

# HOUSE . . . . . No. 4933

---

Text of House amendments and Bills in the Third Reading changes to the Senate Bill setting next-generation climate policy (Senate, No. 2500), as amended by the House (July 30 and July 31). July 31, 2020.

---

## The Commonwealth of Massachusetts

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

By striking out all after the enacting clause and inserting in place thereof the following:—

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

4           “Direct emissions”, emissions from sources that are owned or operated, in whole or in  
5   part, by any person, entity or facility including, but not limited to, emissions from any  
6   transportation vehicle, building, structure, distribution system or residential, commercial,  
7   institutional, industrial, waste management, agricultural or manufacturing process.

8           SECTION 2. Said section 1 of said chapter 21N, as so appearing, is hereby further  
9   amended by inserting after the definition of “Greenhouse gas emissions source” the following  
10   definition:—

11           “Greenhouse gas-emitting priority”, matter that emits or is capable of emitting a  
12   greenhouse gas when burned including, but not limited to, natural gas, petroleum, coal and any

solid, liquid or gaseous fuel derived therefrom or any other such matter as identified by the department.

SECTION 3. Said section 1 of said chapter 21N, as so appearing, is hereby further amended by striking out the definition of “Indirect emissions” and inserting in place thereof the following definition:-

“Indirect emissions”, emissions associated with the consumption of any greenhouse gas-emitting priority or purchased electricity, fuel, steam and heating or cooling by a person, an entity or a facility.

SECTION 4. Said section 1 of said chapter 21N, as so appearing, is hereby further amended by striking out the definition of “Market-based compliance mechanism” and inserting in place thereof the following definition:-

“Market-based compliance mechanism”, any form of priced compliance system imposed on sources or categories of sources, or a pricing mechanism imposed directly on greenhouse gas-emitting priorities or on their the distribution or sale, designed to reduce emissions as required by this chapter including, but not limited to: (i) a system of market-based declining annual 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, the regional greenhouse gas initiative or other regional program that result in the same greenhouse gas emissions reduction, over the same time period, as direct compliance with a greenhouse gas emissions limit or emission reduction measure adopted by the executive office pursuant to this chapter; or (iii) a system of charges or exactions imposed to reduce statewide greenhouse gas emissions in whole or in part.

SECTION 4A. Section 1 of chapter 21N of the General Laws, as so appearing, is hereby amended by inserting after the definition of “Nature-based solutions” the following new definition:-

“Natural and working lands”, lands that (i) are actively used by an owner or operator of 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 and similar open space land.

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:-

The department shall monitor and regulate emissions of greenhouse gases with the goal of reducing those emissions in order to achieve greenhouse gas emissions limits established by this chapter.

SECTION 6. Subsection (b) of section 3 of said chapter 21N, as so appearing, is hereby amended by striking out clause (4), and inserting in place thereof the following clause:-

(4) a 2050 statewide emissions limit that achieves at least net zero statewide greenhouse gas emissions.

SECTION 7. Section 4 of said chapter 21N, as so appearing, is hereby amended by striking out, in line 19, the words “established pursuant to section 12”.

SECTION 8. Said section 4 of said chapter 21N, as so appearing, is hereby further amended by adding the following 3 subsections:-

(i) The secretary shall adopt interim 2030 and 2040 emissions limits consistent with the modeling and analysis required by section 12 and in accordance with this section and section 3. 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. In setting the interim 2030 and 2040 emissions limits, the secretary shall comply with the second sentence of subsection (a) and subsections (b) through (g).

(j) In addition to the requirements of this section and section 5, the secretary shall issue a 2050 emissions reduction roadmap plan. The 2050 emissions reduction roadmap plan shall describe the commonwealth's plan to achieve the 2050 emissions limit required by clause 4 of subsection (b) of section 3, as well as interim 2030 and 2040 emissions limits required by subsection (i), by means of 1 or more technologically and economically feasible pathways selected to reduce statewide emissions. The 2050 emissions reduction roadmap plan shall include proposed policies, regulations and legislative recommendations that incorporate all sources or categories of sources that emit greenhouse gases with the goal of reducing those emissions to achieve the 2050 emissions limit required by subsection (b) of section 3.

(k) The secretary shall promulgate regulations regarding all sources or categories of sources that emit greenhouse gases consistent with, and as necessary to implement the 2050 emissions reduction roadmap plan required by subsection (j). Regulations shall be consistent with section 12 and subsections (i) and (j), and shall be designed to ensure that the commonwealth achieves its required emissions reductions equitably and in a manner that

protects low and moderate income persons and environmental justice populations. The department shall update said regulations within 1 year of the release of the report required by section 5.

SECTION 9. Section 5 of said chapter 21N, as so appearing, is hereby amended by striking out, in lines 25 and 26, the words “ and (x) recommendations for future policy action.” and inserting in place thereof the following words:- (x) a comprehensive update to the 2050 emissions reduction roadmap plan required by subsection (j) of section 4; (xi) a detailed summary of the steps taken by the commonwealth to improve or mitigate economic, environmental and public health impacts on low or moderate-income individuals and environmental justice populations; and (xii) recommendations for future policy action.

SECTION 10. Said chapter 21N is hereby further amended by adding the following section:-

Section 12. The secretary shall publish the results of quantitative modeling and analysis of the commonwealth’s energy economy and greenhouse gas emissions in their regional context, including but not limited to the regional electric distribution and transmission grid, and identify multiple technologically and economically feasible plans for reducing statewide emissions consistent with the subsection (b) of section 3 and subsections (i) and (j) of section 4. The modeling and analysis shall employ back-casting methodology and 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. Each plan identified by the secretary shall analyze the economic, environmental and public health impacts on the commonwealth, including those that may benefit or burden low or moderate income populations or environmental justice

99 populations. The secretary shall publish the results of the modeling and analysis required by this  
100 section on its website, and to the maximum extent permitted by law, shall make available for  
101 public inspection and use the model, all model assumptions, and all input and output data;  
102 provided, that the secretary may protect from public disclosure, trade secrets, confidential,  
103 competitively sensitive or other proprietary information provided in the course of proceedings in  
104 the same manner as provided in section 5D of chapter 25.

105         Section 13. The secretary shall (i) determine a baseline measurement and measure the  
106 current carbon flux on natural and working lands; (ii) track and report the release of measurable  
107 greenhouse gases from and carbon sequestration by natural and working lands and the products  
108 derived from these lands to the maximum extent practicable; (iii) adopt statewide goals to reduce  
109 greenhouse gas emissions and increase carbon sequestration on natural and working lands; and  
110 (iv) develop a natural and working lands plan that outlines actions to meet these statewide goals,  
111 including but not limited to, land protection, management, and restoration, and state and local  
112 legislation, laws and regulations, programs, grants, loans, incentives and public-private  
113 partnerships to meet the statewide goals. The secretary shall conduct a stakeholder process to  
114 inform and develop said plan. Said plan shall provide guidance and strategies for state agencies,  
115 authorities, municipalities, regional planning agencies, nonprofit organizations, landowners and  
116 operators. Said baseline, goal and plan shall be integrated into the inventory, baseline  
117 assessment, plan and reporting requirements pursuant to this chapter, and shall be consistent with  
118 state climate change adaptation and resiliency policies.

