

SENATE No. 2819

The Commonwealth of Massachusetts

In the One Hundred and Ninety-Second General Court
(2021-2022)

SENATE, April 7, 2022.

The committee on Senate Ways and Means to whom was referred the House Bill advancing offshore wind and clean energy (House, No. 4524) (also based on Senate, Nos. 1333, 2130, 2145, 2150, 2180, 2192, 2197, 2203, 2220 and 2738); reports, recommending that the same ought to pass with an amendment striking out all after the enacting clause and inserting in place thereof the text of Senate document numbered 2819.

[Estimated fiscal impact of \$250,000,000].

For the committee,
Michael J. Rodrigues

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1 SECTION 1. Section 85 of chapter 6 of the General Laws, as appearing in the 2020
2 Official Edition, is hereby amended by striking out, in line 5, the words “or nuclear
3 transformation”.

4 SECTION 2. Chapter 6C of the General Laws is hereby amended by adding the
5 following section:-

6 Section 78. The department shall create an anonymized and aggregated data inventory of
7 motor vehicle types and locations. The department shall develop the data inventory in
8 consultation with at least 1 member organization of the Massachusetts Association of Regional
9 Planning Agencies. The database shall consist of data for the most recently available 12 months,
10 be updated annually, consist of data readily sortable by municipality and zip code and contain
11 the: (i) total number of passenger fossil fuel-powered vehicle registrations; (ii) total number of
12 passenger hybrid vehicle registrations; (iii) total number of passenger zero-emission vehicle
13 registrations; (iv) total number of commercial fossil fuel-powered vehicle registrations; (v) total
14 number of commercial hybrid vehicle registrations; (vi) total number of commercial zero-
15 emission vehicle registrations; (vii) total number of vehicle miles traveled by passenger fossil
16 fuel-powered vehicles over a defined 12-month period; (viii) total number of vehicle miles

traveled by passenger hybrid vehicles over a defined 12-month period; (ix) total number of vehicle miles traveled by passenger zero-emission vehicles over a defined 12-month period; (x) total number of vehicle miles traveled by commercial fossil fuel-powered vehicles over a defined 12-month period; (xi) total number of vehicle miles traveled by commercial hybrid vehicles over a defined 12-month period; and (xii) the total number of vehicle miles traveled by commercial zero-emission vehicles over a defined 12-month period.

Upon request, the department shall provide the data to a member organization of the Massachusetts Association of Regional Planning Agencies or a municipality to aid in the deployment of electric vehicles and related infrastructure.

SECTION 3. Section 1 of chapter 23J of the General Laws, as appearing in the 2020 Official Edition, is hereby amended by striking out the definitions of “Clean energy” and “Clean energy research” and inserting in place thereof the following 2 definitions:-

“Clean energy”, advanced and applied technologies that significantly reduce or eliminate the use of energy from non-renewable sources, including, but not limited to: (i) energy efficiency; (ii) demand response; (iii) energy conservation; or (iv) technologies powered, in whole or in part, by the sun, wind, water, geothermal energy, including networked geothermal and deep geothermal energy, hydrogen produced by non-fossil fuel sources and methods, alcohol, fuel cells, nuclear fusion or any other renewable, non-depletable or recyclable fuel; provided, however, that “clean energy” shall include an alternative energy generating source as defined in clauses (i) to (vi), inclusive, of subsection (a) of section 11F ½ of chapter 25A.

"Clean energy research", advanced and applied research in new clean energy technologies including: (i) solar photovoltaic; (ii) solar thermal; (iii) wind power; (iv) geothermal energy,

including networked geothermal and deep geothermal energy; (v) wave and tidal energy; (vi) advanced hydropower; (vii) energy transmission and distribution; (viii) energy storage; (ix) renewable biofuels, including ethanol, biodiesel and advanced biofuels; (x) renewable, biodegradable chemicals; (xi) advanced thermal-to-energy conversion; (xii) nuclear fusion; (xiii) hydrogen produced by non-fossil fuel sources and methods; (xiv) carbon capture and sequestration; (xv) energy monitoring; (xvi) green building materials; (xvii) energy efficiency; (xviii) energy-efficient lighting; (xix) gasification and conversion of gas to liquid fuels; (xx) industrial energy efficiency; (xxi) demand-side management; and (xxii) fuel cells; provided, however, that "clean energy research" shall not include advanced and applied research in coal, oil, natural gas or nuclear power other than nuclear fusion.

SECTION 4. Section 8 of said chapter 23J, as so appearing, is hereby amended by striking out the third sentence and inserting in place thereof the following sentence:-

The grants shall include matching grants to such public institutions of higher education and such vocational technical schools for the development of small-scale renewable clean energy generating sources, energy storage technologies, energy efficiency innovations and energy transmission and distribution innovations, including, but not limited to: (i) photovoltaic installations; (ii) wind energy; (iii) ocean thermal, wave or tidal energy; (iv) fuel cells; (v) hydrogen produced by non-fossil fuel sources and methods; (vi) landfill gas; (vii) natural flowing water and hydroelectric; (viii) low-emission advanced biomass power conversion technologies using biomass fuels including, but not limited to, wood, agricultural or food wastes; (ix) renewable biogas, biodiesel or organic refuse-derived fuel; (x) geothermal energy, including networked geothermal and deep geothermal energy; and (xi) nuclear fusion; provided, however, that the matching grants shall not be awarded for such development if it includes as sources coal,

oil or natural gas resources other than the sources enumerated here or nuclear power other than nuclear fusion.

