.
(r) water coolers.	(r) water coolers.
(s) residential ventilating fans.	(s) residential ventilating fans.
(t) commercial ovens.	(t) commercial ovens.
(u) commercial dishwashers.	(u) commercial dishwashers.
(v) commercial fryers.	(v) commercial fryers.
(w) commercial steam cookers.	(w) commercial steam cookers.
(x) spray sprinkler bodies.	(x) spray sprinkler bodies.
(y) electric vehicle supply equipment.	(y) electric vehicle supply equipment.
SECTION 50. Section 5 of said chapter 25B, as so appearing, is hereby amended by striking out, in line 24, the figure "(s)" and inserting in place thereof the following figure:- (y).	SECTION 50. Section 5 of said chapter 25B, as so appearing, is hereby amended by striking out, in line 24, the figure "(s)" and inserting in place thereof the following figure:- (y).

SECTION 51. The third paragraph of said section 5 of said chapter 25B, as so appearing, is hereby amended by adding the following 5 clauses:-

(6) Commercial hot-food holding cabinets shall meet the qualification criteria of the ENERGY STAR program product specifications for commercial hot-food holding cabinets, Version 2.0.

(7) Computers and computer monitors shall meet the requirements of section 1605.3 of Title 20 of the California Code of Regulations, as in effect on the effective date of this section, as measured in accordance with test methods prescribed in section 1604 of said Title 20 of the California Code of Regulations; provided, however, that The regulations shall define "computer" and "computer monitor" to have the same meaning as set forth in section 1602(v) of said Title 20 of the California Code of Regulations; provided further, that the referenced portions of the California Code of Regulations shall be those adopted on or before the effective date of this section; and provided further, that the commissioner may amend the regulations so that the definitions of "computer" and "computer monitor" and the minimum efficiency standards for computers and computer monitors conform to subsequently adopted modifications to the referenced sections of the California Code of Regulations.

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

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

(10) Plumbing fittings shall meet the following requirements: (a) When tested in accordance with the flow rate test procedure prescribed in Appendix S to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations:

(I) the flow rate of lavatory faucets and replacement aerators shall not be greater than 1.5 gallons per minute, hereafter referred to as gpm, at 60 pounds per square inch, hereafter referred to as psi;

(II) for sprayheads with independently controlled orifices and manual controls, the maximum flow rate of each orifice that manually turns on or off shall not exceed the maximum flow rate for a lavatory faucet;

(III) for sprayheads with collectively controlled orifices and manual controls, the maximum flow rate of a sprayhead that manually turns on or off shall be the product of: (i) the maximum flow rate for a lavatory faucet; and (ii) the number of component lavatories, rim space of the lavatory in inches [millimeters] divided by 20 inches

SECTION 51. The third paragraph of said section 5 of said chapter 25B, as so appearing, is hereby amended by adding the following 5 clauses:-

(6) Commercial hot-food holding cabinets shall meet the qualification criteria of the ENERGY STAR program product specifications for commercial hot-food holding cabinets, Version 2.0.

(7) Computers and computer monitors shall meet the requirements of section 1605.3 of Title 20 of the California Code of Regulations, as in effect on the effective date of this section, as measured in accordance with test methods prescribed in section 1604 of said Title 20 of the California Code of Regulations; provided, however, that The regulations shall define "computer" and "computer monitor" to have the same meaning as set forth in section 1602(v) of said Title 20 of the California Code of Regulations; provided further, that the referenced portions of the California Code of Regulations shall be those adopted on or before the effective date of this section; and provided further, that the commissioner may amend the regulations so that the definitions of "computer" and "computer monitor" and the minimum efficiency standards for computers and computer monitors conform to subsequently adopted modifications to the referenced sections of the California Code of Regulations.

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(II) for sprayheads with independently controlled orifices and manual controls, the maximum flow rate of each orifice that manually turns on or off shall not exceed the maximum flow rate for a lavatory faucet;

(III) for sprayheads with collectively controlled orifices and manual controls, the maximum flow rate of a sprayhead that manually turns on or off shall be the product of: (i) the maximum flow rate for a lavatory faucet; and (ii) the number of component lavatories, rim space of the lavatory in inches [millimeters] divided by 20 inches

[508 millimeters];

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

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

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

(11) Plumbing fixtures shall meet the following requirements:

(a) The water consumption of urinals and water closets, other than those designed and marketed exclusively for use at prisons or mental health care facilities, shall be no greater than the values shown in items (b) through (d) , inclusive, when tested in accordance with the:

(i) Water consumption test prescribed in Appendix T to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations; and

(ii) Waste extraction test for water closets, section 7.9 of ASME A112.19.2/CSA B45.1- 2018;

(b) Urinals shall have a maximum flush volume of 0.5 gallons per flush;

(c) Water closets, except for dual-flush tank-type water closets, shall have a maximum flush volume of 1.28 gallons per flush; and

(d) Dual-flush tank-type water closets shall have a maximum effective flush volume of 1.28 gallons per flush.

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

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

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

[508 millimeters];

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

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

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

(11) Plumbing fixtures shall meet the following requirements:

(a) The water consumption of urinals and water closets, other than those designed and marketed exclusively for use at prisons or mental health care facilities, shall be no greater than the values shown in items (b) through (d) , inclusive, when tested in accordance with the:

(i) Water consumption test prescribed in Appendix T to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations; and

(ii) Waste extraction test for water closets, section 7.9 of ASME A112.19.2/CSA B45.1- 2018;

(b) Urinals shall have a maximum flush volume of 0.5 gallons per flush;

(c) Water closets, except for dual-flush tank-type water closets, shall have a maximum flush volume of 1.28 gallons per flush; and

(d) Dual-flush tank-type water closets shall have a maximum effective flush volume of 1.28 gallons per flush.

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

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

(b) 0.87 kilowatt-hours per day for hot-and-cold unitsâ€™ storage type; and

(c) 0.18 kilowatt-hours per day for hot and cold unitsâ€™ on demand.

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

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

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

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

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

(19) Spray sprinkler bodies that are not specifically excluded from the scope of the U.S. Environmental Protection Agency's WaterSense Specification for Spray Sprinkler Bodies, Version 1.0, shall include an integral pressure regulator and shall meet the water efficiency and performance criteria and other requirements of that specification.

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

(b) 0.87 kilowatt-hours per day for hot-and-cold unitsâ€™ storage type; and

(c) 0.18 kilowatt-hours per day for hot and cold unitsâ€™ on demand.

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

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

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

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

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

(19) Spray sprinkler bodies that are not specifically excluded from the scope of the U.S. Environmental Protection Agency's WaterSense Specification for Spray Sprinkler Bodies, Version 1.0, shall include an integral pressure regulator and shall meet the water efficiency and performance criteria and other requirements of that specification.

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

SECTION 52. Said section 5 of said chapter 25B, as so appearing, is hereby further amended by inserting after the fourth paragraph the following paragraph:-

No new, commercial dishwasher, commercial fryer, commercial hot-food holding cabinet, commercial oven, commercial steam cooker, computer or computer monitor, electric vehicle supply equipment, faucet, high CRI fluorescent lamp, portable electric spa, residential ventilating fan, showerhead, spray sprinkler body, urinal, water closet or water cooler shall be sold or offered for sale, lease or rent in the commonwealth unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to this section. No state-regulated general service lamp shall be sold or offered for sale in the commonwealth unless the efficiency of the new product meets or exceeds the efficiency standards provided in this section.

SECTION 53. Section 9 of said chapter 25B, as so appearing, is hereby amended by inserting after the first paragraph the following paragraph:-

If any of the energy or water conservation standards issued or approved for publication by the Office of the United States Secretary of Energy pursuant to the Energy Policy and Conservation Act, 10 C.F.R. §§ 430-431, were withdrawn, repealed or otherwise voided between January 1, 2018, and January 21, 2021, the minimum energy or water efficiency level permitted for products previously subject to federal energy or water conservation standards shall be the previously applicable federal standards and no such product may be sold or offered for sale in the state unless it meets or exceeds such standards.

SECTION 54. Chapter 29 of the General Laws is hereby amended by inserting after section 2KKKKK the following section:-

Section 2LLLLL. There is hereby established and set up on the books of the commonwealth an expendable trust to be known as the low-income services solar program. The secretary of energy and environmental affairs shall establish a grant program to provide solar energy technology to non-profit organizations offering services including, but not limited to, food security, homelessness and emergency shelter; provided, that any such grant shall be expended for solar energy technology at the principal place of the non-profit organization's operations or at any location or site that has a primary or secondary function to provide benefits or services, including, but not limited to, satellite operations space or affiliated organization locations; provided further, that 100 per cent of the solar energy produced by said technology will benefit the awarded non-profit organization. The amounts credited to the trust shall be available for expenditure, subject to appropriation, not to exceed \$500,000 in a fiscal year, for the costs associated with purchasing and installing solar energy generating equipment for non641 profit organizations that meet criteria set forth by the secretary; provided, that not less than 10 grants shall be awarded per fiscal year; provided further, that no grant amount shall exceed \$50,000; and provided further, that grants shall be awarded in geographically diverse areas of the commonwealth. The executive office of energy and environmental affairs shall annually submit a report on

SECTION 52. Said section 5 of said chapter 25B, as so appearing, is hereby further amended by inserting after the fourth paragraph the following paragraph:-

No new, commercial dishwasher, commercial fryer, commercial hot-food holding cabinet, commercial oven, commercial steam cooker, computer or computer monitor, electric vehicle supply equipment, faucet, high CRI fluorescent lamp, portable electric spa, residential ventilating fan, showerhead, spray sprinkler body, urinal, water closet or water cooler shall be sold or offered for sale, lease or rent in the commonwealth unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to this section. No state-regulated general service lamp shall be sold or offered for sale in the commonwealth unless the efficiency of the new product meets or exceeds the efficiency standards provided in this section.