119         The secretary shall provide the plan to the senate and house committees on ways and  
120 means and the joint committee on environment, natural resources and agriculture not later than  
121 December 31, 2021 and every fifth year thereafter.

SECTION 10A. Section 1 of chapter 23M is hereby amended by striking out the words “or retrofitting”, in lines 16 and 17, and inserting in place thereof the following:- , retrofitting or qualifying new construction

SECTION 11. Chapter 23J of the General Laws is hereby amended by adding the following section:-

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 minority-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.

(b) The department of public utilities shall annually transfer funds collected pursuant section 19 of chapter 25 to the center for the purposes of implementing the clean energy equity workforce and market development program, provided, that the department shall transfer no less than \$12,000,000 no later than December 31 each year. Such transfer shall not reduce low-income program funds allocated pursuant to subsection (c) of section 19 of said chapter 25.

SECTION 12. Section 19 of chapter 25 of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by adding the following subsection:-

(d) Notwithstanding any provision of this section to the contrary, the department shall annually transfer, on or before December 31, no 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 low-income program funds allocated pursuant to subsection (c).

SECTION 13. Section 21 of said chapter 25, as so appearing is hereby amended by striking out, in lines 56 to 58, inclusive, the words “and (J) programs that result in customers switching to renewable energy sources or other clean energy technologies;” and inserting in place thereof the following words:- (J) programs that result in customers switching to renewable energy sources or other clean energy technologies; and (K) programs administered by the low-income weatherization and fuel assistance program network that result in whole home retrofits, including but not limited to weatherization and electrification for low-income and fixed-income households residing in (1) affordable housing units under the jurisdiction of the department of



housing and community development or (2) affordable housing units the department oversees funding for, which result in lower energy use or utilization in renewable energy;

SECTION 14. Said section 21 of said chapter 25, as so appearing, is hereby further amended by adding the following 3 subsections:-

(f) The department of housing and community development shall conduct an audit of the (1) affordable housing units under the jurisdiction of the department and (2) the affordable housing units the department oversees funding for in order to determine the need and outreach for participation in programs created pursuant to clause (K) of paragraph (2) of subsection (b) and make recommendations to energy efficiency advisory council on how to improve program access and increase program deployment to individuals residing in affordable housing units.

(g) There shall be a low-income whole home retrofit task force to develop recommendations for programs developed pursuant to clause (K) of paragraph (2) of subsection (b). The taskforce shall consist of 12 members as follows: the director of housing and community development, or a designee, who shall serve as chair; the commissioner of the department of energy resources, or a designee; and 10 members appointed by the governor, 1 of whom shall be a representative from the Low-Income Energy Affordability Network, 1 of whom shall a representative from the energy efficiency advisory council established in section 22, 1 of whom shall be from the Income-Eligible Best Practices Committee of the energy efficiency advisory council, 1 of whom shall be a representative from the Massachusetts Housing Finance Agency, 1 of whom shall be from the Greater Boston Labor Council,; 1 of whom shall be a representative from a non-profit with expertise in community organizing, affordable housing and labor issues, 1 of whom shall be from an organization with expertise in housing displacement prevention and

tenant rights, 1 of whom shall be an organization with expertise in enhancing the urban environment and public health, 1 of whom shall be from an organization with expertise in enhancing the rural environment and public health and 1 of whom shall be an organization with expertise in environmental justice and transit-oriented development. The task force shall submit recommendations to the energy efficiency advisory council to review every 3 years as part the council's review of energy efficiency investment plans under this section.

(h) Funds may be expended to cover up to the full cost of projects in clause (K) of paragraph (2) of subsection (b) that are located within environmental justice communities; provided, that the expenditure of funds for projects in said clause (K) of said paragraph (2) of said subsection (b) shall be in addition to and shall not reduce low-income program funds allocated in subsection (c) of section 19; and provided further that the annual household income of such households is not more than 80 per cent of statewide median income, as determined by the low-income weatherization and fuel assistance program network.

SECTION 14A. Subsection (a) of section 11F of 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; (4) an additional 3 per cent of sales each year thereafter until December 31, 2029; and (5).

SECTION 15. Chapter 25A of the General Laws, as so appearing, is hereby 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) biomass fuel; (10) wind energy; and (11) 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 GHG 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 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).

(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 act, 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

250 such deficiency, escalated annually by the Consumer Price Index, but in no event shall said ACP  
251 exceed \$0.010 per kilowatt hour. Such Municipal Lighting Plant ACP shall be deposited into a  
252 fund that shall be maintained and administered by the municipal light plant and such fund shall  
253 be used by the municipal light plant to fund greenhouse gas emissions reduction and related  
254 programs in its service territory.

255 SECTION 15A. Section 93 of chapter 143, as so appearing, is hereby amended by  
256 striking out, in line 6, the word “eleven” and inserting in place thereof the following:- 15.

257 SECTION 15B. Said section 93 of chapter 143 is hereby further amended by striking out,  
258 in lines 8 and 9, the words “both of whom shall serve” and inserting in place thereof following  
259 words:-one of whom shall be the commissioner of the department of energy resources, or their  
260 designee, all of whom who shall serve”.

261 SECTION 15C. Said section 93 of said chapter 143, as so appearing, is hereby further  
262 amended by striking out, in line 9 , the word “nine” and inserting in place thereof the following  
263 figure:- 12.

264 SECTION 15D. Said section 93 of said chapter 143, as so appearing, is hereby further  
265 amended by inserting after the word “department”, in line17 , the following words:- , one of  
266 whom shall be an expert in commercial building energy efficiency, one of whom shall be an  
267 expert in residential building energy efficiency, one of whom shall be an expert in advanced  
268 building technology,.

269 SECTION 15E. Said section 93 of chapter 143 is hereby further amended by inserting  
270 after the word “reappointment”, in lines 26 and 27, the following words:- for a second term, but  
271 shall not serve more than 10 total years.

SECTION 15F. Said section 93 of chapter 143 is hereby further amended by inserting after the word “years”, in line 37, the following words:- or more than 4 years total.

SECTION 15G. Section 5 of chapter 59 of the General Laws, as so appearing, is hereby amended by striking out clause Forty-fifth and inserting in place thereof the following clause:-

Forty-fifth, Any solar or wind powered system that is capable of producing not more than 125 per cent of the annual energy needs of the residential real property upon which it is located.

Any other solar or wind powered system capable of producing energy shall be taxable unless the owner has executed an agreement for a payment in lieu of taxes with the city or town where the system is located. The chief executive officer, as defined in section 7 of chapter 4, of a city or town may execute any such agreement for a payment in lieu of taxes with the owner of a solar or wind powered system in the municipality where the solar or wind powered system is located.