SECTION 5. Section 9 of said chapter 23J is hereby amended by striking out, in line 118, as so appearing, the words “biomass thermal and” and inserting in place thereof the following words:- including networked geothermal and deep geothermal energy, and.

SECTION 6. Section 13 of said chapter 23J is hereby amended by striking out subsection (a), inserted by section 14 of said chapter 8, and inserting in place thereof the following subsection:-

(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 to: (i) certified minority-owned and women-owned small business enterprises; (ii) individuals residing within an environmental justice community; (iii) current and former workers from the fossil fuel industry; and (iv) any other business or community that is underrepresented in the clean energy workforce or clean energy industry. The program shall promote participation in the commonwealth’s energy efficiency, clean energy and clean heating and cooling industries and promote access to the benefits of clean energy, clean transportation, electrification, energy efficiency and reducing the energy burden. 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, individuals residing within an environmental justice community and any other business or community that is underrepresented in the clean energy

workforce or clean energy industry; (iii) provide grants and support to community-based organizations and organizations serving environmental justice communities to expand access to clean energy, clean transportation, building electrification and energy efficiency or reduce the energy burden in such communities; (iv) identify barriers to deployment of clean energy and energy storage resources to certified minority-owned and women-owned small business enterprises; (v) identify near-term deployment targets consistent with the state's clean energy and climate change requirements and award incentives to deploy such resources; and (vi) make recommendations to the general court for policies to promote employment growth and access to jobs in the clean energy industry.

SECTION 7. Said chapter 23J is hereby further amended by adding the following section:-

Section 15. (a) There shall be established and placed within the center a separate fund to be known as the Clean Energy Investment Fund to be administered by the center. The fund shall be credited with: (i) revenue from appropriations or other money authorized by the general court and specifically designated to be credited to the fund; (ii) interest earned on such revenue; and (iii) funds from public and private sources and other gifts, grants and donations for the establishment and expansion of workforce training and development initiatives to support the clean energy industry. All amounts credited to the fund shall be used solely for activities and expenditures consistent with the public purposes of the fund as set forth in subsection (b), including the ordinary and necessary expenses of administration and operation associated with the fund. Amounts credited to the fund shall not be subject to further appropriation and any money remaining in the fund at the end of a fiscal year shall not revert to the General Fund.

106 (b) The center shall make expenditures from the fund for the purposes of:

107 (i) advancing clean energy research and technologies to commonwealth-based investors,
108 entrepreneurs and institutions that are involved in the clean energy industry;

109 (ii) providing workforce development and technical training programs for public higher
110 education and vocational-technical education institutions;

111 (iii) developing a regional strategy for regional employment boards to support the
112 development of the clean energy industry; provided, however, that the regional employment
113 boards shall publish their findings as an addendum to their workforce development blueprints;

114 (iv) supporting infrastructure, including, but not limited to, port infrastructure,
115 development related to supporting the clean energy industry in the commonwealth;

116 (v) matching funds to secure future federal funding to support the clean energy industry
117 and clean energy research in the commonwealth;

118 (vi) supporting research and development in the clean energy industry, including, but not
119 limited to, the interrelationship between clean energy infrastructure and existing natural habitats,
120 ecosystems and dependent species;

121 (vii) supporting improved outcomes from the development of clean energy resources;

122 (viii) supporting the long-term coexistence and sustainability of the fishing and clean
123 energy industries; and

(ix) providing for the necessary and reasonable administrative and personnel costs of the center or of the executive office of energy and environmental affairs related to administering the fund.

(c) The fund's activity shall be included in the annual report required by the second paragraph of section 5.

SECTION 8. Said section 21 of said chapter 25 is hereby further amended by inserting after the word "technologies", in line 58, as so appearing, the following words:- including, but not limited to, programs that combine efficiency and electrification with renewable generation and storage.

SECTION 9. Said section 21 of said chapter 25 is hereby further amended by inserting after the word "plan", in line 63, as so appearing, the following words:- , including separate incentives for their performance on specific metrics.

SECTION 10. Said section 21 of said chapter 25 is hereby further amended by striking out the word "and", inserted by section 24 of chapter 8 of the acts of 2021, the last time it appears.

SECTION 11. The first sentence of paragraph (2) of subsection (b) of said section 21 of said chapter 25, as most recently amended by said section 24 of said chapter 8, is hereby further amended by adding the following clause:- ; and (xi) no spending on incentives, programs or support for systems, equipment, workforce development or training as it relates to new fossil fuel equipment unless such spending is for a backup or supplemental thermal energy source for a heat pump.

SECTION 12. Said section 21 of said chapter 25 is hereby further amended by inserting after the word “bodies,”, in line 75, as appearing in the 2020 Official Edition, the following words:- maximizing net climate, environmental and equity impacts.

SECTION 13. Said section 21 of said chapter 25 is hereby further amended by striking out, in line 80, as so appearing, the word “with” and inserting in place thereof the following words:- including, but not limited to climate, environmental and equity benefits, with.