SECTION 53. Section 9 of said chapter 25B, as so appearing, is hereby amended by inserting after the first paragraph the following paragraph:-

If any of the energy or water conservation standards issued or approved for publication by the Office of the United States Secretary of Energy pursuant to the Energy Policy and Conservation Act, 10 C.F.R. §§ 430-431, were withdrawn, repealed or otherwise voided between January 1, 2018, and January 21, 2021, the minimum energy or water efficiency level permitted for products previously subject to federal energy or water conservation standards shall be the previously applicable federal standards and no such product may be sold or offered for sale in the state unless it meets or exceeds such standards.

SECTION 54. Chapter 29 of the General Laws is hereby amended by inserting after section 2KKKKK the following section:-

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disbursements of the trust, including, but not limited to, grant awardees and amounts awarded, to the clerks of the house and senate and the joint committee on telecommunications, utilities and energy not later than December 31.

disbursements of the trust, including, but not limited to, grant awardees and amounts awarded, to the clerks of the house and senate and the joint committee on telecommunications, utilities and energy not later than December 31.

SECTION 55. Section 62 of chapter 30 of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by striking out the words "sixty-one to sixty-two H" and inserting in place thereof the following figures:- 61 to 62L.

SECTION 55. Section 62 of chapter 30 of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by striking out the words "sixty-one to sixty-two H" and inserting in place thereof the following figures:- 61 to 62L.

SECTION 56. Said section 62 of said chapter 30, as so appearing, is hereby amended by inserting after the definition of "Agency" the following 5 definitions:-

"Environmental benefits", the access to clean natural resources, including air, water resources, open space, constructed playgrounds and other outdoor recreational facilities and venues, clean renewable energy sources, environmental enforcement, training and funding disbursed or administered by the executive office of energy and environmental affairs.

"Environmental burdens", any destruction, damage or impairment of natural resources that is not insignificant, resulting from intentional or reasonably foreseeable causes, including but not limited to, climate change, air pollution, water pollution, improper sewage disposal, dumping of solid wastes and other noxious substances, excessive noise, activities that limit access to natural resources and constructed outdoor recreational facilities and venues, inadequate remediation of pollution, reduction of ground water levels, impairment of water quality, increased flooding or storm water flows, and damage to inland waterways and waterbodies, wetlands, marine shores and waters, forests, open spaces, and playgrounds from private industrial, commercial or government operations or other activity that contaminates or alters the quality of the environment and poses a risk to public health.

"Environmental justice population", a neighborhood that meets 1 or more of the following criteria: (i) the annual median household income is not more than 65 per cent of the statewide annual median household income; (ii) minorities comprise 40 per cent or more of the population; (iii) 25 per cent or more of households lack English language proficiency; or (iv) minorities comprise 25 per cent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 per cent of the statewide annual median household income; provided, however, that for a neighborhood that does not meet said criteria, but a geographic portion of that neighborhood meets at least 1 criterion, the secretary may designate that geographic portion as an environmental justice population upon the petition of at least 10 residents of the geographic portion of that neighborhood meeting any such criteria; provided further, that the secretary may determine that a neighborhood, including any geographic portion thereof, shall not be designated an environmental justice population upon finding that: (A) the annual median household income of that neighborhood is greater than 125 per cent of the statewide median household income; (B) a majority of persons age 25 and older in that neighborhood have a college education; (C) the neighborhood does not bear an unfair burden of environmental pollution; and (D) the neighborhood has more than limited access to natural resources, including open spaces and water resources, playgrounds and other constructed outdoor recreational facilities and venues.

"Environmental justice principles", principles that support protection from environmental pollution and the ability to live in and enjoy a clean and healthy environment, regardless of race, color, income, class, handicap, gender identity, sexual orientation, national origin,

SECTION 56. Said section 62 of said chapter 30, as so appearing, is hereby amended by inserting after the definition of "Agency" the following 5 definitions:-

"Environmental benefits", the access to clean natural resources, including air, water resources, open space, constructed playgrounds and other outdoor recreational facilities and venues, clean renewable energy sources, environmental enforcement, training and funding disbursed or administered by the executive office of energy and environmental affairs.

"Environmental burdens", any destruction, damage or impairment of natural resources that is not insignificant, resulting from intentional or reasonably foreseeable causes, including but not limited to, climate change, air pollution, water pollution, improper sewage disposal, dumping of solid wastes and other noxious substances, excessive noise, activities that limit access to natural resources and constructed outdoor recreational facilities and venues, inadequate remediation of pollution, reduction of ground water levels, impairment of water quality, increased flooding or storm water flows, and damage to inland waterways and waterbodies, wetlands, marine shores and waters, forests, open spaces, and playgrounds from private industrial, commercial or government operations or other activity that contaminates or alters the quality of the environment and poses a risk to public health.

"Environmental justice population", a neighborhood that meets 1 or more of the following criteria: (i) the annual median household income is not more than 65 per cent of the statewide annual median household income; (ii) minorities comprise 40 per cent or more of the population; (iii) 25 per cent or more of households lack English language proficiency; or (iv) minorities comprise 25 per cent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 per cent of the statewide annual median household income; provided, however, that for a neighborhood that does not meet said criteria, but a geographic portion of that neighborhood meets at least 1 criterion, the secretary may designate that geographic portion as an environmental justice population upon the petition of at least 10 residents of the geographic portion of that neighborhood meeting any such criteria; provided further, that the secretary may determine that a neighborhood, including any geographic portion thereof, shall not be designated an environmental justice population upon finding that: (A) the annual median household income of that neighborhood is greater than 125 per cent of the statewide median household income; (B) a majority of persons age 25 and older in that neighborhood have a college education; (C) the neighborhood does not bear an unfair burden of environmental pollution; and (D) the neighborhood has more than limited access to natural resources, including open spaces and water resources, playgrounds and other constructed outdoor recreational facilities and venues.

"Environmental justice principles", principles that support protection from environmental pollution and the ability to live in and enjoy a clean and healthy environment, regardless of race, color, income, class, handicap, gender identity, sexual orientation, national origin,

ethnicity or ancestry, religious belief or English language proficiency, which includes: (i) the meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies; and (ii) the equitable distribution of energy and environmental benefits and environmental burdens.

"Neighborhood," a census block group as defined by the United States Census Bureau, excluding people who live in college dormitories and people who are under formally authorized, supervised care or custody, including federal, state or county prisons.

ethnicity or ancestry, religious belief or English language proficiency, which includes: (i) the meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies; and (ii) the equitable distribution of energy and environmental benefits and environmental burdens.

"Neighborhood," a census block group as defined by the United States Census Bureau, excluding people who live in college dormitories and people who are under formally authorized, supervised care or custody, including federal, state or county prisons.

SECTION 57. The third paragraph of section 62B of said chapter 30, as so appearing, is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:-

An environmental impact report shall contain: (i) statements describing the nature and extent of the proposed project and its environmental and public health impact as result of any development, alteration and operation of the project; (ii) studies to evaluate said impacts; (iii) all measures being utilized to minimize any anticipated environment and public health damage; (iv) any adverse short-term and long-term environmental and public health consequences that cannot be avoided should the project be undertaken; and (v) reasonable alternatives to the proposed project and their environmental consequences.

SECTION 57. The third paragraph of section 62B of said chapter 30, as so appearing, is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:-

An environmental impact report shall contain: (i) statements describing the nature and extent of the proposed project and its environmental and public health impact as result of any development, alteration and operation of the project; (ii) studies to evaluate said impacts; (iii) all measures being utilized to minimize any anticipated environment and public health damage; (iv) any adverse short-term and long-term environmental and public health consequences that cannot be avoided should the project be undertaken; and (v) reasonable alternatives to the proposed project and their environmental consequences.

SECTION 58. Said section 62B of said chapter 30, as so appearing, is hereby further amended by adding the following paragraph:-

An environmental impact report shall be required for any project that is likely to cause damage to the environment and is located within a distance of 1 mile of an environmental justice population; provided, that for a project that impacts air quality, such environmental impact report shall be required if the project is likely to cause damage to the environment and is located within a distance of 5 miles of an environmental justice population. Said report shall contain statements about the results of an assessment of any existing unfair or inequitable environmental burden and related public health consequences impacting the environmental justice population from any prior or current private, industrial, commercial, state, or municipal operation or project that has damaged the environment. The required assessment shall conform to the standards and guidelines established by the secretary. If the assessment indicates an environmental justice population is subject to an existing unfair or inequitable environmental burden or related health consequence the report shall identify any: (i) environmental and public health impact from the proposed project that would likely result in a disproportionate adverse effect on such population; and (ii) potential impact or consequence from the proposed project that would increase or reduce the effects of climate change on the environmental justice population. The secretary may require that an assessment be performed at any stage of the review process.

SECTION 59. Section 62E of said chapter 30, as so appearing, is hereby amended by adding the following paragraph:-

No agency shall exempt from an environmental impact report any project that is located in a neighborhood that has an environmental justice population and is reasonably likely to cause damage to the environment, as defined in section 61. The provisions of this paragraph shall not apply to emergency actions essential to avoid or eliminate a threat to public health or safety or a threat to any natural resource undertaken in compliance with section 62F.

SECTION 58. Said section 62B of said chapter 30, as so appearing, is hereby further amended by adding the following paragraph:-

An environmental impact report shall be required for any project that is likely to cause damage to the environment and is located within a distance of 1 mile of an environmental justice population; provided, that for a project that impacts air quality, such environmental impact report shall be required if the project is likely to cause damage to the environment and is located within a distance of 5 miles of an environmental justice population. Said report shall contain statements about the results of an assessment of any existing unfair or inequitable environmental burden and related public health consequences impacting the environmental justice population from any prior or current private, industrial, commercial, state, or municipal operation or project that has damaged the environment. The required assessment shall conform to the standards and guidelines established by the secretary. If the assessment indicates an environmental justice population is subject to an existing unfair or inequitable environmental burden or related health consequence the report shall identify any: (i) environmental and public health impact from the proposed project that would likely result in a disproportionate adverse effect on such population; and (ii) potential impact or consequence from the proposed project that would increase or reduce the effects of climate change on the environmental justice population. The secretary may require that an assessment be performed at any stage of the review process.