Unless otherwise provided by such agreement, (1) a notice of the payment in lieu of taxes owed for each fiscal year shall be mailed to the owner and due on the dates by which a tax assessed under this chapter would be payable without interest; (2) all provisions of law regarding billing and collecting a tax assessed under this chapter shall apply to the payment in lieu of taxes, including the payment of interest; and (3) upon issuance of the notice, the owner shall have the remedies provided by section 59 and section 64 and all other applicable provisions of law for the abatement and appeal of taxes upon real estate.

Any exemption pursuant to this clause shall be allowed for a period of not more than 20 years from the date of installation of the system; provided, however, that no exemption shall be allowed for any year within that period where the solar or wind powered system is not capable of

producing energy as required by this clause. Each owner shall annually, on or before March 1, make a declaration under oath to the assessors regarding the system and power generated for the previous calendar year. This clause shall not apply to projects developed pursuant to section 1A of chapter 164.

SECTION 15H. Section 1A of chapter 164 of the General Laws, as so appearing, is hereby amended by adding a new 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 therein, 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 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 of chapter 164, 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 communities, 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 to the commonwealth, or both in combination, 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: (1) provide the criteria applied in reviewing the proposal; (2) provide the evidence provided in support of the proposal and relied



on by the department in making its decision; and (3) 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.

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

SECTION 15I. Section 5 of chapter 59 of the General Laws, as so appearing is hereby amended by striking out, in line 13, the words "or Forty-fifth" and inserting in place thereof the following words:- , Forty-fifth or Forty-fifth B.

SECTION 15J. 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, which shall include contiguous or non-contiguous real property owned or leased by the owner. Any other qualified fuel cell powered system shall be exempt provided that the owner has made to the city or town where the system is located a payment in lieu of taxes. A city or town, acting through the board or officer authorized by its legislative body, may execute an agreement for the payment in lieu of taxes with the owner of a qualified fuel cell powered system in the municipality where the qualified fuel cell powered system is located. Unless otherwise provided by such agreement, (1) a notice of the payment in lieu of tax owed for each fiscal year shall be mailed to the owner and due on the dates by which a tax assessed under this chapter would be payable without interest; (2) all

provisions of law regarding billing and collecting a tax assessed under this chapter shall apply to the payment in lieu of taxes, including the payment of interest; and (3) upon issuance of the notice, the owner shall have the remedies provided by section 59, section 64 and all other applicable provisions of law for the abatement and appeal of taxes upon real estate. An exemption under this clause shall be allowed only for a period of 20 years from the date of completion of the construction of the qualified fuel cell powered system; provided, however, that no exemption shall be allowed for any year within that period when the qualified fuel cell powered system is not capable of producing energy as required by this clause. Each owner shall annually, on or before March 1, make a declaration under oath to the assessors regarding the system and power generated for the previous calendar year. This clause shall not apply to projects developed under section 1A of chapter 164.

For the purposes of this clause, “qualified fuel cell powered system” shall mean an integrated system comprised of a fuel cell stack assembly and associated components that utilizes and converts natural gas or renewable fuels into electricity 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.

SECTION 15K. Subsection (b) of section 38H of said chapter 59, as so appearing, is hereby amended by inserting after the first sentence the following sentence:- For purposes of this subsection, a generation facility shall not include a facility powered by a qualified fuel cell powered system, as defined in clause Forty-fifth B of section 5, to generate electricity.

SECTION 15L. Section 2 of chapter 25B of the General Laws, as appearing in the 2016 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 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. A commercial hot-food holding cabinet shall not include heated glass merchandizing cabinets, drawer warmers or cook-and-hold appliances.

“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. Heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel (electric fryers) or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid (gas fryers).

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

403           “Commercial steam cooker,” also known as “compartment steamer,” a device with one or  
404 more food-steaming compartments in which the energy in the steam is transferred to the food by  
405 direct contact. Models may include countertop models, wall-mounted models, and floor models  
406 mounted on a stand, pedestal, or cabinet-style base.

407           SECTION 15M. Said section 2 of said chapter 25B, as so appearing, is hereby further  
408 amended by inserting after the definition of “Compensation” the following 3 definitions:-

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

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

413           “Electric vehicle supply equipment” means the conductors, including the ungrounded,  
414 grounded, and equipment grounding conductors, the electric vehicle connectors, attachment  
415 plugs, and all other fittings, devices, power outlets, or apparatuses installed specifically for the  
416 purpose of delivering energy from the premises wiring to the electric vehicle. Charging cords  
417 with NEMA 5-15P and NEMA 5-20P attachment plugs are considered electric vehicle supply  
418 equipment. Excludes conductors, connectors, and fittings that are part of a vehicle.

419           SECTION 15N. Said section 2 of said chapter 25B, as so appearing, is hereby further  
420 amended by striking out the definition of “High-intensity discharge lamp”.

421           SECTION 15O. Said section 2 of said chapter 25B, as so appearing, is hereby further  
422 amended by inserting after the definition of “Electricity Ratio (ER)” the following 2 definitions:-

423 “Faucet”, a lavatory faucet, kitchen faucet, metering faucet, public lavatory faucet, or  
424 replacement aerator for a lavatory or kitchen faucet.

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

426 SECTION 15P. Said section 2 of said chapter 25B, as so appearing, is hereby further  
427 amended by inserting after the definition of “F96T12 Lamp” the following 5 definitions:-

428 “General service lamp” has the same meaning as set forth in 10 CFR 430.2.

429 “State-regulated general service lamp” includes the following:

430 (1) Shatter-resistant incandescent lamps, 3-way incandescent lamps and high lumen  
431 output incandescent lamps rated at more than 2600 lumens or, in the case of a modified spectrum  
432 lamp, more than 1950 lumens, and less than or equal to 3,300 lumens.

433 (2) Incandescent reflector lamps that are:

434 (a) ER30, BR30, BR40, or ER40 lamps rated at 50 Watts or less;

435 (b) BR30, BR40, or ER40 lamps rated at 65 watts;

436 (c) R20 lamps rated at 45 watts or less.

437 (3) Incandescent lamps that are:”

438 (a) T shape lamps rated at  $\leq 40$  Watts or  $\geq 10$  inches in length;

439 (b) B, BA, CA, F, G-16½, G-25, G-30 and S shape lamps;

440 (c) M-14 lamps rated at  $\leq 40$  Watts.

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

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

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

447           SECTION 15Q. Said section 2 of said chapter 25B, as so appearing, is hereby further  
448 amended by inserting after the definition of “New appliance” the following 4 definitions:-

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

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

452           “Plumbing fixture”, an exchangeable device, which connects to a plumbing system to  
453 deliver and drain away water and waste.

454           “Portable electric spa”, a factory-built electric spa or hot tub which may or may not  
455 include any combination of integral controls, water heating or water circulating equipment.