SECTION 14. Section 11F of chapter 25A of the General Laws is hereby amended by striking out, in line 40, 81 and 82 and 114, as so appearing, the word “biomass”.

SECTION 15. Said section 11F of said chapter 25A is hereby further amended by striking out, in lines 41, 82 and 115, as so appearing, the word “wood, by-products” and inserting in place thereof, in each instance, the following word:- by-products.

SECTION 26. Subsection (b) of said section 11F of said chapter 25A, as so appearing, is hereby amended by striking out the second sentence.

SECTION 17. Said section 11F of said chapter 25A is hereby further amended by inserting after the word “gas”, in line 145, as so appearing, the following words:- , woody biomass.

SECTION 18. Section 11F½ of said chapter 25A, as so appearing, is hereby amended by striking out, in line 16, the word “, biomass”.

SECTION 19. Said section 11F½ of said chapter 25A, as so appearing, is hereby further amended by striking out, in lines 22 to 25, inclusive, the words “; provided, however, that

165 facilities using biomass fuel shall be low emission, use efficient energy conversion technologies
166 and fuel that is produced by means of sustainable forestry practices”.

167 SECTION 20. Said section 11F½ of said chapter 25A, as so appearing, is hereby further
168 amended by striking out the, in line 33, the words “and (F)” and inserting in place thereof the
169 following words:- ; (F) biomass; and (G).

170 SECTION 21. Said section 11F½ of said chapter 25A, as so appearing, is hereby further
171 amended by striking out, in lines 36 and 37, 41 and 47, the words “eligible biomass, biogas” and
172 inserting in place thereof, in each instance, the following word:- biogas.

173 SECTION 22. Said section 11F½ of said chapter 25A, as so appearing, is hereby further
174 amended by striking out, in lines 50 to 58, inclusive, the words “(iv) for eligible biomass, biogas
175 and liquid biofuel technologies, fuel conversion efficiency performance standards achievable by
176 best-in-class commercially-feasible technologies; and (v) in consultation with the department of
177 conservation and recreation, for forest-derived biomass, requirements that fuel shall be provided
178 by means of sustainable forestry practices; provided, however, that the department shall adopt
179 any existing or new biomass fuel sustainability standards if deemed appropriate by the
180 department after a public comment process” and inserting in place thereof the following words:-
181 and (iv) for biogas and liquid biofuel technologies, fuel conversion efficiency performance
182 standards achievable by best-in-class commercially-feasible technologies.

183 SECTION 23. Section 16 of said chapter 25A, as so appearing, is hereby amended by
184 inserting after the word “section”, in line 1, the following words:- and section 19.

185 SECTION 24. Subsection (a) of said section 16 of said chapter 25A, as so appearing, is
186 hereby amended by adding the following 2 definitions:-

“Qualifying zero-emission vehicle”, a new or used motor vehicle: (i) that is a zero-emission vehicle; (ii) that has been manufactured primarily for use on public streets, roads and highways; (iii) that is registered within the commonwealth; (iv) whose purchaser’s primary residence or business location is within the commonwealth; and (v) whose purchaser files proof of primary residency and each qualifying vehicle’s registration within the commonwealth not later than 90 days after purchase.

“Zero-emission vehicle”, a motor vehicle that produces no engine exhaust carbon emissions.

SECTION 25. Said chapter 25A is hereby further amended by adding the following section:-

Section 19. (a) There shall be an Electric Vehicle Adoption Incentive Trust Fund to be expended, without further appropriation, by the department of energy resources for funding electric vehicle incentive programs consistent with this section. The fund shall be credited with: (i) money from public and private sources, including gifts, grants and donations; (ii) interest earned on such money; (iii) any other money authorized by the general court and specifically designated to be credited to the fund; and (iv) any funds provided from other sources. No expenditure from the fund shall cause the fund to be deficient at the close of a fiscal year. Revenues deposited in the fund that are unexpended at the end of a fiscal year shall not revert to the General Fund and shall be available for expenditure in the following fiscal year.

(b)(1) The department shall establish a program of rebates and other financial incentives to parties that purchase or lease a new or used qualifying zero-emission vehicle in the commonwealth. The program shall apply to individual and corporate fleet purchases of

passenger cars and light duty, medium duty and heavy duty trucks, buses and vans; provided, however, that no rebate or other financial incentive shall be made available under this section for a zero-emission vehicle that is a passenger car or light duty truck with a sales price that exceeds \$50,000 or for a zero-emission vehicle that is leased for a period of less than 36 months. The department shall set a maximum sales price for medium duty or heavy duty trucks, busses and vans.

(2) The program shall include a point-of-sale rebate model that offers consumers savings at the point of purchase.

(c) The department shall offer rebates of not less than \$3,500 and not more than \$5,000 for a qualifying zero-emission vehicle that is a passenger car or a light duty truck and meets the requirements under subsection (b). The department shall provide rebates of not less than \$4,500 and not more than \$6,000 for the purchase or lease of: (i) a qualifying zero-emission vehicle that is a medium duty or heavy duty truck, bus or van; or (ii) a qualifying zero-emission vehicle under said subsection (b) if an individual is purchasing or leasing the vehicle and trading in a vehicle with market value that has an internal combustion engine that is not an electric vehicle as defined in section 16; provided, however, that the vehicle with an internal combustion engine has been continuously registered for the previous 2 years: (A) in the commonwealth; and (B) to the consumer or the consumer's immediate family.