SECTION 59. Section 62E of said chapter 30, as so appearing, is hereby amended by adding the following paragraph:-

No agency shall exempt from an environmental impact report any project that is located in a neighborhood that has an environmental justice population and is reasonably likely to cause damage to the environment, as defined in section 61. The provisions of this paragraph shall not apply to emergency actions essential to avoid or eliminate a threat to public health or safety or a threat to any natural resource undertaken in compliance with section 62F.

SECTION 60. Said chapter 30 is hereby further amended by inserting after section 62I the following 3 sections:-

Section 62J. To enable the public to assess the impact of proposed projects that affect their environment, health and safety through the project review process established under sections 61 through 62J, inclusive, the secretary shall provide opportunities for meaningful public involvement.

For any proposed project that requires the filing of an environmental notification form, the proponent of the project shall indicate on the document whether an environmental justice population that lacks English language proficiency within a designated geographical area is reasonably likely to be affected negatively by the project.

If a proposed project affects an environmental justice population, the secretary shall require additional measures to improve public participation by the environmental justice population. Such measures shall include, as appropriate: (i) making public notices, environmental notification forms, environmental impact reports, and other key documents related to the secretary's review and decisions of a project review available in English and any other language spoken by a significant number of the affected environmental justice population; (ii) providing translation services at public meetings for a significant portion of an affected environmental justice population that lacks English proficiency in the project's designated geographic area; (iii) requiring public meetings be held in accessible locations that are near public transportation; (iv) providing appropriate information about the project review procedure for the proposed project; and (v) where feasible, establishing a local repository for project review documents, notices and decisions.

The secretary of energy and environmental affairs may require such additional measures as appropriate for projects that do not require the filing of an environmental notification form pursuant to section 62A, or to improve participation opportunities for persons in an environmental justice population that lack English language proficiency and do not speak a dominant language spoken by such population.

As used in this section, the term designated geographic area shall mean an environmental justice population located within a distance of 1 mile of a project, unless the project affects air quality then the distance from such project shall be increased to within 5 miles of an environmental justice population.

Section 62K. The secretary shall consider the environmental justice principles, as defined in section 62, in making any policy or determination, or taking any action relating to a project review, undertaken pursuant to sections 61 through 62J, inclusive, to reduce the potential for unfair or inequitable effects upon an environmental justice population.

To further the environmental justice principles the secretary shall direct its agencies, including the departments, divisions, boards and offices under the secretary's control and authority, to consider the

SECTION 60. Said chapter 30 is hereby further amended by inserting after section 62I the following 3 sections:-

Section 62J. To enable the public to assess the impact of proposed projects that affect their environment, health and safety through the project review process established under sections 61 through 62J, inclusive, the secretary shall provide opportunities for meaningful public involvement.

For any proposed project that requires the filing of an environmental notification form, the proponent of the project shall indicate on the document whether an environmental justice population that lacks English language proficiency within a designated geographical area is reasonably likely to be affected negatively by the project.

If a proposed project affects an environmental justice population, the secretary shall require additional measures to improve public participation by the environmental justice population. Such measures shall include, as appropriate: (i) making public notices, environmental notification forms, environmental impact reports, and other key documents related to the secretary's review and decisions of a project review available in English and any other language spoken by a significant number of the affected environmental justice population; (ii) providing translation services at public meetings for a significant portion of an affected environmental justice population that lacks English proficiency in the project's designated geographic area; (iii) requiring public meetings be held in accessible locations that are near public transportation; (iv) providing appropriate information about the project review procedure for the proposed project; and (v) where feasible, establishing a local repository for project review documents, notices and decisions.

The secretary of energy and environmental affairs may require such additional measures as appropriate for projects that do not require the filing of an environmental notification form pursuant to section 62A, or to improve participation opportunities for persons in an environmental justice population that lack English language proficiency and do not speak a dominant language spoken by such population.

As used in this section, the term designated geographic area shall mean an environmental justice population located within a distance of 1 mile of a project, unless the project affects air quality then the distance from such project shall be increased to within 5 miles of an environmental justice population.

Section 62K. The secretary shall consider the environmental justice principles, as defined in section 62, in making any policy or determination, or taking any action relating to a project review, undertaken pursuant to sections 61 through 62J, inclusive, to reduce the potential for unfair or inequitable effects upon an environmental justice population.

To further the environmental justice principles the secretary shall direct its agencies, including the departments, divisions, boards and offices under the secretary's control and authority, to consider the

environmental justice principles in making any policy, determination or taking any other action related to a project review, or in undertaking any project pursuant to said sections 61 through 62J, inclusive, and related regulations that is likely to affect environmental justice populations.

In addition, the secretary shall establish standards and guidelines for the implementation, administration and periodic review of environmental justice principles by the executive office of energy and environmental affairs and its agencies.

Section 62L. There shall be an environmental justice council to advise and provide recommendations to the secretary of energy and environmental affairs on relevant policies and standards to achieve the environmental justice principles. The council shall consist of not less than 9, but not more than 15, members appointed by the governor, who shall designate a chair. Members may be removed without cause, by the governor. All members shall serve without compensation. The secretary of energy and environmental affairs shall consult with the environmental justice council before making any substantial adoptions, revisions or amendments to any regulation related to the definition of environmental justice population as defined in section 62.

The environmental justice council shall conduct a comprehensive analysis by not later than July 31, 2022, and every fifth year thereafter, to ensure the definition of environmental justice population achieves the objectives of the environmental justice principles, pursuant to the definitions of environmental justice population and environmental justice principles contained in section 62. The analysis shall include, but not be limited to, an evaluation of this definition as compared to the demographics of environmental justice populations in the commonwealth. As part of the analysis, said council shall provide advice and make recommendations to the secretary on any necessary changes to the percentage thresholds included in this definition and any related regulation. The secretary shall consider the recommendations of the council regarding any proposed changes to the percentage thresholds under this definition; provided, however, that such changes are needed to achieve and promote the environmental justice principles as defined under said section 62. Proposed regulations shall be adopted only after the approval of the council by a majority vote in the affirmative of those members so voting. The environmental justice council may recommend and provide advice to the secretary on proposed substantial legislative or regulatory changes related to this definition at any time prior to conducting a comprehensive analysis.

environmental justice principles in making any policy, determination or taking any other action related to a project review, or in undertaking any project pursuant to said sections 61 through 62J, inclusive, and related regulations that is likely to affect environmental justice populations.

In addition, the secretary shall establish standards and guidelines for the implementation, administration and periodic review of environmental justice principles by the executive office of energy and environmental affairs and its agencies.

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The environmental justice council shall conduct a comprehensive analysis by not later than July 31, 2022, and every fifth year thereafter, to ensure the definition of environmental justice population achieves the objectives of the environmental justice principles, pursuant to the definitions of environmental justice population and environmental justice principles contained in section 62. The analysis shall include, but not be limited to, an evaluation of this definition as compared to the demographics of environmental justice populations in the commonwealth. As part of the analysis, said council shall provide advice and make recommendations to the secretary on any necessary changes to the percentage thresholds included in this definition and any related regulation. The secretary shall consider the recommendations of the council regarding any proposed changes to the percentage thresholds under this definition; provided, however, that such changes are needed to achieve and promote the environmental justice principles as defined under said section 62. Proposed regulations shall be adopted only after the approval of the council by a majority vote in the affirmative of those members so voting. The environmental justice council may recommend and provide advice to the secretary on proposed substantial legislative or regulatory changes related to this definition at any time prior to conducting a comprehensive analysis.

SECTION 61. Section 5 of chapter 59 of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by striking out clause Forty-fifth and inserting in place thereof the following clause:-

Forty-fifth, An owned or leased solar powered system, wind powered system or a solar or wind powered system that is co-located with an energy storage system, as defined in section 1 of chapter 164, that is: (i) capable of producing not more than 125 per cent of the annual electricity needs of the real property upon which it is located; provided, however, that the real property shall include both contiguous or non-contiguous real property within the same municipality in which there is a common ownership interest; (ii) a solar or wind powered system or a solar or wind powered system that is co-located with energy storage that is equal to or less than 25 kilowatts or less in capacity, provided that the capacity of the system is verified by department of energy resources incentive program documentation or electric distribution company permission to operate documentation; or (iii) a solar or wind powered system or energy storage system, or a combination therein, that has entered into an agreement for payment in lieu of taxes associated with the system with the municipality where the system is located. The exemption under this clause shall be allowed for a period of 20 years; provided, however, that upon a written agreement between the owner of the solar or wind powered system and the municipality where the system is located, an exemption with a period greater than 20 years may be allowed.

For purposes of this clause, an agreement for payment in lieu of taxes associated with the system shall include all personal property taxes on the system and any real property taxes attributable to the system and those taxes associated with the land on which the system is located, provided the land and the system are in common ownership. In cases in which the system and land are not in common ownership, only the personal property taxes attributable to the system shall be included in the agreement. A municipality, acting through its authorized officer, may execute an agreement for the payment in lieu of taxes with the owner of a solar, wind or storage powered system in the municipality where the solar or wind powered system is located.

This clause shall not apply to: (i) solar powered systems developed under section 1A of said chapter 164 or (ii) solar, wind, or energy storage systems otherwise owned by distribution or electric companies as defined under said section 1 of said chapter 164.