456           SECTION 15R. Said section 2 of said chapter 25B, as so appearing, is hereby further  
457 amended by inserting after the definition of “Probe-start metal halide ballast” the following  
458 definition:-

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

SECTION 15S. 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:-

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

SECTION 15T. 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:-

“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.

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

SECTION 15U. 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 2 definitions:-

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

“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.

SECTION 15V. 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:-

“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.

SECTION 15W. 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:-

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

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

“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.

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

SECTION 15X. 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:-

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

SECTION 15Y. Section 3 of said chapter 25B, as so appearing, is hereby amended by inserting after clause (j) the following clauses:-

(k) commercial hot-food holding cabinets.



- 501 (l) computers and computer monitors.
- 502 (m) state-regulated general service lamps.
- 503 (n) high CRI fluorescent lamps.
- 504 (o) plumbing fittings.
- 505 (p) plumbing fixtures.
- 506 (q) portable electric spas.
- 507 (r) water coolers.
- 508 (s) residential ventilating fans
- 509 (t) commercial ovens
- 510 (u) commercial dishwashers
- 511 (v) commercial fryers
- 512 (w) commercial steam cookers
- 513 (x) spray sprinkler bodies
- 514 (y) electric vehicle supply equipment

515 SECTION 15Z. Section 5 of said chapter 25B, as so appearing, is hereby amended by  
516 striking out the words, in line 24, “clauses (f) to (s)” and inserting in place thereof the following  
517 words:- clauses (f) to (y).

SECTION 15AA. The third paragraph of said section 5 of said chapter 25B, as so appearing, is hereby amended by adding after clause (5) the following 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 date of enactment of this Act, as measured in accordance with test methods prescribed in section 1604 of those regulations.

1) The rules shall define “computer” and “computer monitor” to have the same meaning as set forth in 20 C.C.R. § 1602(v).

2) The referenced portions of the C.C.R. shall be those adopted on or before the effective date of this act. However, the commissioner shall have authority to amend the rules 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 C.C.R.

(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: 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); 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; and 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]);

(b) 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; and

(c) 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;

(d) 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 (a)(ii)(A) through (a)(ii)(D) 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.

(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.

(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;

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

(c) 0.18 kilowatt-hours per day for hot and cold units—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 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 15BB. Said section 5 of said chapter 25B, as so appearing, is hereby further amended by inserting after the fourth paragraph the following paragraph:-

On or after January 1, 2022, 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 may be sold or offered for sale, lease, or rent in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to Section 16.

a) On or after the date 12 months after enactment of this ACT, no state-regulated general service lamp may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards provided in Section 16.

SECTION 15CC. Section 9 of said chapter 25B, as so appearing, is hereby amended by inserting after the first paragraph the following paragraph:-

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

628 SECTION 15DD. Said chapter 82, as so appearing, is hereby amended by striking out  
629 section 40E, and inserting in place thereof the following section:-

630 Section 40E. Any person or company found by the department, after a hearing, to have  
631 violated any provision of sections 40A to 40E, inclusive, shall be fined not more than \$200,000;  
632 provided that nothing herein shall be construed to require the forfeiture of any penal sum by a  
633 residential property owner for the failure to pre-mark for an excavation on such person's  
634 residential property.

635 SECTION 15EE. Section 185 of chapter 149 of the General Laws, as so appearing, is  
636 hereby amended by inserting, after the definition of "public body" the following definition:-

637 (3½) "Public utility employer," a gas and electricity public utility provider.

638 SECTION 15FF. Said section 185 of said chapter 149, as so appearing, is hereby further  
639 amended by inserting in lines 4, 20, 24, 29, 32 to 33, 33, 42, 43, 57, 61, 79, 84, 88, 89, 97, 99, and  
640 103 after the word "employer" in each instance, thereof the following:- or public utility  
641 employer.

642           SECTION 15GG. Said section 185 of said chapter 149, as so appearing, is hereby further  
643 amended by inserting in lines 33 to 34 and 44 after the word “relationship,” in each instance  
644 thereof the following:- including private contractors hired to perform work customarily  
645 performed by employees of public utility employers,.

646           SECTION 15HH. Section 1E of chapter 164 of the General Laws, as so appearing, is  
647 hereby amended in line 12 by inserting after the word “levels” the following:- , public safety  
648 measures,.

649           SECTION 15II. Section 1F of said chapter 164, as so appearing, is hereby amended by  
650 adding the following:-

651           (h) The department shall ensure that all written complaints under this section received  
652 from customers and the public regarding gas providers are investigated and a response to the  
653 complainant provided in a timely manner. The department shall establish a publicly accessible  
654 database of all complaints received, noting the category of complaint, the date it was received,  
655 the steps taken to address the complaint and that date it was resolved.

656           SECTION 15JJ. Section 1J of chapter 164 of the General Laws, as so appearing, is  
657 hereby amended by striking out, in line 5, the figure "250,000" and inserting in place thereof the  
658 following figure:- 500,000.

659           SECTION 15KK. Said section 1J of said chapter 164, as so appearing, is hereby further  
660 amended by striking out, in line 8, the figure "20,000,000" and inserting in place thereof the  
661 following figure:-50,000,000.



SECTION 15LL. 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 sentence shall be doubled in the event that the department determines that the violator has engaged in one or more similar violations in the three years preceding the violation. A separate violation occurs for each day the violation continues.

SECTION 15MM. Said Chapter 164 of the General Laws, as so appearing, is hereby amended by inserting after section 115A, the following 3 sections:

Section 115B. The department shall promulgate regulations establishing: (1) inspection and reporting requirements for the inspection of pipe, including gas company service lines connected to an inside meter from the pipeline, and (2) notice to occupants of the inspection process and any findings resulting therefrom, and (3) hazard repair and replacement requirements.

Section 115C. Every gas piping system shall be constructed, operated and maintained in compliance with federal pipeline safety standards pursuant to 49 CFR 192. Notwithstanding any general or special law to the contrary, the department may establish pipeline safety standards that exceed those set forth in 49 CFR 192. In establishing such standards, the department may consider recommended practices issued by industry or non-profit organizations.

Section 115D. The department shall promulgate regulations for improving emergency preparedness and response during emergency situations concerning the transportation or distribution of gas. Regulations shall address communication and coordination between the commonwealth, municipalities and other governmental entities.

SECTION 15NN. Section 62 of chapter 30 of the General Laws, 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, 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

705 statewide annual median household income; (ii) minorities comprise 40 per cent or more of the  
706 population; (iii) 25 per cent or more of households lack English language proficiency; or (iv)  
707 minorities comprise 25 per cent or more of the population and the annual median household  
708 income of the municipality in which the neighborhood is located does not exceed 150 per cent of  
709 the statewide annual median household income; provided, however, that for a neighborhood that  
710 does not meet said criteria, but a geographic portion of that neighborhood meets at least  
711 1 criterion, the secretary may designate that geographic portion as an environmental justice  
712 population upon the petition of at least 10 residents of the geographic portion of that  
713 neighborhood meeting any such criteria. The secretary may determine that a neighborhood,  
714 including any geographic portion, shall not be designated an environmental justice population  
715 upon finding the annual median household income of that neighborhood is greater than 125 per  
716 cent of the statewide median household income; a majority of persons age 25 and older in that  
717 neighborhood have a college education; the neighborhood does not bear an unfair burden of  
718 environmental pollution; and has more than limited access to natural resources, including open  
719 spaces and water resources, playgrounds and other constructed outdoor recreational facilities and  
720 venues.