(d) The department shall publish and regularly update cumulative data regarding usage of the programs established in this section, including, but not limited to, the number and dollar value per fiscal year of rebates and incentives provided, sortable by: (i) zip code, municipality, make, model, dealership and whether ownership is personal or corporate; (ii) vehicle type; and

(iii) vehicle weight. Such information shall be published and regularly updated on a website maintained by or provided for the department. Annually, the department shall compile the data required to be collected under this paragraph in a report to be filed not later than September 1 for the previous fiscal year with the senate and house committees on ways and means, the joint committee on transportation and the joint committee on telecommunications, utilities and energy. The report shall include an analysis of the programs established in this section, including, but not limited to, examining the cost-effectiveness of the programs in reducing greenhouse gas emissions.

(e) The department shall establish an outreach campaign to inform dealers, vehicle salespeople and consumers and businesses in underserved communities, communities with high percentages of low-income households and communities with high proportions of high emissions vehicles about the programs and incentives established pursuant to this section. The department may expend not more than 5 per cent of money in the fund for the outreach campaign.

(f) The department may promulgate regulations to implement this section.

SECTION 26. Section 2A of chapter 61A of the General Laws is hereby amended by striking out subsections (b) and (c), as appearing in the 2020 Official Edition, and inserting in place thereof the following 3 subsections:-

(b) In addition to the use provided for in subsection (a), land used primarily and directly for agricultural purposes pursuant to section 1 or land used primarily and directly for horticultural use pursuant to section 2 may, in addition to being used primarily and directly for agriculture or horticulture, be used to site a renewable energy generating source as defined in subsection (b) of section 11F of chapter 25A that qualifies in accordance with a solar incentive

program for agriculture or horticulture sectors developed by the department of energy resources, if such renewable energy generating source does not impede the continued use of the land for agricultural or horticultural purposes pursuant to this chapter.

(c) Land used primarily and directly for agricultural purposes pursuant to section 1 or land used primarily and directly for horticultural purposes pursuant to section 2 shall be deemed to be in agricultural or horticultural use pursuant to this chapter if used to simultaneously site a renewable energy generating source pursuant to subsection (a) or subsection (b).

(d) Renewable energy generating sources located on land used primarily and directly for agricultural purposes pursuant to section 1 or land used primarily and directly for horticultural purposes pursuant to section 2 shall be subject to the provisions afforded to land used for agriculture under section 3 of chapter 40A.

SECTION 27. Section 13 of said chapter 61A, as so appearing, is hereby amended by inserting after the word “years”, in line 35, the following words:- , or 10 years where the land has been used to simultaneously site a renewable energy generating source pursuant to section 2A,.

SECTION 28. Section 4 of chapter 93B of the General Laws, as appearing in the 2020 Official Edition, is hereby amended by adding the following subsection:-

(e) It shall be a violation of subsection (a) of section 3 for a motor vehicle dealer to sell in-state any new vehicle that is not a zero-emission vehicle. For the purposes of this paragraph, “vehicle” shall mean a passenger car or light duty truck and “zero-emission vehicle” shall have the same meaning as defined in section 16 of chapter 25A.

SECTION 29. Section 94 of chapter 143 of the General Laws, as most recently amended by section 96 of chapter 39 of the acts of 2021, is hereby further amended by adding the following 2 clauses:

(s) In consultation with the department of energy resources, to adopt and fully integrate into the state building code a requirement that new construction of commercial and residential buildings with not less than 10 parking spaces, and any major reconstruction, renovation and repair of such buildings, include building electrical service and conduit systems sufficient to support the minimum number of parking spaces for zero-emission vehicles, as defined in section 16 of chapter 25A; provided, however, that the minimum number of zero-emission vehicle parking spaces shall be at least 1 parking space or not less than 10 per cent of the total number of parking spaces, whichever is greater.

(t) In consultation with the department of energy resources, to adopt and fully integrate into the state building code a requirement that new construction of parking facilities with not less than 10 parking spaces, and any major reconstruction, renovation and repair of such facilities, include building electrical service and conduit systems sufficient to support the minimum number of parking spaces for zero-emission vehicles, as defined in section 16 of chapter 25A; provided, however, that the minimum number of zero-emission vehicle parking spaces shall be at least 1 parking space or not less than 10 per cent of the total number of parking spaces, whichever is greater.

SECTION 30. Chapter 159A½ of the General Laws is hereby amended by adding the following section:-

Section 12. The division shall establish a program to reduce greenhouse gas emissions from transportation network vehicles. The program shall establish vehicle electrification and greenhouse gas emission requirements for transportation network companies. Such requirements shall require a transportation network company to submit biennial plans to gradually increase zero emission transportation network vehicles and reduce greenhouse gas emissions to meet goals set by the executive office of energy and environmental affairs. The division shall minimize any negative impact of the program on low-income and moderate-income drivers and support the goal of clean mobility for low-income and moderate-income individuals.

The division shall establish regulations to implement the program required by this section.

