HOUSE . . . . . . No. 4912

The Commonwealth of Massachusetts


The committee on Ways and Means, to whom was referred the Senate Bill setting next-generation climate policy (Senate, No. 2500), reports recommending that the same ought to pass with amendments striking out all after the enacting clause and inserting in place thereof the text contained in House document numbered 4912; and by striking out the title and inserting in place thereof the following title: “An Act creating a 2050 roadmap to a clean and thriving commonwealth.”.

For the committee,

AARON MICHLEWITZ.
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
5 “Direct emissions”, emissions from sources that are owned or operated, in whole or in
6 part, by any person, entity or facility including, but not limited to, emissions from any
7 transportation vehicle, building, structure or residential, commercial, institutional, industrial or
8 manufacturing process.
9
10 SECTION 2. Said section 1 of said chapter 21N, as so appearing, is hereby further
11 amended by inserting after the definition of “Greenhouse gas emissions source” the following
12 definition:–
13
14 “Greenhouse gas-emitting priority”, matter that emits or is capable of emitting a
15 greenhouse gas when burned including, but not limited to, natural gas, petroleum, coal and any
16 solid, liquid or gaseous fuel derived therefrom or any other such matter as identified by the
17 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 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; and (xi)

recommendations for future policy action.

SECTION 10. Said chapter 21N is hereby further amended by adding the following 2

sections:-

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

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 and clean energy industries to: (i) certified minority-owned and women-owned small business enterprises; (ii) individuals residing within an environmental justice community; and (iii) workers displaced 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 11 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 9 members appointed by the governor, 1 of whom shall be a representative from the Low-Income Energy Affordability Network, 1 of whom shall be 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 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.

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

SECTION 16. Section 139 of chapter 164 of the General Laws, as appearing in the 2018 Official Edition, is hereby amended by striking out in lines 60 through 64, inclusive, the words “A solar net metering facility may designate customers of the same distribution company to 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 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; provided, that any credits that are in excess of its annual electricity consumption as calculated at the end of the calendar year shall be credited or paid out at the utility’s avoided cost rate.
SECTION 18. Section 16 of chapter 298 of the Acts of 2008 is hereby amended by striking out the following words: - “, and shall expire on December 31, 2020”.

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

SECTION 20. (a) The department of public utilities shall establish a future utility grid commission for the purpose of studying and making recommendations regarding the establishment of a long-term grid modernization plan to facilitate upgrades to the electric and gas distribution systems located in the commonwealth, including but not limited to: (i) infrastructure and system investments necessary to implement the state’s clean energy and climate change requirements; (ii) clean energy and energy storage deployment targets and incentive programs; and (iii) the state’s clean energy and climate plans and emission reduction requirements set by chapter 21N of the General Laws.
(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 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) determine an appropriate penalty structure that applies to the interconnection process to ensure the timely deployment of distributed generation facilities; and (vi) examine opportunities to increase deployment of energy storage systems that facilitate the state’s ability to comply with its clean energy and climate change requirements.
(d) The commission shall consist of 19 members or their designees: the secretary of energy and environmental affairs or a designee, who shall serve as chair; the commissioner of the department of public utilities or a designee; the commissioner of the department of energy resources or a designee; the commissioner of the department of environmental protection or a designee; the chief executive officer of the Massachusetts clean energy technology center established pursuant to section 2 of chapter 23J of the General Laws or a designee; the attorney general in the role of the commonwealth’s ratepayer advocate or a designee; and 13 members who shall be appointed by the chair: 1 of whom shall be a representative from the distributed energy generation industry; 1 of whom shall be a representative from the energy storage industry; 1 of whom shall be a representative from a higher education institution with expertise in utility engineering; 3 of whom shall be a representative from each of the electric distribution companies located in the commonwealth; 1 of whom shall be a municipal official to be nominated by the Massachusetts Municipal Association, Inc.; 3 of whom shall be representatives from environmental organizations; 1 of whom shall be a representative from the business community; 1 of whom shall be a representative from an organization that serves low-income ratepayers; and 1 of whom shall be a representative from the executive office of energy and environmental affairs’ global warming solutions act implementation advisory committee. The commission may request from all state agencies such information and assistance as the commission may require and may retain consultants as necessary.

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

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

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

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

SECTION 24. The secretary of energy and environmental affairs shall publish the results of quantitative modeling and analysis of the commonwealth’s energy economy and greenhouse gas emissions required pursuant to section 12 of chapter 21N of the General Laws no later than December 31, 2021.”; and by striking out the title and inserting in place thereof the following title: “An Act creating a 2050 roadmap to a clean and thriving commonwealth.”.