721 “Environmental justice principles”, principles that support protection from environmental  
722 pollution and the ability to live in and enjoy a clean and healthy environment, regardless of race,  
723 color, income, class, handicap, gender identity, sexual orientation, national origin, ethnicity or  
724 ancestry, religious belief or English language proficiency., which includes: (i) the meaningful  
725 involvement of all people with respect to the development, implementation and enforcement of  
726 environmental laws, regulations and policies, including climate change policies; and (ii) the  
727 equitable distribution of energy and environmental benefits and environmental burdens.

"Neighborhood," a census block group as defined by the U.S. 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 15OO. Section 62B of said chapter 30, as so appearing, is hereby amended by striking out the first sentence of the third paragraph and inserting, in place thereof, the following sentence:-

An environmental impact report shall contain 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; studies to evaluate said impacts; all measures being utilized to minimize any anticipated environment and public health damage; and any adverse short-term and long-term environmental and public health consequences that cannot be avoided should the project be undertaken.

SECTION 15PP. 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 that is not insignificant 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 that is not insignificant 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,

750 industrial, commercial, state, or municipal operation or project that has damaged the  
751 environment. The required assessment shall conform to the standards and guidelines established  
752 by the secretary. If the assessment indicates an environmental justice population is subject to an  
753 existing unfair or inequitable environmental burden or related health consequence the report shall  
754 identify any: (i) environmental and public health impact from the proposed project that would  
755 likely result in a disproportionate adverse effect on such population, and (ii) potential impact or  
756 consequence from the proposed project that would increase or reduce the effects of climate  
757 change on the environmental justice population. The secretary may require that an assessment be  
758 performed at any stage of the review process.

759         SECTION 15QQ. Section 62E of said chapter 30, as so appearing, is hereby amended by  
760 adding the following paragraph:-

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

766         SECTION 15RR. Chapter 30 of the General Laws is hereby amended by adding after  
767 section 62I the following 2 sections:-

768         Section 62J. To enable the public to assess the impact of proposed projects that affect  
769 their environment, health and safety through the project review process established under  
770 sections 61 through 62J, inclusive, the secretary shall provide opportunities for meaningful  
771 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 is significant and 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) require public meetings be held in accessible locations that are near public transportation; (iv) provide appropriate information about the project review procedure for the proposed project; and (vi) where feasible, establish 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 non-significant projects, 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

794 quality then the distance from such project shall be increased to within 5 miles of an  
795 environmental justice population.

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

800 To further the environmental justice principles the secretary shall direct its agencies,  
801 including the departments, divisions, boards and offices under the secretary's control and  
802 authority, to consider the environmental justice principles in making any policy, determination or  
803 taking any other action related to a project review, or in undertaking any project, under said  
804 sections and related regulations which is likely to affect environmental justice populations.

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

808 Section 62L. There shall be an environmental justice council to advise and provide  
809 recommendations to the secretary of energy and environmental affairs on relevant policies and  
810 standards to achieve the environmental justice principles. The council shall consist of at least 9,  
811 but not more than 15 fifteen members appointed by the governor, who shall designate a chair.  
812 Members may be removed without cause, by the governor. All members shall serve without  
813 compensation.

814           The secretary of energy and environmental affairs shall consult with the environmental  
815 justice council before making any substantial adoptions, revisions or amendments to any  
816 regulation related to the definition of environmental justice population as defined in section 62.

817           The environmental justice council shall conduct a comprehensive analysis by no later  
818 than July 31, 2022 and thereafter, every fifth year, to ensure the definition of environmental  
819 justice population in section 62 achieves the objectives of the environmental justice principles.  
820 The analysis shall include, but not be limited to, an evaluation of this definition as compared to  
821 the demographics of environmental justice populations in the commonwealth. As part of the  
822 analysis, said council shall provide advice and make recommendations to the secretary on any  
823 necessary changes to the percentage thresholds included in this definition and any related  
824 regulation. The secretary shall consider the recommendations of the council regarding any  
825 proposed changes to the percentage thresholds under this definition, provided however, such  
826 changes are needed to achieve and promote the environmental justice principles as defined under  
827 section 61. Proposed regulations shall be adopted only after the approval of the council by a  
828 majority vote in the affirmative of those members so voting.

829           The environmental justice council may recommend and provide advice to the secretary  
830 on proposed substantial legislative or regulatory changes related to this definition at any time  
831 prior to conducting a comprehensive analysis.

832           SECTION 16. Section 139 of chapter 164 of the General Laws, as appearing in the 2018  
833 Official Edition, is hereby amended by striking out in lines 60 through 64, inclusive, the words  
834 “A solar net metering facility may designate customers of the same distribution company to  
835 which the solar net metering facility is interconnected and that are located in the same ISO-NE



load zone to receive such credits in amounts attributed by the solar net metering facility.” and inserting in place thereof the following words:- 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 17. 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 non-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 17A. Section 144 of said chapter 164, as so appearing, is hereby amended by inserting the following subsections:

(g) Upon the undertaking of any planned project involving excavation for purposes of performing maintenance on or construction involving gas mains or services by gas company employees, or any blasting work, the gas company shall ensure that employees first locate, identify and mark all gas gates and valves, and verify that all are cleared, operational and accessible in clear sight at ground level in advance of any excavation; and that said gas gates and valves are left cleared and operational following any such project.

(h) A gas company shall ensure that any shut off valve in the significant project area has a gate box installed upon it by its employees to ensure continued public safety.

SECTION 17B. 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:- 3,600.

SECTION 17C. The fifth sentence of said subsection (b) of said section 83C of said chapter 169, as amended by chapter 48 of the acts of 2019, is hereby further amended by striking out the figure “24”, as appearing in section 12 of chapter 188 of the acts of 2016, and inserting in place thereof the following figure:- 18.

SECTION 17D. 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, is hereby further amended by inserting, after the word “resources”, the following words:- and the executive office of housing and economic development.

SECTION 17E. Chapter 164 of the General Laws is hereby amended by striking out the first sentence of paragraph (3) of subsection (b) of section 144, as so appearing, and inserting in its place the following:

(3) A Grade 2 leak shall be a leak that is recognized as non-hazardous to persons or property at the time of detection, but justifies scheduled repair based on probable future hazard. The gas company shall repair Grade 2 leaks or replace the main within 6 months from the date the leak was classified; provided, however, that said repair or replacement may take place later than 6 months from the date the leak is classified, but no later than 12 months from the date the

879 leak is classified, if any required permits for such repair or replacement are temporarily withheld  
880 consistent with a seasonal moratorium.