SECTION 31. Section 5 of chapter 161A of the General Laws, as appearing in the 2020 Official Edition, is hereby amended by inserting after the word “standards”, in line 105, the following words:- , climate and the reduction of greenhouse gas emissions, environmental resiliency.

SECTION 32. Said section 5 of said chapter 161A, as so appearing, is hereby further amended by inserting after the words “act,”, in line 111, the following words:- capital investments that result in reductions of greenhouse gas emissions.

SECTION 33. Said section 5 of said chapter 161A, as so appearing, is hereby further amended by inserting after the word “maintenance,”, in line 116, the following words:- address climate change-related vulnerabilities.

SECTION 34. The fourth paragraph of subsection (g) of said section 5 of said chapter 161A, as so appearing, is hereby amended by inserting after the first sentence the following 3

sentences:- The program shall include a clear, comprehensive and specific plan to implement the requirements under section 6A of chapter 448 of the acts of 2018, which shall include, but not be limited, to alterations, updates, land acquisitions and new construction of bus garages, maintenance facilities and charging and fueling equipment, as may be necessary to meet the requirements. The plan shall prioritize the deployment of zero-emission buses on routes that serve underserved communities and communities with a high percentage of low-income households. Each rolling 5-year plan shall report on the progress in meeting the requirements under said section 6A of said chapter 448 including, but not limited to, the number of zero-emission passenger buses operated, the number of non-zero emission passenger buses operated, barriers to increased numbers of zero-emission passenger buses, if any, and recommended legislative or regulatory action needed to address barriers or otherwise promote compliance.

SECTION 35. Section 139 of chapter 164 of the General Laws is hereby amended by striking out, in lines 141 to 143, inclusive, as so appearing, the words “(1) equal to or less than 10 kilowatts on a single-phase circuit or (2) 25 kilowatts on a 3-phase circuit” and inserting in place thereof the following words:- equal to or less than 25 kilowatts.

SECTION 36. Said section 139 of said chapter 164 is hereby further amended by inserting after subsection (i), as amended by section 85 of chapter 8 of the acts of 2021, the following subsection:-

(i 1/2) A Class I net metering facility greater than 25 kilowatts in nameplate capacity, a Class II net metering facility or a Class III net metering facility shall be exempt from the aggregate net metering capacity of net metering facilities and may net meter and accrue market

337 net metering credits if it is generating renewable energy and serves on-site load, other than
338 parasitic load.

339 SECTION 37. Said section 139 of said chapter 164 is hereby further amended by adding
340 the following subsection:-

341 (l) A Class I, Class II or Class III solar net metering facility, as defined in section 138,
342 shall be eligible to or shall continue to receive Class I, Class II or Class III net metering credits
343 as otherwise provided by this section if such facility is on the same parcel as any number of other
344 such solar net metering facilities if the systems are:

345 (i) placed on a government-owned parcel; provided, however, that all systems on the
346 single parcel do not exceed an aggregate limit of 2 megawatts;

347 (ii) placed on a single parcel of land where all buildings on that parcel comprise low or
348 moderate income housing as defined in section 20 of chapter 40B;

349 (iii) each placed on a separate and distinct rooftop where no 2 systems occupy the same
350 rooftop; provided, however, that all systems on the single parcel do not exceed an aggregate limit
351 of 2 megawatts; or

352 (iv) installed not less than 1 year after any previously installed system was placed into
353 service; provided, however, that all systems on the single parcel do not exceed an aggregate limit
354 of 2 megawatts.

355 SECTION 38. Section 83B of chapter 169 of the acts of 2008, as inserted by section 12
356 of chapter 188 of the acts of 2016, is hereby amended by striking out the definition of “Long-
357 term contract” and inserting in place thereof the following 3 definitions:-

“Long-duration energy storage system”, an energy storage system, as defined in section 1 of chapter 164 of the General Laws, that is capable of dispatching energy at its full rated capacity for a period of 12 hours or greater, up to 24 hours.

“Long-term contract”, a contract for a period of 15 to 20 years for offshore wind energy generation pursuant to section 83C or for clean energy generation pursuant to section 83D; provided, however, that a contract for offshore wind energy generation pursuant to said section 83C may include terms and conditions for renewable energy credits associated with the offshore wind energy generation that exceed the term of generation under the contract.

“Multi-day energy storage system”, an energy storage system, as defined in section 1 of chapter 164 of the General Laws, that is capable of dispatching energy at its full rated capacity for a period greater than 24 hours.

SECTION 39. Section 83C of said chapter 169, as most recently amended by section 69 of chapter 24 of the acts of 2021, is hereby further amended by striking out subsections (a) to (e), inclusive, and inserting in place thereof the following 5 subsections:-

(a) To facilitate the financing of offshore wind energy generation resources in the commonwealth, every distribution company shall jointly and competitively, in coordination with the department of energy resources, solicit proposals for offshore wind energy generation. If reasonable proposals have been received, each distribution company shall enter into long-term contracts that are cost-effective and promote economic development in the commonwealth. Long-term contracts executed pursuant to this section shall be subject to the approval of the department of public utilities and shall be apportioned among the distribution companies; provided, however, that the department of public utilities shall not approve a long-term contract

that results from a solicitation and procurement if the levelized price per megawatt hour, plus associated transmission costs, is greater than or equal to the levelized price per megawatt hour plus transmission costs of the previous procurement; provided further, that increased costs from the contract compared to the previous approved contract for documented, direct and performance-based economic development and employment opportunities for economically distressed areas and for low-income and middle-income populations and for diversity, equity and inclusion and supplier diversity programs shall not be factored into the levelized price per megawatt hour; and provided further, that such economic development costs shall not result in a contract being approved if the total cost of the procurement is greater than a 10 per cent increase from the previous procurement.