SECTION 62. Said section 5 of said chapter 59, as so appearing, is hereby further amended by inserting after clause Forty-fifth A the following clause:-

Forty-fifth B, Any qualified fuel cell powered system, the construction of which was commenced after January 1, 2020, that is capable of producing not more than 125 per cent of the annual energy needs of the real property upon which it is located. All other qualified fuel cell powered systems shall be taxable under the same conditions provided in clause Forty-fifth. For the purposes of this clause, "qualified fuel cell powered system" shall mean an

SECTION 61. Section 5 of chapter 59 of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by striking out clause Forty-fifth and inserting in place thereof the following clause:-

Forty-fifth, An owned or leased solar powered system, wind powered system or a solar or wind powered system that is co-located with an energy storage system, as defined in section 1 of chapter 164, that is: (i) capable of producing not more than 125 per cent of the annual electricity needs of the real property upon which it is located; provided, however, that the real property shall include both contiguous or non-contiguous real property within the same municipality in which there is a common ownership interest; (ii) a solar or wind powered system or a solar or wind powered system that is co-located with energy storage that is equal to or less than 25 kilowatts or less in capacity, provided that the capacity of the system is verified by department of energy resources incentive program documentation or electric distribution company permission to operate documentation; or (iii) a solar or wind powered system or energy storage system, or a combination therein, that has entered into an agreement for payment in lieu of taxes associated with the system with the municipality where the system is located. The exemption under this clause shall be allowed for a period of 20 years; provided, however, that upon a written agreement between the owner of the solar or wind powered system and the municipality where the system is located, an exemption with a period greater than 20 years may be allowed.

For purposes of this clause, an agreement for payment in lieu of taxes associated with the system shall include all personal property taxes on the system and any real property taxes attributable to the system and those taxes associated with the land on which the system is located, provided the land and the system are in common ownership. In cases in which the system and land are not in common ownership, only the personal property taxes attributable to the system shall be included in the agreement. A municipality, acting through its authorized officer, may execute an agreement for the payment in lieu of taxes with the owner of a solar, wind or storage powered system in the municipality where the solar or wind powered system is located.

This clause shall not apply to: (i) solar powered systems developed under section 1A of said chapter 164 or (ii) solar, wind, or energy storage systems otherwise owned by distribution or electric companies as defined under said section 1 of said chapter 164.

SECTION 62. Said section 5 of said chapter 59, as so appearing, is hereby further amended by inserting after clause Forty-fifth A the following clause:-

Forty-fifth B, Any qualified fuel cell powered system, the construction of which was commenced after January 1, 2020, that is capable of producing not more than 125 per cent of the annual energy needs of the real property upon which it is located. All other qualified fuel cell powered systems shall be taxable under the same conditions provided in clause Forty-fifth. For the purposes of this clause, "qualified fuel cell powered system" shall mean an

<p>integrated system comprised of a fuel cell stack assembly and associated components that converts fuel into electricity without combustion and is being utilized as the primary or auxiliary power system for the real property upon which it is located, which shall include contiguous or non-contiguous real property owned or leased by the owner, or in which the owner otherwise holds an interest.</p>	<p>integrated system comprised of a fuel cell stack assembly and associated components that converts fuel into electricity without combustion and is being utilized as the primary or auxiliary power system for the real property upon which it is located, which shall include contiguous or non-contiguous real property owned or leased by the owner, or in which the owner otherwise holds an interest.</p>
<p>SECTION 63. Subsection (b) of section 38H of said chapter 59, as so appearing, is hereby amended by inserting after the word "thereof", in line 91, the following words:- ; provided, however, that for the purposes of this subsection, a generation facility shall not include a facility that generates electricity through solar or wind power, nor shall it include a facility that generates electricity by a qualified fuel cell powered system, as defined in clause Forty-fifth B of section 5; and provided further, that a facility that generates electricity through solar or wind may execute an agreement for the payment in lieu of taxes under clause Forty-fifth of said section 5.</p>	<p>SECTION 63. Subsection (b) of section 38H of said chapter 59, as so appearing, is hereby amended by inserting after the word "thereof", in line 91, the following words:- ; provided, however, that for the purposes of this subsection, a generation facility shall not include a facility that generates electricity through solar or wind power, nor shall it include a facility that generates electricity by a qualified fuel cell powered system, as defined in clause Forty-fifth B of section 5; and provided further, that a facility that generates electricity through solar or wind may execute an agreement for the payment in lieu of taxes under clause Forty-fifth of said section 5.</p>
<p>SECTION 64. Section 93 of chapter 143 of the General Laws, as so appearing, is hereby amended by striking out, in line 6, the word "eleven" and inserting in place thereof the following figure:- 13.</p>	<p>SECTION 64. Section 93 of chapter 143 of the General Laws, as so appearing, is hereby amended by striking out, in line 6, the word "eleven" and inserting in place thereof the following figure:- 15.</p>
<p>SECTION 65. Said section 93 of said chapter 143, as so appearing, is hereby further amended by striking out, in line 8, the word "both" and inserting in place thereof the following words:- 1 of whom shall be the commissioner of energy resources or a designee and all 3.</p>	<p>SECTION 65. Said section 93 of said chapter 143, as so appearing, is hereby further amended by striking out, in line 8, the word "both" and inserting in place thereof the following words:- 1 of whom shall be the commissioner of energy resources or a designee and all 3.</p>
<p>SECTION 66. Said section 93 of said chapter 143, as so appearing, is hereby further amended by striking out, in line 9, the word "nine" and inserting in place thereof the following figure:- 10.</p>	<p>SECTION 66. Said section 93 of said chapter 143, as so appearing, is hereby further amended by striking out, in line 9, the word "nine" and inserting in place thereof the following figure:- 12.</p>
<p>SECTION 67. Said section 93 of said chapter 143, as so appearing, is hereby further amended by inserting after the word "department", in line 17, the following words:- , 1 of whom shall be an expert in advanced building technology.</p>	<p>SECTION 67. Said section 93 of said chapter 143, as so appearing, is hereby further amended by inserting after the word "department", in line 17, the following words:- , 1 of whom shall be an expert in commercial building energy efficiency, 1 of whom shall be an expert in residential building energy efficiency, 1 of whom shall be an expert in advanced building technology.</p>
<p>SECTION 68. Said section 93 of chapter 143, as so appearing, is hereby further amended by inserting after the word "reappointment", in lines 26 and 27, the following words:- for a second term, but shall not serve more than 10 total years.</p>	<p>SECTION 68. Said section 93 of chapter 143, as so appearing, is hereby further amended by inserting after the word "reappointment", in lines 26 and 27, the following words:- for a second term, but shall not serve more than 10 total years.</p>
<p>SECTION 69. Said section 93 of chapter 143, as so appearing, is hereby further amended by inserting after the word "years", in line 37, the following words:- or more than 4 years total.</p>	<p>SECTION 69. Said section 93 of chapter 143, as so appearing, is hereby further amended by inserting after the word "years", in line 37, the following words:- or more than 4 years total.</p>
<p>SECTION 70. The second paragraph of said section 93 of said chapter 143, as so appearing, is hereby amended by adding the following sentence:- The board shall keep detailed and accurate minutes of its meetings and shall publish such minutes within 30 days of each meeting.</p>	<p>SECTION 70. The second paragraph of said section 93 of said chapter 143, as so appearing, is hereby amended by adding the following sentence:- The board shall keep detailed and accurate minutes of its meetings and shall publish such minutes within 30 days of each meeting.</p>
<p>SECTION 71. Said section 93 of said chapter 143, as so appearing, is hereby further amended by inserting after the word "designee", in line 46, the following words:- , in consultation with the commissioner of energy resources,</p>	<p>SECTION 71. Said section 93 of said chapter 143, as so appearing, is hereby further amended by inserting after the word "designee", in line 46, the following words:- , in consultation with the commissioner of energy resources,</p>

<p>SECTION 72. Section 94 of said chapter 143, as so appearing, is hereby amended by striking out, in lines 110 to 113, inclusive, the words "as part of the state building code, together with any more stringent energy-efficiency provisions that the board, in consultation with the department of energy resources, concludes are warranted" and inserting in place thereof the following words:- and any more stringent amendments thereto as part of the state building code, in consultation with the department of energy resources.</p>	<p>SECTION 72. Section 94 of said chapter 143, as so appearing, is hereby amended by striking out, in lines 110 to 113, inclusive, the words "as part of the state building code, together with any more stringent energy-efficiency provisions that the board, in consultation with the department of energy resources, concludes are warranted" and inserting in place thereof the following words:- and any more stringent amendments thereto as part of the state building code, in consultation with the department of energy resources.</p>
<p>SECTION 73. Section 96 of said chapter 143, as so appearing, is hereby amended by inserting, in line 7, after the word "to" the following words:- , the specialized stretch energy code developed and promulgated by the department of energy resources.</p>	<p>SECTION 73. Section 96 of said chapter 143, as so appearing, is hereby amended by inserting, in line 7, after the word "to" the following words:- , the specialized stretch energy code developed and promulgated by the department of energy resources.</p>
<p>SECTION 73A. Section 100 of said chapter 143 is hereby amended by striking out, in line 9, the word "ninety-six" and inserting in place thereof the following words:- 96, other than the specialized stretch energy code developed and promulgated by the department of energy resources.</p>	
<p>SECTION 74. Section 97 of said chapter 143, as so appearing, is hereby amended by striking out, in line 22, the words "a reasonable time" and inserting in place thereof the following words:- 45 days.</p>	<p>SECTION 74. Section 97 of said chapter 143, as so appearing, is hereby amended by striking out, in line 22, the words "a reasonable time" and inserting in place thereof the following words:- 45 days.</p>
	<p>SECTION 74A. Section 100 of said chapter 143 is hereby amended by striking out, in line 9, the word "ninety-six" and inserting in place thereof the following words:- 96, other than the specialized stretch energy code developed and promulgated by the department of energy resources.</p>
<p>SECTION 75. Section 185 of chapter 149 of the General Laws, as so appearing, is hereby amended by inserting after the definition of "public body" the following definition:-</p> <p>(3½) "Public utility employer," a gas and electricity public utility provider.</p>	<p>SECTION 75. Section 185 of chapter 149 of the General Laws, as so appearing, is hereby amended by inserting after the definition of "public body" the following definition:-</p> <p>(3½) "Public utility employer," a gas and electricity public utility provider.</p>
<p>SECTION 76. Said section 185 of said chapter 149, as so appearing, is hereby further amended by inserting after the word "employer", in lines 4, 20, 24, 29, 32, 32 to 33, 33, 42, 43, 57, 61, 79, 84, 88, 89, 97, 99 and 103, each time it appears, the following words:- or public utility employer.</p>	<p>SECTION 76. Said section 185 of said chapter 149, as so appearing, is hereby further amended by inserting after the word "employer", in lines 4, 20, 24, 29, 32, 32 to 33, 33, 42, 43, 57, 61, 79, 84, 88, 89, 97, 99 and 103, each time it appears, the following words:- or public utility employer.</p>