881 SECTION 17F. Said section 144 of said chapter 164, as so appearing, is hereby amended  
882 by inserting after subsection (g), inserted by amendment 28, the following 3 subsections:-

883 (h) Each distribution company shall maintain an accurate and timely record of any Grade  
884 3 leaks that, upon re-inspection, are upgraded to a Grade 1 or 2 leak. The department shall  
885 establish a service quality metric for the same, and each distribution company shall report any  
886 upgrades of Grade 3 leaks to the department on a monthly basis.

887 (i) The department shall promulgate regulations establishing requirements for the  
888 maintenance, timely updating, accuracy, and security of gas distribution company maps and  
889 records.

890 (j) Disruptions in the provision of electronic data, including but not limited to, maps and  
891 records relevant to inspections, maintenance, repairs, and construction to its in-house workforce  
892 and contractors, lasting more than 30 minutes to field personnel and field contractors shall be  
893 incorporated as a metric in the department's service quality indicators for local distribution  
894 companies.

895 SECTION 17G. Section 145 of said chapter 164, as so appearing, is hereby amended by  
896 striking out subsection (b) and inserting in place thereof the following subsection:-

897 (b) A gas company shall file with the department a plan to address aging or leaking  
898 natural gas infrastructure within the commonwealth and the leak rate on the gas company's  
899 natural gas infrastructure in the interest of public safety and reducing lost and unaccounted for

900 natural gas through a reduction in natural gas system leaks. Each company's gas infrastructure  
901 plan shall include interim targets for the department's review. The department shall review these  
902 interim targets to ensure each gas company is meeting the appropriate pace to reduce the leak  
903 rate on and to replace the gas company's natural gas infrastructure in a safe and timely manner.  
904 The interim targets shall be for periods of not to exceed five years. The gas companies shall  
905 incorporate these interim targets into timelines for removing all leak-prone infrastructure filed  
906 pursuant to subsection(c) and may update them based on overall progress. The department may  
907 levy a penalty against any gas company that fails to meet its interim target in an amount up to  
908 and including the equivalent of 2.5 per cent of such gas company's transmission and distribution  
909 service revenues for the previous calendar year.

910 SECTION 17H. Section 145 of chapter 164 of the General Laws, as so appearing, is  
911 hereby amended in line 33 by striking the words “and (vi) any other information the department  
912 considers necessary to evaluate the plan.”, and inserting in place thereof - (vi) the relocations of a  
913 meter located inside of a structure to the outside of said structure for the purpose of improving  
914 public safety; and (vii) any other information the department considers necessary to evaluate the  
915 plan.

916 SECTION 17I. Subsection (c) of said section 145 of said chapter 164, as so appearing, is  
917 hereby amended by striking out the first sentence of the second paragraph and inserting in place  
918 thereof the following sentence:-

919 As part of each plan filed under this section, a gas company shall include a timeline for  
920 removing all leak-prone infrastructure on an accelerated basis specifying an annual replacement  
921 pace and program end date with a target end date of either (i) not more than 20 years from the

922 filing of a gas company's initial plan, or (ii) a reasonable target end date considering the  
923 allowable recovery cap established pursuant to subsection (f).

924 SECTION 18. Section 16 of chapter 298 of the acts of 2008 is hereby amended by  
925 striking out the words “, and shall expire on December 31, 2020”.

926 SECTION 19. Notwithstanding any general or special law, rule or regulation to the  
927 contrary, when initiating a regulatory process for any new solar incentive program developed by  
928 the department of energy resources pursuant to section 11 of chapter 75 of the acts of 2016 or  
929 any other general or special law or other authority, the department shall to the greatest extent  
930 feasible: (1) provide equitable access to all Massachusetts ratepayers, including low-income  
931 ratepayers; (2) address solar energy access and affordability for low-income communities; (3)  
932 include effective consumer protection provisions; and (4) ensure that information about the  
933 program and its benefits are provided in a readily accessible manner to all ratepayers, including  
934 non-English speaking communities. The department shall consult with a diverse range of  
935 stakeholders to inform the design of any such solar incentive program, including low-income  
936 ratepayers and organizations representing their interests.

937 SECTION 20. (a) The department of public utilities shall establish a future utility grid  
938 commission for the purpose of studying and making recommendations regarding the  
939 establishment of a long-term grid modernization plan to facilitate upgrades to the electric and gas  
940 distribution systems located in the commonwealth, including but not limited to: (i) infrastructure  
941 and system investments necessary to implement the state’s clean energy and climate change  
942 requirements; (ii) clean energy and energy storage deployment targets and incentive programs;  
943 (iii) the state’s clean energy and climate plans and emission reduction requirements set by

chapter 21N of the General Laws; and (iv) transitioning in the commonwealth from energy derived from fossil fuels to energy derived from clean, non-emitting renewable sources, in order to reach net zero statewide greenhouse gas emissions by 2050.

(b) The commission shall review and incorporate department findings from the department's regulatory processes regarding short to medium-term grid modernization planning, including utilization of consensus filings and findings related to: (i) cost allocation; (ii) a timeline enforcement mechanism; (iii) interconnection of renewable energy and energy storage systems and a standard interconnection process; (iv) affected system operator studies; (v) state and federal jurisdiction governing the electric distribution and transmission system; (vi) the management of high volumes of applications to incentive programs for distributed energy generation; (vii) the interconnection process for distributed generation facilities interconnecting to the distribution and transmission system; (viii) and advanced metering requirements.

(c) The commission shall examine whether the department should implement a system planning process for electric and gas distribution systems that shall: (i) create a technical foundation to understand the physical and electrical state of current grid infrastructure including existing and planned interconnection projects as well as future scenarios; (ii) analyze the evaluation and approval process for infrastructure investment proposals from distribution companies that meet the department's requirements to maintain the safety and reliability of the distribution system, minimize costs to ratepayers, and comply with the state's clean energy and climate change requirements outlined in subsection (a); (iii) determine a method for dispute resolution for interconnecting distributed generation facilities to the electric distribution system conducted by the department; (iv) determine an appropriate cost recovery mechanism for electric and gas distribution companies to deploy necessary upgrades approved by the department; (v)

967 determine an appropriate penalty structure that applies to the interconnection process to ensure  
968 the timely deployment of distributed generation facilities; and (vi) examine opportunities to  
969 increase deployment of energy storage systems that facilitate the state's ability to comply with its  
970 clean energy and climate change requirements.