(b) The timetable and method for solicitations of long-term contracts shall be proposed by the department of energy resources in coordination with the distribution companies using a competitive bidding process and shall be subject to review and approval by the department of public utilities. The department of energy resources shall consult with the distribution companies and the attorney general regarding the choice of solicitation methods. A solicitation may be coordinated and issued jointly with other New England states or entities designated by those states. The distribution companies, in coordination with the department of energy resources, may conduct 1 or more competitive solicitations through a staggered procurement schedule developed by the department of energy resources; provided, however, that the schedule shall ensure that the distribution companies enter into cost-effective long-term contracts for offshore wind energy generation equal to approximately 5,600 megawatts of aggregate nameplate capacity not later than June 30, 2027, including capacity authorized pursuant to section 21 of chapter 227 of the acts of 2018; and provided further, that individual solicitations shall seek proposals for not less

than 400 megawatts of aggregate nameplate capacity of offshore wind energy generation resources. The staggered procurement schedule shall be developed by the department of energy resources and shall specify that any subsequent solicitation shall occur within 24 months of a previous solicitation. Proposals received pursuant to a solicitation under this section shall be subject to review by the department of energy resources and the executive office of housing and economic development, in consultation with the independent evaluator and the electric distribution companies for technical advice. The department of energy resources shall, in consultation with the independent evaluator, issue a final, binding determination of the winning bid; provided, however, that the final contract executed shall be subject to review by the department of public utilities. The department of energy resources may require additional solicitations to fulfill the requirements of this section. If the department of energy resources, in consultation with the independent evaluator, determines that reasonable proposals were not received pursuant to a solicitation, the department may terminate the solicitation and may require additional solicitations to fulfill the requirements of this section.

(c) In developing proposed long-term contracts, the distribution companies shall consider long-term contracts for renewable energy certificates, for energy and for a combination of both renewable energy certificates and energy. A distribution company may decline to pursue a contract if the contract's terms and conditions would require the contract obligation to place an unreasonable burden on the distribution company's balance sheet after consultation with the department of energy resources; provided, however, that the distribution company shall take all reasonable actions to structure the contracts, pricing or administration of the products purchased under this section to prevent or mitigate an impact on the balance sheet or income statement of the distribution company or its parent company, subject to the approval of the department of

public utilities; and provided further, that mitigation shall not increase costs to ratepayers. If a distribution company deems all contracts to be unreasonable, the distribution company shall consult with the department of energy resources and, within 20 days of the date of its decision, submit a filing to the department of public utilities. The filing shall include, in the form and detail prescribed by the department of public utilities, documentation supporting the distribution company's decision to decline the contract. Following a distribution company's filing, and within 4 months of the date of filing, the department of public utilities shall approve or reject the distribution company's decision and may order the distribution company to reconsider any contract. The department of public utilities shall take into consideration the department of energy resources' recommendations on the distribution company's decision. The department of energy resources may require additional solicitations to fulfill the requirements of this section.

(d) The department of public utilities shall promulgate regulations consistent with this section. The regulations shall: (i) allow offshore wind developers of offshore wind energy generation to submit proposals for long-term contracts consistent with this section; (ii) require that a proposed long-term contract executed by the distribution companies under a proposal be filed with and approved by the department of public utilities before becoming effective; (iii) provide for an annual remuneration for the contracting distribution company of 1.25 per cent of the annual payments under the contract to compensate the company for accepting the financial obligation of the long-term contract; provided, however, that such provision shall be acted upon by the department of public utilities at the time of contract approval; (iv) require associated transmission costs to be incorporated into a proposal; provided, however, that, to the extent there are transmission costs included in a bid, the department of public utilities may authorize or require the contracting parties to seek recovery of such transmission costs of the project through

federal transmission rates, consistent with policies and tariffs of the Federal Energy Regulatory Commission if the department finds such recovery is in the public interest; and (v) require that offshore wind energy generating resources to be used by a developer under the proposal: (A) where feasible, create and foster employment and economic development in the commonwealth; (B) provide enhanced electricity reliability, system safety and energy security; (C) contribute to reducing winter electricity price spikes; (D) are cost effective and beneficial to electric ratepayers in the commonwealth over the term of the contract, taking into consideration potential costs and benefits to the ratepayers, including potential economic and environmental benefits; (E) avoid line loss and mitigate transmission costs to the extent possible and ensure that transmission cost overruns, if any, are not borne by ratepayers; (F) adequately demonstrate project viability in a commercially reasonable timeframe; (G) allow offshore wind energy generation resources to be paired with energy storage systems; (H) include an initial environmental and fisheries mitigation plan for the construction and operation of such offshore wind facilities; and (I) mitigate impacts to the marine environment by providing financial and technical assistance to support robust monitoring of wildlife and habitat through contributions to regional research efforts. The department of energy resources shall give preference to proposals that demonstrate benefits from: (i) documented, direct or performance-based economic development and employment activity, including opportunities for diversity, equity and inclusion; (ii) mitigation and avoidance of detrimental environmental and socioeconomic impacts; and (iii) benefits to environmental justice communities and low-income ratepayers in the commonwealth.