SECTION 77. Section 1A of chapter 164 of the General Laws, as so appearing, is hereby amended by adding the following subsection:-

(g) Municipalities, including those with environmental justice populations, at high risk from the effects of climate change may approve 1 or more solar energy projects owned and operated by an electric or gas distribution company constructing, owning and operating generation facilities on land owned within the municipality, which is paired, where feasible, with energy storage facilities designed to improve community climate adaptation and resiliency or contribute to the commonwealth meeting its carbon emissions limits established in section 3 of chapter 21N. Prior to project approval under this section, electric and gas distribution companies shall conduct an outreach program to promote the development of solar energy projects in environmental justice communities and to create program goals, including, but not limited to, job creation, peak demand reduction and system resiliency. Municipalities with environmental justice populations shall receive a preference for participation in such projects.

For the purposes of this section, a municipality at high risk from the effects of climate change shall mean a city or town that can demonstrate to the department current or future significant changes to its population, land use or local economy resulting from changes in climate. Nothing in this section shall have the effect of, overriding, modifying, or terminating any applicable requirements for local zoning and permitting by a municipality.

Notwithstanding sections 1B to 1H, inclusive, electric and gas distribution companies may be eligible to assist a municipality at high risk from the effects of climate change in furthering its climate adaptation and resiliency goals by constructing, owning and operating solar generation facilities paired, where feasible, with energy storage facilities on land owned by the electric or gas distribution company within a municipality, including those with environmental justice populations, at no cost to the municipality; provided, that such facilities may receive department approval for cost recovery. Such company shall not construct, own or operate new facilities equaling more than 10 per cent of the total installed megawatt capacity of solar generation facilities in the commonwealth as of July 31, 2020.

Projects undertaken on behalf of a municipality for construction of utility-owned solar facilities shall be exempt from the prohibition on utility-owned generation, subject to review and approval by the department of public utilities. The department may review municipal petitions for development of utility-owned solar facilities and may allow cost recovery upon a showing that a site-specific development would provide environmental or climate change benefits to the community, municipality or the commonwealth, or a combination thereof, warranting a site specific exemption and that the costs of the project are reasonable.

Affirmation of support by a municipality shall be presented to the department by an electric or gas distribution company in any petition for pre-approval of cost recovery for a solar energy generating

SECTION 77. Section 1A of chapter 164 of the General Laws, as so appearing, is hereby amended by adding the following subsection:-

(g) Municipalities, including those with environmental justice populations, at high risk from the effects of climate change may approve 1 or more solar energy projects owned and operated by an electric or gas distribution company constructing, owning and operating generation facilities on land owned within the municipality, which is paired, where feasible, with energy storage facilities designed to improve community climate adaptation and resiliency or contribute to the commonwealth meeting its carbon emissions limits established in section 3 of chapter 21N. Prior to project approval under this section, electric and gas distribution companies shall conduct an outreach program to promote the development of solar energy projects in environmental justice communities and to create program goals, including, but not limited to, job creation, peak demand reduction and system resiliency. Municipalities with environmental justice populations shall receive a preference for participation in such projects.

For the purposes of this section, a municipality at high risk from the effects of climate change shall mean a city or town that can demonstrate to the department current or future significant changes to its population, land use or local economy resulting from changes in climate. Nothing in this section shall have the effect of, overriding, modifying, or terminating any applicable requirements for local zoning and permitting by a municipality.

Notwithstanding sections 1B to 1H, inclusive, electric and gas distribution companies may be eligible to assist a municipality at high risk from the effects of climate change in furthering its climate adaptation and resiliency goals by constructing, owning and operating solar generation facilities paired, where feasible, with energy storage facilities on land owned by the electric or gas distribution company within a municipality, including those with environmental justice populations, at no cost to the municipality; provided, that such facilities may receive department approval for cost recovery. Such company shall not construct, own or operate new facilities equaling more than 10 per cent of the total installed megawatt capacity of solar generation facilities in the commonwealth as of July 31, 2020.

Projects undertaken on behalf of a municipality for construction of utility-owned solar facilities shall be exempt from the prohibition on utility-owned generation, subject to review and approval by the department of public utilities. The department may review municipal petitions for development of utility-owned solar facilities and may allow cost recovery upon a showing that a site-specific development would provide environmental or climate change benefits to the community, municipality or the commonwealth, or a combination thereof, warranting a site specific exemption and that the costs of the project are reasonable.

Affirmation of support by a municipality shall be presented to the department by an electric or gas distribution company in any petition for pre-approval of cost recovery for a solar energy generating

facility and energy storage facility, where deemed feasible, and the department shall determine whether the proposal is consistent with the commonwealth's energy policies, contributes to the climate change resiliency of the host municipality and mitigates peak energy demand. In approving any such proposal, the department shall: (i) provide the criteria applied in reviewing the proposal; (ii) provide the evidence provided in support of the proposal and relied on by the department in making its decision; and (iii) identify the specific contributions to the commonwealth's energy policies that will be attributable to the proposed facility and demonstrate the analytical foundation for the department's approval of utility owned solar facilities.

For purposes of this subsection, "environmental justice population" shall have the same meaning as provided in section 62 of chapter 30.

The department may adopt such rules and regulations as may be necessary to implement this subsection.

facility and energy storage facility, where deemed feasible, and the department shall determine whether the proposal is consistent with the commonwealth's energy policies, contributes to the climate change resiliency of the host municipality and mitigates peak energy demand. In approving any such proposal, the department shall: (i) provide the criteria applied in reviewing the proposal; (ii) provide the evidence provided in support of the proposal and relied on by the department in making its decision; and (iii) identify the specific contributions to the commonwealth's energy policies that will be attributable to the proposed facility and demonstrate the analytical foundation for the department's approval of utility owned solar facilities.

For purposes of this subsection, "environmental justice population" shall have the same meaning as provided in section 62 of chapter 30.

The department may adopt such rules and regulations as may be necessary to implement this subsection.

SECTION 78. Section 1F of said chapter 164, as so appearing, is hereby amended by adding the following paragraph:-

(10) The department shall ensure that all written complaints under this section received from customers and the public regarding gas providers are investigated and a response to the complainant provided in a timely manner. The department shall establish a publicly accessible database which shall, to the greatest extent possible and incorporating customer privacy concerns, contain all complaints received, noting the category of complaint, the date it was received, the steps taken to address it and that date it was

SECTION 78. Section 1F of said chapter 164, as so appearing, is hereby amended by adding the following paragraph:-

(10) The department shall ensure that all written complaints under this section received from customers and the public regarding gas providers are investigated and a response to the complainant provided in a timely manner. The department shall establish a publicly accessible database which shall, to the greatest extent possible and incorporating customer privacy concerns, contain all complaints received, noting the category of complaint, the date it was received, the steps taken to address it and that date it was