971 (d) The commission shall consist of 21 members or their designees: the secretary of  
972 energy and environmental affairs or a designee, who shall serve as chair; the chair of the  
973 department of public utilities or a designee; the commissioner of the department of energy  
974 resources or a designee; the commissioner of the department of environmental protection or a  
975 designee; the chief executive officer of the Massachusetts clean energy technology center  
976 established pursuant to section 2 of chapter 23J of the General Laws or a designee; the attorney  
977 general in the role of the commonwealth's ratepayer advocate or a designee; and 15 members  
978 who shall be appointed by the chair: 1 of whom shall be a representative from the distributed  
979 energy generation industry; 1 of whom shall be a representative from the energy storage  
980 industry; 1 of whom shall be a representative from the offshore wind electric generation industry;  
981 1 of whom shall be a representative from a higher education institution with expertise in utility  
982 engineering; 3 of whom shall be a representative from each of the electric distribution companies  
983 located in the commonwealth; 1 of whom shall be a municipal official to be nominated by the  
984 Massachusetts Municipal Association, Inc.; 3 of whom shall be representatives from  
985 environmental organizations; 1 of whom shall be a representative from the business community;  
986 1 of whom shall be a representative from an organization that serves low-income ratepayers; 1 of  
987 whom shall be a representative from a regional planning agency; and 1 of whom shall be a  
988 representative from the executive office of energy and environmental affairs' global warming  
989 solutions act implementation advisory committee. The commission may request from all state

990 agencies such information and assistance as the commission may require and may retain  
991 consultants as necessary.

992 (e) The commission shall convene its first meeting on or before January 31, 2021. The  
993 commission shall meet regularly and provide at least 3 opportunities for public comment in  
994 different geographical areas of the state. The commission shall file its recommendations,  
995 including drafts of legislation, with the clerks of the house of representatives and the senate and  
996 with the chairs of the joint committee on telecommunications, utilities and energy not later than  
997 November 1, 2021.

998 SECTION 20A. There shall be a land use commission to develop recommendations on  
999 land use restrictions within the Solar Massachusetts Renewable Target (SMART) Program. The  
1000 commission shall develop recommendations on developing land use policies to encourage  
1001 conservation of open space, farm and forestlands in a responsible manner. The commission shall  
1002 review the negative impacts of the SMART program on the development of solar facilities in the  
1003 commonwealth and consider the economic viability of farmlands, forest management practices  
1004 and the balance of farm preservation through utilization of solar as an economic tool. The  
1005 commission shall also consider the social value of community solar projects and best practices  
1006 for carbon sequestration.

1007 The commission shall consist of 13 members appointed by the governor; the  
1008 commissioner of the department of energy resources or a designee, who shall serve as chair; the  
1009 executive director of the Massachusetts Municipal Association or a designee; the executive  
1010 director of the Massachusetts Farm Bureau or a designee; the executive director of the  
1011 Massachusetts Forest Alliance or a designee; the executive director of the Massachusetts



1012 Cranberry Growers Association or a designee; 1 member of an environmental organization; 1  
1013 member of a conservation group; 1 member from a business that develops solar facilities, 1  
1014 member of the community shared solar group; 1 member who is an owner of an active farm; 1  
1015 member with experience working with low-income communities on community shared solar  
1016 programs, 1 member of a local or regional land trust organization, and 1 member from the  
1017 Natural Heritage and Endangered Species Program.

1018 The department of energy resources shall provide assistance and shall staff the  
1019 commission meetings. The commission members shall serve without compensation. The  
1020 commission shall file a report with the house and senate committees on ways and means and the  
1021 joint committee on telecommunications, utilities and energy not later than July 1, 2021.

1022 SECTION 20B. The department of public utilities may, upon application of a gas  
1023 company, as defined in section 1 of chapter 164 of the General Laws, authorize 1 or more pilot  
1024 projects for the development of utility-scale renewable thermal energy, including non-carbon  
1025 emitting technologies for energy savings and energy storage. Such application shall be filed with  
1026 the department on or before January 1, 2023. The department may approve recovery of costs for  
1027 pilot projects situated in the commonwealth that demonstrate the costs and benefits of: (i) utility-  
1028 scale renewable thermal energy sources, systems or technologies capable of substituting for  
1029 fossil-based natural gas; or (ii) utility-scale renewable thermal energy replacements for, or  
1030 alternative uses of, infrastructure constructed originally to generate, transmit or distribute fossil-  
1031 based natural gas; provided, however, that such substitute renewable thermal energy sources,  
1032 systems or technologies, and such replacements or alternative uses, have a reasonable likelihood  
1033 of facilitating substantial reductions in greenhouse gas emissions that satisfy the mandates of  
1034 greenhouse gas reductions set forth in chapter 21N of the General Laws; and provided further,

1035 that the pilots shall not include the blending of other fuels with fossil-based natural gas. The  
1036 department may approve a pilot project in a gas system enhancement plan as replacement for  
1037 leak prone infrastructure submitted pursuant to section 145 of chapter 164. The department may  
1038 permit a gas company to bill for thermal energy developed by a pilot project. The department  
1039 shall ensure transparency and validity of the outcomes of the pilot projects through a third-party  
1040 evaluation and through reports by the department of energy resources. In determining whether to  
1041 approve a pilot project, the department shall consider the reasonableness of the size, scope and  
1042 scale of the pilot project and related budget and whether the benefits of the proposed pilot justify  
1043 the proposed cost to participating and non-participating customers; provided, however, that the  
1044 calculation of benefits shall include calculations of the social value of greenhouse gas emissions  
1045 reductions. The department may promulgate rules or regulations to implement this section.

1046 SECTION 20C. Not later than 6 months after the effective date of this act, the department  
1047 of energy resources shall publish a guide to assist cities and towns to develop programs that  
1048 allow residents unable to install off-street electric vehicle charging stations to install curbside  
1049 electric vehicle charging stations proximate to their residences.

1050 SECTION 20D. The secretary of energy and environmental affairs shall conduct and  
1051 publish the results of quantitative modeling and analysis of the commonwealth's direct and  
1052 indirect emissions, as defined in section 1 of chapter 21N of the General Laws, for any direct or  
1053 indirect emissions for which no such quantitative modeling and analysis exists as of December  
1054 31, 2021, and publish such results no later December 31, 2022.

1055 SECTION 20E. The department of energy resources, in consultation with the  
1056 Massachusetts clean energy center and the carbon reduction research center, shall study the

1057 feasibility of optimizing the deployment and utilization of both new and existing long-duration  
1058 energy storage systems in the commonwealth capable of absorbing energy, storing it for a period  
1059 of time and thereafter dispatching the energy for a minimum period of five hours or greater. The  
1060 goal of said systems would be to a) enhance the reliable delivery of electricity to Massachusetts  
1061 consumers; b) improve the reliability and integration of intermittent renewable energy or clean  
1062 energy generation; c) reduce carbon emissions; and d) minimize ratepayer costs. The study shall  
1063 determine the commercial availability of said systems, including performance under frequent  
1064 deployment, barriers to deployment or utilization, and incentives that could facilitate their  
1065 deployment or utilization. The department of energy resources shall submit recommendations to  
1066 the clerks of the house of representatives and senate and to the house and senate chairs of the  
1067 joint committee on telecommunications, utilities, and energy no later than March 1, 2021.