(e) A proposed long-term contract shall be subject to the review and approval of the department of public utilities. As part of its approval process, the department of public utilities

shall consider recommendations by the attorney general, which shall be submitted to the department of public utilities within 45 days following the filing of a proposed long-term contract with the department of public utilities. The department of public utilities shall take into consideration the department of energy resources' recommendations on the potential costs and benefits to the rate payers, including economic and environmental benefits, and the requirements of chapter 298 of the acts of 2008 and chapter 21N of the General Laws. The department of public utilities shall consider the potential costs and benefits of the proposed long-term contract and shall approve a proposed long-term contract if the department finds that the proposed contract is a cost-effective mechanism for procuring beneficial, reliable renewable energy on a long-term basis, taking into account the factors outlined in this section. A distribution company shall be entitled to cost recovery of payments made under a long-term contract approved under this section.

SECTION 40. Section 3 of chapter 448 of the acts of 2016 is hereby amended by striking out the words "may include requirements for electric vehicle charging for residential and appropriate" and inserting in place thereof the following words:- shall include requirements for electric vehicle charging for appropriate residential and.

SECTION 41. Said chapter 448 is hereby further amended by inserting after section 6 the following section:-

Section 6A. (a) Each purchase or lease of a passenger bus by the Massachusetts Bay Transportation Authority shall be a zero-emission vehicle.

(b) Not later than December 31, 2040, all passenger buses operated by the Massachusetts Bay Transportation Authority shall be exclusively zero-emission passenger buses.

SECTION 42. Said chapter 448 is hereby further amended by adding the following section:-

Section 8. Section 6A shall take effect on January 1, 2028; provided, however, that notwithstanding the effective date of said section 6A, the Massachusetts Bay Transportation Authority shall seek to replace non-zero-emission passenger buses with zero-emission passenger buses before January 1, 2028.

SECTION 43. Notwithstanding any general or special law to the contrary, beginning on January 1, 2023, no supplier, energy marketer or energy broker shall execute a new contract or renew an existing contract for generation services with any individual residential retail customer. This section shall not apply to, or otherwise affect, any government body that aggregates the load of residential retail customers as part of a municipal aggregation energy plan pursuant to section 134 of chapter 164 of the General Laws. A violation of this section shall be an unfair and deceptive act pursuant to chapter 93A of the General Laws and the attorney general may bring an action under section 4 of said chapter 93A to enforce this section and to seek restitution, civil penalties, injunctive relief and any other relief awarded pursuant to said chapter 93A.

SECTION 44. (a) The department of energy resources, in consultation with the Massachusetts clean energy technology center, shall study the current and developing technologies of energy storage systems and make recommendations on how such systems may be deployed in the commonwealth. The study shall examine: (i) currently available energy storage systems; (ii) energy storage systems currently in development; (iii) cost effective deployment of energy storage systems including, but not limited to, long-duration and multi-day energy storage systems; and (iv) the necessity, costs and benefits of requiring distribution

companies as defined in section 1 of chapter 164 of the General Laws to jointly and competitively conduct energy storage systems solicitation and procurements from renewable generation delivered in periods of high demand or other methods to help increase the utilization of energy storage systems.

(b) In making its recommendations, the department shall consider the extent to which the storage systems: (i) contribute to compliance with the statewide greenhouse gas emissions limits and sublimits under chapter 21N of the General Laws including, but not limited to, the sublimit of electric power pursuant to section 3A of said chapter 21N; (ii) promote the integration of offshore wind energy and other renewable sources; (iii) enable firm energy delivery from renewable energy resources during periods of low energy demand to periods of high energy demand; (iv) enhance the reliable delivery and security of electricity to consumers; and (v) minimize ratepayer costs. The study shall determine the performance of the systems under frequent deployment, barriers to deployment or utilization and incentives and programs that could facilitate their deployment or utilization. The department of energy resources shall provide recommendations to the secretary of energy and environmental affairs not later than 6 months after the effective date of this act, including numerical deployment targets for both new and existing long-duration and multi-day energy storage systems to optimize the use of these systems, which the secretary shall incorporate into the setting of numerical benchmarks for energy storage capacity pursuant to clause (xi) of section 5 of said chapter 21N; provided, however, that said benchmarks shall not include hydrogen produced by fossil fuel sources and methods. Not later than December 31, 2023, the department of energy resources shall submit its recommendations to the clerks of the senate and house of representatives and the joint committee on telecommunications, utilities and energy.

SECTION 45. Not later than July 1, 2023, the Massachusetts Department of Transportation shall install and maintain electric vehicle charging stations for public use at all service plazas located on the Massachusetts Turnpike.