resolved.	resolved.
SECTION 79. Section 1J of said chapter 164, as so appearing, is hereby amended by striking out, in line 5, the figure "250,000" and inserting in place thereof the following figure:- 500,000.	SECTION 79. Section 1J of said chapter 164, as so appearing, is hereby amended by striking out, in line 5, the figure "250,000" and inserting in place thereof the following figure:- 500,000.
SECTION 80. Said section 1J of said chapter 164, as so appearing, is hereby further amended by striking out, in line 8, the figure "20,000,000" and inserting in place thereof the following figure:- 50,000,000.	SECTION 80. Said section 1J of said chapter 164, as so appearing, is hereby further amended by striking out, in line 8, the figure "20,000,000" and inserting in place thereof the following figure:- 50,000,000.
SECTION 81. Section 105A of said chapter 164, as so appearing, is hereby amended by striking out, in lines 21 to 23, inclusive, the words "as specified in 49 U.S.C. section 60122(a)(1) or any successor statute enacted into federal law for the same purposes as said section 60122(a)(1)" and inserting in place thereof the following words:- of not more than \$500,000 for each violation; provided, however, that the maximum civil penalty under this section for a related series of violations shall be \$10,000,000; and provided further, that the dollar limits in this paragraph shall be doubled if the department determines that the violator has engaged in 1 or more similar violations in the 3 years preceding the violation. A separate violation occurs for each day the violation continues.	SECTION 81. Section 105A of said chapter 164, as so appearing, is hereby amended by striking out, in lines 21 to 23, inclusive, the words "as specified in 49 U.S.C. section 60122(a)(1) or any successor statute enacted into federal law for the same purposes as said section 60122(a)(1)" and inserting in place thereof the following words:- of not more than \$500,000 for each violation; provided, however, that the maximum civil penalty under this section for a related series of violations shall be \$10,000,000; and provided further, that the dollar limits in this paragraph shall be doubled if the department determines that the violator has engaged in 1 or more similar violations in the 3 years preceding the violation. A separate violation occurs for each day the violation continues.
SECTION 82. Section 138 of said chapter 164, as so appearing, is hereby amended by inserting after the word "less", in line 37, the following words:- ; provided, however, that a "Class I net metering facility" of a municipality or other governmental entity may have a generating capacity of less than or equal to 60 kilowatts per unit.	SECTION 82. Section 138 of said chapter 164, as so appearing, is hereby amended by inserting after the word "less", in line 37, the following words:- ; provided, however, that a "Class I net metering facility" of a municipality or other governmental entity may have a generating capacity of less than or equal to 60 kilowatts per unit.
SECTION 83. Said section 138 of said chapter 164, as so appearing, is hereby further amended by striking out, in line 120, the figure "II" and inserting in place thereof the following figures:- I, II.	SECTION 83. Said section 138 of said chapter 164, as so appearing, is hereby further amended by striking out, in line 120, the figure "II" and inserting in place thereof the following figures:- I, II.
SECTION 84. Paragraph (1) of subsection (b ¹ / ₂) of section 139 of said chapter 164, as so appearing, is hereby amended by striking out the third sentence and inserting in place thereof the following sentence:- A solar net metering facility may designate customers of any distribution company located in the commonwealth to receive such credits in amounts attributed by the solar net metering facility.	SECTION 84. Paragraph (1) of subsection (b ¹ / ₂) of section 139 of said chapter 164, as so appearing, is hereby amended by striking out the third sentence and inserting in place thereof the following sentence:- A solar net metering facility may designate customers of any distribution company located in the commonwealth to receive such credits in amounts attributed by the solar net metering facility.
SECTION 85. Subsection (i) of said section 139 of said chapter 164, as so appearing, is hereby amended by adding the following sentence:- A Class II net metering facility or Class III net metering facility with an executed interconnection agreement with a distribution company on or after January 1, 2021 shall be exempt from the aggregate net metering capacity of facilities that are not net metering facilities of a municipality or other governmental entity under subsection (f), and may net meter and accrue Class II or Class III net metering credits if it is generating renewable energy and serves on-site load, other than parasitic or station load; provided, that any credits accrued in excess of its annual electricity consumption for the period running from April through the following March shall be credited or paid out for such excess credits at the utility's avoided cost rate.	SECTION 85. Subsection (i) of said section 139 of said chapter 164, as so appearing, is hereby amended by adding the following sentence:- A Class II net metering facility or Class III net metering facility with an executed interconnection agreement with a distribution company on or after January 1, 2021 shall be exempt from the aggregate net metering capacity of facilities that are not net metering facilities of a municipality or other governmental entity under subsection (f), and may net meter and accrue Class II or Class III net metering credits if it is generating renewable energy and serves on-site load, other than parasitic or station load; provided, that any credits accrued in excess of its annual electricity consumption for the period running from April through the following March shall be credited or paid out for such excess credits at the utility's avoided cost rate.

SECTION 86. Section 144 of said chapter 164, as so appearing, is hereby amended by adding the following 2 subsections:-

(g) The department shall establish requirements for the maintenance, timely updating, accuracy, and security of gas company maps and records. The department shall incorporate these requirements as a metric in the department's service quality indicators for gas companies.

(h) The department shall incorporate into its service quality indicators for gas companies a metric or metrics related to disruptions in the provision of electronic data, including but not limited to, maps and records relevant to inspections, maintenance, repairs, and construction to its in-house workforce and contractors.

SECTION 87. Section 145 of said chapter 164, as so appearing, is hereby amended by striking out subsection (b) and inserting in place thereof the following subsection:-

(b) A gas company shall file with the department a plan to address aging or leaking natural gas infrastructure within the commonwealth and the leak rate on the gas company's natural gas infrastructure in the interest of public safety and reducing lost and unaccounted for natural gas through a reduction in natural gas system leaks. Each company's gas infrastructure plan shall include interim targets for the department's review. The department shall review these interim targets to ensure each gas company is meeting the appropriate pace to reduce the leak rate on and to replace the gas company's natural gas infrastructure in a safe and timely manner. The interim targets shall be for periods of not more than 6 years or at the conclusion of 2 complete 3-year walking survey cycles conducted by the gas company. The gas companies shall incorporate these interim targets into timelines for removing all leak-prone infrastructure filed pursuant to subsection (c) and may update them based on overall progress. The department may levy a penalty against any gas company that fails to meet its interim target in an amount up to and including the equivalent of 2.5 per cent of such gas company's transmission and distribution service revenues for the previous calendar year.

SECTION 88. Said section 145 of said chapter 164, as so appearing, is hereby further amended by striking out, in line 33, the words "and (vi)" and inserting in place thereof the following words:- (vi) the relocations, where practical, of a meter located inside of a structure to the outside of said structure for the purpose of improving public safety; and (vii).

SECTION 89. The second paragraph of subsection (c) of said section 145 of said chapter 164, as so appearing, is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:-

As part of each plan filed under this section, a gas company shall include a timeline for removing all leak-prone infrastructure on an accelerated basis specifying an annual replacement pace and program end date with a target end date of: (i) not more than 20 years from the filing of a gas company's initial plan; or (ii) a reasonable target end date considering the allowable recovery cap

SECTION 86. Section 144 of said chapter 164, as so appearing, is hereby amended by adding the following 2 subsections:-

(g) The department shall establish requirements for the maintenance, timely updating, accuracy, and security of gas company maps and records. The department shall incorporate these requirements as a metric in the department's service quality indicators for gas companies.

(h) The department shall incorporate into its service quality indicators for gas companies a metric or metrics related to disruptions in the provision of electronic data, including but not limited to, maps and records relevant to inspections, maintenance, repairs, and construction to its in-house workforce and contractors.

SECTION 87. Section 145 of said chapter 164, as so appearing, is hereby amended by striking out subsection (b) and inserting in place thereof the following subsection:-

(b) A gas company shall file with the department a plan to address aging or leaking natural gas infrastructure within the commonwealth and the leak rate on the gas company's natural gas infrastructure in the interest of public safety and reducing lost and unaccounted for natural gas through a reduction in natural gas system leaks. Each company's gas infrastructure plan shall include interim targets for the department's review. The department shall review these interim targets to ensure each gas company is meeting the appropriate pace to reduce the leak rate on and to replace the gas company's natural gas infrastructure in a safe and timely manner. The interim targets shall be for periods of not more than 6 years or at the conclusion of 2 complete 3-year walking survey cycles conducted by the gas company. The gas companies shall incorporate these interim targets into timelines for removing all leak-prone infrastructure filed pursuant to subsection (c) and may update them based on overall progress. The department may levy a penalty against any gas company that fails to meet its interim target in an amount up to and including the equivalent of 2.5 per cent of such gas company's transmission and distribution service revenues for the previous calendar year.

SECTION 88. Said section 145 of said chapter 164, as so appearing, is hereby further amended by striking out, in line 33, the words "and (vi)" and inserting in place thereof the following words:- (vi) the relocations, where practical, of a meter located inside of a structure to the outside of said structure for the purpose of improving public safety; and (vii).

SECTION 89. The second paragraph of subsection (c) of said section 145 of said chapter 164, as so appearing, is hereby amended by striking out the first sentence and inserting in place thereof the following sentence:-

As part of each plan filed under this section, a gas company shall include a timeline for removing all leak-prone infrastructure on an accelerated basis specifying an annual replacement pace and program end date with a target end date of: (i) not more than 20 years from the filing of a gas company's initial plan; or (ii) a reasonable target end date considering the allowable recovery cap

<p>established pursuant to subsection (f).</p>	<p>established pursuant to subsection (f).</p>
<p>SECTION 90. Section 16 of chapter 298 of the acts of 2008 is hereby amended by striking out the words ", and shall expire on December 31, 2020".</p>	<p>SECTION 90. Section 16 of chapter 298 of the acts of 2008 is hereby amended by striking out the words ", and shall expire on December 31, 2020".</p>
<p>SECTION 91. The fourth sentence of subsection (b) of section 83C of chapter 169 of the acts of 2008, as appearing in section 12 of chapter 188 of the acts of 2016, is hereby amended by striking out the figure "1,600" and inserting in place thereof the following figure:- 4,000.</p>	<p>SECTION 91. The fourth sentence of subsection (b) of section 83C of chapter 169 of the acts of 2008, as appearing in section 12 of chapter 188 of the acts of 2016, is hereby amended by striking out the figure "1,600" and inserting in place thereof the following figure:- 4,000.</p>
<p>SECTION 93. The sixth sentence of said subsection (b) of said section 83C of said chapter 169, as appearing in said section 12 of said chapter 188 of the acts of 2016, is hereby further amended by inserting after the word "resources" the following words:- and the executive office of housing and economic development.</p>	<p>SECTION 93. The sixth sentence of said subsection (b) of said section 83C of said chapter 169, as appearing in said section 12 of said chapter 188 of the acts of 2016, is hereby further amended by inserting after the word "resources" the following words:- and the executive office of housing and economic development.</p>
<p>SECTION 94. Notwithstanding any general or special law, rule or regulation to the contrary, when initiating a regulatory process for any new solar incentive program developed by the department of energy resources pursuant to section 11 of chapter 75 of the acts of 2016 or any other general or special law or other authority, the department shall to the greatest extent feasible: (i) provide equitable access to all Massachusetts ratepayers, including low-income ratepayers; (ii) address solar energy access and affordability for low-income communities; (iii) include effective consumer protection provisions; and (iv) ensure that information about the program and its benefits are provided in a readily accessible manner to all ratepayers, including non-English speaking communities. The department shall consult with a diverse range of stakeholders to inform the design of any such solar incentive program, including low-income ratepayers and organizations representing their interests.</p>	<p>SECTION 94. Notwithstanding any general or special law, rule or regulation to the contrary, when initiating a regulatory process for any new solar incentive program developed by the department of energy resources pursuant to section 11 of chapter 75 of the acts of 2016 or any other general or special law or other authority, the department shall to the greatest extent feasible: (i) provide equitable access to all Massachusetts ratepayers, including low-income ratepayers; (ii) address solar energy access and affordability for low-income communities; (iii) include effective consumer protection provisions; and (iv) ensure that information about the program and its benefits are provided in a readily accessible manner to all ratepayers, including non-English speaking communities. The department shall consult with a diverse range of stakeholders to inform the design of any such solar incentive program, including low-income ratepayers and organizations representing their interests.</p>
<p>SECTION 95. Notwithstanding any general or special law to the contrary, the department of energy resources may require distribution companies to jointly and competitively solicit and procure proposals for offshore wind energy transmission sufficient to deliver energy generation procured pursuant to subsection (b) of section 83C of chapter 169 of the acts of 2008 from designated wind energy areas for which a federal lease was issued on or after January 1, 2012, that may be developed independent of such offshore wind energy generation; provided further, that such transmission service shall be made available for use by more than 1 wind energy generation project and shall not exceed the generation capacity authorized by this section; and provided further, that any selection of offshore wind energy transmission shall be the most cost1056 effective mechanism for procuring reliable, low-cost</p>	<p>SECTION 95. Notwithstanding any general or special law to the contrary, the department of energy resources may require distribution companies to jointly and competitively solicit and procure proposals for offshore wind energy transmission sufficient to deliver energy generation procured pursuant to subsection (b) of section 83C of chapter 169 of the acts of 2008 from designated wind energy areas for which a federal lease was issued on or after January 1, 2012, that may be developed independent of such offshore wind energy generation; provided further, that such transmission service shall be made available for use by more than 1 wind energy generation project and shall not exceed the generation capacity authorized by this section; and provided further, that any selection of offshore wind energy transmission shall be the most cost1056 effective mechanism for procuring reliable, low-cost</p>