1068         SECTION 20F. The department of energy resources shall study the feasibility of ferry  
1069 operators located in the commonwealth to convert vessel fleets to electric and hybrid electric  
1070 ferries by 2050 to comply with the requirements of chapter 21N of the General Laws. The study  
1071 shall investigate: (i) the technology necessary to accomplish the transition to electric or hybrid  
1072 electric ferry service; (ii) the availability of such technology; (iii) costs and benefits of making  
1073 such transition, the analysis shall include but not be limited to the cost of negative externalities  
1074 associated with greenhouse gas emissions; (iv) the feasibility of ferry operators to make such  
1075 transition and any operational or infrastructure limitations to such transition; (v) the availability  
1076 of technical assistance or other private or public programs to facilitate the transition to electric or  
1077 hybrid electric ferry service and (vi) the operations of electric ferries already in service in Europe  
1078 and elsewhere in the world. The department shall make recommendations of a timeline for  
1079 Massachusetts ferry operators to transition to electric fleets to comply with the state emission

reduction goal of net zero greenhouse gas emissions by 2050. The department shall file its recommendations with the clerks of the house of representatives and the senate and the chairs of the joint committee on telecommunications, utilities and energy not later than July 1, 2021.

SECTION 20G. Not later than 6 months after the effective date of this act, the department of energy resources and department of transportation shall file a report with the joint committee on transportation identifying state routes, U.S. routes, and interstate highways in Massachusetts that are high priority for public electric vehicle charging station installation. Determinations of priority shall be based on locations with high levels of air pollution in close proximity to transportation infrastructure, locations in close proximity to environmental justice populations, high total traffic volume on the route, volume of trips on the route that exceed 50 miles, importance of the route for accessing employment centers, tourist attractions, and other frequent destinations, and other factors as detailed in the report. The report shall consider locations across the commonwealth, including within municipal light plant territories, and assess the benefit and potential cost savings to ratepayers for potential locations.

SECTION 20H. The department of public utilities shall establish rules and regulations 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 and provide all required documentation to meet certification requirements with the department on an annual basis.

SECTION 20I. Notwithstanding any general or special law to the contrary, the department of public utilities shall conduct, publish, and periodically update a report detailing the degree to which each gas piping system operator adhered to the department's safety

1102 standards, reviewing the efficacy of said standards in protecting the physical health and financial  
1103 prosperity of the commonwealth's residents, and analyzing recent advancements made in the  
1104 theory and practice of pipeline safety and operation. The report shall include policy  
1105 recommendations, including, but not limited to, legislation and regulations, that would enhance  
1106 the safety of gas piping systems by utilizing any theoretical or practical advancements in safety  
1107 analyzed within it. The department may conduct field audits of gas companies operating in the  
1108 Commonwealth to ensure compliance with all applicable statutes and regulations, and shall  
1109 include the results of any such audits in the study required under this section or any subsequent  
1110 updates to said study. The department shall publish the study no later than 1 year after the  
1111 effective date of this act and shall publish updates to the study not less than every 36 months.  
1112 Said study shall be submitted to the clerks of the house and senate, as well as to the joint  
1113 committee on telecommunications, utilities and energy.

1114           SECTION 20J. The secretary shall no later than 365 days after this act takes effect, adopt  
1115 regulations for the requirements, administration and enforcement of this act.

1116           SECTION 20K. Notwithstanding any general or special law to the contrary, the  
1117 department of energy resources and department of public utilities shall amend any rules,  
1118 regulations, and tariffs to permit the owner of any new solar facility, including any solar energy  
1119 generating source, that qualifies for programs pursuant to section 11F of chapter 25A of the  
1120 General Laws and application regulations that achieves commercial operation on or after January  
1121 1, 2021 to: (i) receive credits for any electricity generated by a solar facility that exceeds the  
1122 owner's usage during a billing period, with such credits to be credited to a solar facility owner's  
1123 customer account with the relevant distribution company, and carried forward from month to  
1124 month; (ii) designate customers of the same distribution company, regardless of which ISO-NE

1125 load zone the customers are located in, to receive such credits in amounts attributed by the solar  
1126 facility, with such credits applicable to any portion or all of a designated customer's electric bill;  
1127 and (iii) direct the distribution company to purchase all or a portion of any credits produced by a  
1128 solar facility at the rates provided for in the applicable statute, regulation, or tariff without  
1129 discount or penalty. This section shall not apply to solar net metering facilities.

1130           SECTION 21. The secretary of energy and environmental affairs shall adopt the interim  
1131 2030 and 2040 emissions limits pursuant to subsection (i) of section 4 of chapter 21N of the  
1132 General Laws no later than December 31, 2021.

1133           SECTION 22. The secretary of energy and environmental affairs shall issue the 2050  
1134 emissions reduction roadmap plan pursuant to subsection (j) of section 4 of chapter 21N of the  
1135 General Laws no later than December 31, 2022.

1136           SECTION 23. The secretary of energy and environmental affairs shall promulgate the  
1137 regulations required pursuant to subsection (k) of section 4 of chapter 21N of the General Laws  
1138 no later than December 31, 2023.

1139           SECTION 24. The secretary of energy and environmental affairs shall publish the results  
1140 of quantitative modeling and analysis of the commonwealth's energy economy and greenhouse  
1141 gas emissions required pursuant to section 12 of chapter 21N of the General Laws no later than  
1142 December 31, 2021.

1143           SECTION 25. Notwithstanding any general or special law to the contrary, the secretary  
1144 of energy and environmental affairs, in consultation with the commissioner of environmental  
1145 protection, shall make recommendations for increasing small businesses' access to energy  
1146 efficiency grants and programs. The recommendations shall, at a minimum, include: (i) proposed

1147 changes to existing programs to better aid small businesses with short-term leases in making  
1148 energy efficient improvements to existing properties; (ii) proposed changes to other existing  
1149 programs to suit the particular needs of small businesses; and (iii) proposals for new programs  
1150 specifically aimed at small businesses. The secretary shall file the recommendations as a report  
1151 with the house and senate chairs of the joint committee on telecommunications, utilities and  
1152 energy and the clerks of the house of representatives and the senate on or before January 15,  
1153 2022.

1154 SECTION 26. Clause Forty-fifth of section 5 of chapter 59 of the General Laws shall not  
1155 apply to solar and wind powered systems for which the owner has a signed agreement with the  
1156 city or town to make a payment in lieu of taxes under subsection (b) of section 38H of chapter 59  
1157 as of the effective date of this act.

1158 SECTION 27. Section 15G shall apply to taxes assessed for fiscal years beginning on or  
1159 after July 1, 2021.

1160 SECTION 28. The department of public utilities shall promulgate regulations pursuant to  
1161 section 115D of chapter 164 no later than December 31, 2021.

1162 SECTION 29. The department of public utilities shall promulgate and implement the  
1163 regulations required pursuant to subsection (i) of section 144 of chapter 164 by July 1, 2021.; and  
1164 by striking out the title and inserting in place thereof the following title: "An Act creating a 2050  
1165 roadmap to a clean and thriving commonwealth."