offshore wind energy transmission service for ratepayers.

offshore wind energy transmission service for ratepayers.

SECTION 96. Notwithstanding any general or special law to the contrary, the department of energy resources and department of public utilities shall amend any rules, regulations, and tariffs to permit the owner of any new solar facility, including any solar energy generating source, that qualifies for programs pursuant to section 11 of chapter 75 of the acts of 2016 and application regulations that achieves commercial operation on or after January 1, 2021 to: (i) receive credits for any electricity generated by a solar facility that exceeds the owner's usage during a billing period, with such credits to be credited to a solar facility owner's customer account with the relevant distribution company, and carried forward from month to month; (ii) designate customers of the same distribution company, regardless of which ISO-NE load zone the customers are located in, to receive such credits in amounts attributed by the solar facility, with such credits applicable to any portion or all of a designated customer's electric bill; and (iii) direct the distribution company to purchase all or a portion of any credits produced by a solar facility at the rates provided for in the applicable statute, regulation, or tariff without discount, fee, or penalty. This section shall not apply to solar net metering facilities.

SECTION 96. Notwithstanding any general or special law to the contrary, the department of energy resources and department of public utilities shall amend any rules, regulations, and tariffs to permit the owner of any new solar facility, including any solar energy generating source, that qualifies for programs pursuant to section 11 of chapter 75 of the acts of 2016 and application regulations that achieves commercial operation on or after January 1, 2021 to: (i) receive credits for any electricity generated by a solar facility that exceeds the owner's usage during a billing period, with such credits to be credited to a solar facility owner's customer account with the relevant distribution company, and carried forward from month to month; (ii) designate customers of the same distribution company, regardless of which ISO-NE load zone the customers are located in, to receive such credits in amounts attributed by the solar facility, with such credits applicable to any portion or all of a designated customer's electric bill; and (iii) direct the distribution company to purchase all or a portion of any credits produced by a solar facility at the rates provided for in the applicable statute, regulation, or tariff without discount, fee, or penalty. This section shall not apply to solar net metering facilities.

SECTION 97. Notwithstanding clause forty-fifth of section 5 of chapter 59 of the General Laws, the owner of a solar or wind powered system and the municipality in which the system is located shall not be required by sections 61 and 63 to amend, modify or renegotiate an existing payment in lieu of tax agreement that was entered into or executed before the effective date of this act.

SECTION 97. Notwithstanding clause forty-fifth of section 5 of chapter 59 of the General Laws, the owner of a solar or wind powered system and the municipality in which the system is located shall not be required by sections 61 and 63 to amend, modify or renegotiate an existing payment in lieu of tax agreement that was entered into or executed before the effective date of this act.

SECTION 98. Notwithstanding sections 61 and 63, a solar or wind system determined to be exempt under clause Forty-fifth of section 5 of chapter 59 of the General Laws prior to the effective date of this act and that has not executed a payment in lieu of taxes agreement with the municipality in which such system is located shall remain exempt; provided, however, that the system produces less than 150 per cent of the annual electricity needs of the real property on which it is located.

SECTION 98. Notwithstanding sections 61 and 63, a solar or wind system determined to be exempt under clause Forty-fifth of section 5 of chapter 59 of the General Laws prior to the effective date of this act and that has not executed a payment in lieu of taxes agreement with the municipality in which such system is located shall remain exempt; provided, however, that the system produces less than 150 per cent of the annual electricity needs of the real property on which it is located.

SECTION 98A. Notwithstanding any special or general law, rule or regulation to the contrary, not later than January 1, 2028, the state board of building regulations and standards shall incorporate the opt-in higher performing standard of the specialized stretch energy code as developed and promulgated under section 6 of chapter 25A of the General Laws into the base energy provisions of the state building code adopted under section 93 of chapter 143 of the General Laws.

SECTION 98A. Notwithstanding the promulgation of the municipal opt-in specialized stretch energy code under section 6 of chapter 25A of the General Laws or any other provisions of this act, any stretch energy code adopted by the state board of building regulations and standards and in effect on March 1, 2021, shall remain in full force and effect; provided, however, that the department of energy resources, in consultation with the state board of building regulations and standards, may update such stretch energy code from time to time. A community designated as a green community under subsection (c) of section 10 of said chapter 25A

	<p>that elects not to adopt the municipal opt-in specialized stretch energy code under section 6 of chapter 25A shall not lose its designation as a green community as a result of that election.</p>
<p>SECTION 98B. Notwithstanding the provisions of this act, any existing stretch energy code adopted by the state board of building regulations and standards shall remain in full force and effect until the final promulgation of the specialized stretch energy code by the department of energy resources pursuant to section 6 of chapter 25A of the General Laws.</p>	
<p>SECTION 99. The department of public utilities may, upon application of a gas company as defined in section 1 of chapter 164 of the General Laws, authorize 1 or more pilot projects for the development of utility-scale renewable thermal energy. Such application shall be filed with the department on or before January 1, 2023. The department may, under a pilot, approve recovery of costs for projects situated in the commonwealth that demonstrate the costs and benefits of: (i) utility-scale renewable thermal energy sources, systems or technologies capable of substituting for fossil-based natural gas; or (ii) utility-scale renewable thermal energy replacements for, or alternative uses of, infrastructure constructed originally to generate, transmit or distribute fossil-based natural gas; provided, however, that such substitute renewable thermal energy sources, systems or technologies, and such replacements or alternative uses, have a reasonable likelihood of facilitating substantial reductions in greenhouse gas emissions that satisfy the mandates of greenhouse gas reductions set forth in chapter 21N of the General Laws; and provided further, that the pilots shall not include the blending of other fuels with fossil-based natural gas. The department may, within such a pilot, permit a gas company to bill for thermal energy. The department shall ensure transparency and validity of the outcomes of the pilot projects through a third-party evaluation and report by the department of energy resources. In determining whether to approve a pilot project, the department shall consider the reasonableness of the size, scope and scale of the pilot project and related budget and whether the benefits of the proposed pilot justify the proposed cost to both participating and non-participating customers; provided, however, that the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions. The department may promulgate rules or regulations to implement this section.</p>	<p>SECTION 99. The department of public utilities may, upon application of a gas company as defined in section 1 of chapter 164 of the General Laws, authorize 1 or more pilot projects for the development of utility-scale renewable thermal energy. Such application shall be filed with the department on or before January 1, 2023. The department may, under a pilot, approve recovery of costs for projects situated in the commonwealth that demonstrate the costs and benefits of: (i) utility-scale renewable thermal energy sources, systems or technologies capable of substituting for fossil-based natural gas; or (ii) utility-scale renewable thermal energy replacements for, or alternative uses of, infrastructure constructed originally to generate, transmit or distribute fossil-based natural gas; provided, however, that such substitute renewable thermal energy sources, systems or technologies, and such replacements or alternative uses, have a reasonable likelihood of facilitating substantial reductions in greenhouse gas emissions that satisfy the mandates of greenhouse gas reductions set forth in chapter 21N of the General Laws; and provided further, that the pilots shall not include the blending of other fuels with fossil-based natural gas. The department may, within such a pilot, permit a gas company to bill for thermal energy. The department shall ensure transparency and validity of the outcomes of the pilot projects through a third-party evaluation and report by the department of energy resources. In determining whether to approve a pilot project, the department shall consider the reasonableness of the size, scope and scale of the pilot project and related budget and whether the benefits of the proposed pilot justify the proposed cost to both participating and non-participating customers; provided, however, that the calculation of benefits shall include calculations of the social value of greenhouse gas emissions reductions. The department may promulgate rules or regulations to implement this section.</p>
<p>SECTION 100. The Massachusetts clean energy technology center shall administer a heat pump market development program to fund and offer training, which shall include, but not be limited to, heating oil dealers, for the purpose of expanding markets for space and water heating using efficient heat pump technology. The Massachusetts clean energy technology center may draw upon the Massachusetts Renewable Energy Trust Fund, established in section 9 of chapter 23J of the General Laws, for such purpose if sufficient funds are available. The Massachusetts clean energy technology center may stop offering such program after January 1, 2026.</p>	<p>SECTION 100. The Massachusetts clean energy technology center shall administer a heat pump market development program to fund and offer training, which shall include, but not be limited to, heating oil dealers, for the purpose of expanding markets for space and water heating using efficient heat pump technology. The Massachusetts clean energy technology center may draw upon the Massachusetts Renewable Energy Trust Fund, established in section 9 of chapter 23J of the General Laws, for such purpose if sufficient funds are available. The Massachusetts clean energy technology center may stop offering such program after January 1, 2026.</p>

<p>SECTION 101. To develop the specialized stretch energy code required by section 6 of chapter 25A of the General Laws, the department of energy resources shall: (i) hold not less than 5 public hearings in geographically diverse locations throughout the commonwealth that shall represent the distinguishing characteristics of rural, suburban and urban households, 1 of which shall be held in an underserved community or community with a high percentage of low-income households; and (ii) develop and promulgate the specialized stretch energy code not later than 18 months after the effective date of this act. Notwithstanding any special or general law, rule or regulation to the contrary, any municipality may adopt the specialized stretch energy code following its promulgation. A community designated as a green community under subsection (c) of section 10 of chapter 25A of the General Laws that elects not to adopt the opt-in higher performing standard of the specialized stretch energy code shall not lose its designation as a green community solely as a result of that election.</p>	<p>SECTION 101. To develop the specialized stretch energy code required by section 6 of chapter 25A of the General Laws, the department of energy resources shall: (i) hold not less than 5 public hearings in geographically diverse locations throughout the commonwealth that shall represent the distinguishing characteristics of rural, suburban and urban households, 1 of which shall be held in an underserved community or community with a high percentage of low-income households; and (ii) develop and promulgate the municipal opt-in specialized stretch energy code required by section 6 of chapter 25A of the General Laws not later than 18 months after the effective date of this act. Notwithstanding any special or general law, rule or regulation to the contrary, any municipality may adopt the municipal opt-in specialized stretch energy code following its promulgation.</p>
<p>SECTION 102. The executive office of energy and environmental affairs and its various agencies and departments shall conduct a study within 2 years of the effective date of this act that shall include, but not be limited to: (i), an analysis of greenhouse gas emissions generated and projected to be generated by combustion within the commonwealth of the various categories and classes of biomass fuels; (ii) the public health consequences of said combustion for affected populations, together with estimations of the cumulative greenhouse gas emissions and (iii) public health impacts of said combustion. To inform the design and conduct of said study, the executive office shall hold not less than 3 public hearings.</p>	<p>SECTION 102. The executive office of energy and environmental affairs and its various agencies and departments shall conduct a study within 2 years of the effective date of this act that shall include, but not be limited to: (i), an analysis of greenhouse gas emissions generated and projected to be generated by combustion within the commonwealth of the various categories and classes of biomass fuels; (ii) the public health consequences of said combustion for affected populations, together with estimations of the cumulative greenhouse gas emissions and (iii) public health impacts of said combustion. To inform the design and conduct of said study, the executive office shall hold not less than 3 public hearings.</p>
<p>SECTION 102A The secretary of energy and environmental affairs shall promulgate regulations to implement sections 57 and 58 by no later than 180 days after the effective date of this act</p>	<p>SECTION 102A The secretary of energy and environmental affairs shall promulgate regulations to implement sections 57 and 58 not later than 180 days after the effective date of this act</p>
<p>SECTION 102B The requirements imposed by sections 57 and 58 shall apply to new projects filed under section 62A of chapter 30 of the General Laws on or after the effective date of regulations promulgated under section 102A.</p>	<p>SECTION 102B The requirements imposed by sections 57 and 58 shall apply to new projects filed under section 62A of chapter 30 of the General Laws on or after the effective date of regulations promulgated under section 102A.</p>
<p>SECTION 102C The department of environmental protection shall evaluate and seek public comment on the incorporation of cumulative impact analyses in the assessment and identification of certain categories of permits and approvals. Not later than 18 months after the effective date of this act, the department of environmental protection shall propose regulations to 10 of 10 include cumulative impact analyses for defined categories of air quality permits identified through the evaluation and public comment process.</p>	<p>SECTION 102C The department of environmental protection shall evaluate and seek public comment on the incorporation of cumulative impact analyses in the assessment and identification of certain categories of permits and approvals. Not later than 18 months after the effective date of this act, the department of environmental protection shall propose regulations to 10 of 10 include cumulative impact analyses for defined categories of air quality permits identified through the evaluation and public comment process.</p>
<p>SECTION 103. The department of public utilities shall establish rules by which the qualifications of contractors shall be evaluated. Contractors who wish to be eligible to receive contracts with a gas company to perform gas work shall be required to register with the department and provide all required documentation to meet certification requirements, as set by the department, to the department on an annual basis.</p>	<p>SECTION 103. The department of public utilities shall establish rules by which the qualifications of contractors shall be evaluated. Contractors who wish to be eligible to receive contracts with a gas company to perform gas work shall be required to register with the department and provide all required documentation to meet certification requirements, as set by the department, to the department on an annual basis.</p>
<p>SECTION 104. The department of public utilities shall promulgate and implement the regulations required pursuant to subsection (g) of section 144 of chapter 164 of the General Laws.</p>	<p>SECTION 104. The department of public utilities shall promulgate and implement the regulations required pursuant to subsection (g) of section 144 of chapter 164 of the General Laws.</p>

<p>SECTION 105. The department of revenue, in consultation with the department of energy resources, shall issue guidance for municipalities and solar, wind and energy storage system owners that shall include, but not be limited to: (i) assessment of solar, wind and energy storage systems; (ii) standardization of agreement terms; and (iii) where feasible, standardization of tax policy when agreements for payments in lieu of taxes are not in place. The guidance shall be issued not more than 9 months after the effective date of this act.</p>	<p>SECTION 105. The department of revenue, in consultation with the department of energy resources, shall issue guidance for municipalities and solar, wind and energy storage system owners that shall include, but not be limited to: (i) assessment of solar, wind and energy storage systems; (ii) standardization of agreement terms; and (iii) where feasible, standardization of tax policy when agreements for payments in lieu of taxes are not in place. The guidance shall be issued not more than 9 months after the effective date of this act.</p>
<p>SECTION 106. Notwithstanding section 3B of chapter 21N of the General Laws, the secretary of energy and environmental affairs shall set the first goal required by said section 3B of said chapter 21N not later than April 15, 2021.</p>	<p>SECTION 106. Notwithstanding section 3B of chapter 21N of the General Laws, the secretary of energy and environmental affairs shall set the first goal required by said section 3B of said chapter 21N not later than July 15, 2021.</p>
<p>SECTION 107. The 2025 and 2030 statewide greenhouse gas emission interim limits and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2030 emissions reduction roadmap plan required by said section 3 of said chapter 21N shall be adopted and published not later than January 1, 2022. After January 1, 2022 the secretary may set more stringent 2025 and 2030 statewide greenhouse gas emission interim limits and sublimits based on changed circumstances.</p>	<p>SECTION 107. The 2025 and 2030 statewide greenhouse gas emission interim limits and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2025 and 2030 emissions reduction roadmap plan required by said section 3 of said chapter 21N shall be adopted and published not later than July 1, 2022.</p>
<p>SECTION 108. The 2035 statewide greenhouse gas emissions interim limit and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2035 emissions reduction roadmap plan required by said section 3 of said chapter 21N, shall be adopted and published not later than January 1, 2028.</p>	<p>SECTION 108. The 2035 statewide greenhouse gas emissions interim limit and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2035 emissions reduction roadmap plan required by said section 3 of said chapter 21N, shall be adopted and published not later than January 1, 2028.</p>
<p>SECTION 109. The 2040 statewide greenhouse gas emissions interim limit and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2040 emissions reduction roadmap plan required by said section 3 of said chapter 21N, shall be adopted and published not later than January 1, 2033.</p>	<p>SECTION 109. The 2040 statewide greenhouse gas emissions interim limit and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2040 emissions reduction roadmap plan required by said section 3 of said chapter 21N, shall be adopted and published not later than January 1, 2033.</p>
<p>SECTION 110. The 2045 statewide greenhouse gas emissions interim limit and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2045 emissions reduction roadmap plan required by said section 3 of said chapter 21N, shall be adopted and published not later than January 1, 2038.</p>	<p>SECTION 110. The 2045 statewide greenhouse gas emissions interim limit and sublimits required by subsection (b) of section 3 and section 3A of chapter 21N of the General Laws, and the 2045 emissions reduction roadmap plan required by said section 3 of said chapter 21N, shall be adopted and published not later than January 1, 2038.</p>
<p>SECTION 111. The 2050 sector-based emissions sublimits required by section 3A of chapter 21N of the General Laws and the emissions reduction plan required by subsection (b) of section 3 of said chapter 21N to realize the 2050 limit and sublimits shall be adopted and published not later than January 1, 2023; provided, however, that the sublimits and plan shall be subject to revision and improvement by emissions reduction sublimits and plans adopted and published for 2030, 2035, 2040 and 2045.</p>	<p>SECTION 111. The 2050 sector-based emissions sublimits required by section 3A of chapter 21N of the General Laws and the emissions reduction plan required by subsection (b) of section 3 of said chapter 21N to realize the 2050 limit and sublimits shall be adopted and published not later than January 1, 2023; provided, however, that the sublimits and plan shall be subject to revision and improvement by emissions reduction sublimits and plans adopted and published for 2030, 2035, 2040 and 2045.</p>
<p>SECTION 112. Section 34 shall take effect on January 1, 2026.</p>	<p>SECTION 112. Section 34 shall take effect on January 1, 2026.</p>
<p>SECTION 113. Section 52 shall take effect on January 1, 2022.</p>	<p>SECTION 113. Section 52 shall take effect on January 1, 2022.</p>
<p>SECTION 114. Sections 61, 62, 63, 97, and 98 shall take effect 90 days from the passage of this act.</p>	<p>SECTION 114. Sections 61, 62, 63, 97, and 98 shall take effect 90 days from the passage of this act.</p>