SECTION 46. (a) There shall be an interagency coordinating council to implement an electric vehicle charging infrastructure deployment plan. The council shall consist of a designee from the following persons: the secretary of energy and environmental affairs, who shall designate the chair of the council; the commissioner of environmental protection; the commissioner of energy resources; the secretary of transportation; the secretary of housing and economic development; the secretary of administration and finance; and the commissioner of public utilities. The council shall assess and report on strategies and plans necessary to deploy electric vehicle charging infrastructure to establish an equitable, interconnected, accessible and reliable electric vehicle charging network. The deployment plan shall facilitate: (i) compliance with the greenhouse gas emissions limits and sublimits set pursuant to sections 3 and 3A of chapter 21N of the General Laws, with emphasis on compliance with the emissions limits and sublimits set for 2025 and 2030; (ii) attainment of the numerical benchmarks for electric vehicles and electric vehicle charging stations set pursuant to section 5 of said chapter 21N; (iii) the cessation, by December 31, 2035, of in-state sales of non-zero-emission vehicles; and (iv) advance access to, and the affordability of, electric vehicle charging and fueling.

The assessment shall include, but not be limited to: (i) the present condition of, and future needs for, road and highway electrification; (ii) estimates of the number and types of electric vehicle charging stations needed in public and private sector settings including, but not limited to, commercial and industrial settings and single occupancy, double occupancy and multiple-occupancy residential structures; (iii) suggestions for optimal locations for electric vehicle

charging stations in urban, suburban and rural areas including, but not limited to, low-income and moderate-income communities; (iv) discussion of distribution, transmission and storage infrastructure and technology needed; (v) discussion of present and projected future costs and methods of financing those costs; (vi) technological advances in charging stations and related infrastructure, equipment and technology including, but not limited to, advances that may aid in data collection, connecting via remote communications, assisting in grid management and assisting in the integration of renewable energy resources; (vii) recommendations to assist governmental and private sector officials in installing charging stations and related infrastructure, equipment and technology, including within proximity of on-street parking; and (viii) identification and discussion of current policies and recommendations for policies, laws and regulatory actions that may facilitate the provision of charging stations and related infrastructure, equipment and technology.

(b) The department shall regularly seek data and input relating to electric vehicle charging stations, fueling stations and related infrastructure, equipment and technology from stakeholders including, but not limited to, investor-owned and publicly-owned electric utilities, state and local transportation agencies, companies involved in products, services, technologies and data collection related to clean energy charging and fueling, automobile manufacturers, groups representing environmental, energy and climate perspectives and groups representing consumers including, but not limited to, low-income consumers.

(c) In conducting and updating the assessment under this section, the department shall hold at least 5 public hearings in geographically diverse areas of the commonwealth.

(d) The department shall issue its initial assessment to the senate and house committees on ways and means and the joint committee on telecommunications, utilities and energy not later than 12 months after the effective date of this act and shall reconsider and revise its assessment at least once every 2 years. The department shall make its assessments publicly available on the department website.

(e) The council shall coordinate grant programs under each secretariat to ensure a holistic, coordinated and comprehensive deployment of electric vehicle charging infrastructure. The council may further accept appropriations, federal funds, grants, gifts and loans to further the development and objectives of the deployment plan and may establish grant programs to expend funds received. The council shall annually submit a report on disbursements from the grant program including, but not limited to, grant awardees and amounts awarded, to the clerks of the senate and house of representatives and the joint committee on telecommunications, utilities and energy not later than December 31.

(f) There shall be a Charging Infrastructure Deployment Fund to be administered by the council for the purposes of ensuring a holistic, coordinated and comprehensive deployment of electric vehicle charging infrastructure. The fund shall be credited with: (i) revenue from appropriations or other money authorized by the general court and specifically designated to be credited to the fund; (ii) interest earned on such revenue; and (iii) funds from public and private sources and other gifts, grants and donations. All amounts credited to the fund shall be used solely for activities and expenditures consistent with the purposes of this section, including the ordinary and necessary expenses of administration and operation associated with the fund. Amounts credited to the fund shall not be subject to further appropriation and any money remaining in the fund at the end of a fiscal year shall not revert to the General Fund.

SECTION 47. Not later than 6 months after the effective date of this act, distribution companies as defined in section 1 of chapter 164 of the General Laws shall submit proposals to the department of public utilities for approval to offer a time-of-use rate. For the purposes of this section, “time-of-use rate” shall mean a rate designed to reflect the cost of providing electricity to a consumer charging an electric vehicle at an electric vehicle charging station at different times of the day. The proposals shall not include additional demand charges. The proposals shall include a separate opt-in residential time-of-use rate for electric vehicle owners or lessees. In evaluating proposals for approval, the department shall consider the effect of the proposal on: (i) energy conservation, optimal and efficient use of a distribution company’s facilities and resources; (ii) benefits to transmission and distribution systems; (iii) equitable rates for electric consumers; and (iv) greenhouse gas emissions reductions. The proposals shall ensure equitable participation by all electric vehicle owners and lessees.

SECTION 48. Notwithstanding any general or special law or rule, regulation or order to the contrary, the department of public utilities shall not approve any company-specific plan, filed pursuant to the DPU Docket No. 20-80, Investigation by the Department of Public Utilities on its own Motion into the Role of Gas Local Distribution Companies as the Commonwealth Achieves its Target 2050 Climate Goals, prior to conducting an adjudicatory proceeding with respect to such plan.

SECTION 49. The department of public utilities shall convene a stakeholder working group to develop recommendations for regulatory and legislative changes that may be necessary to align gas system enhancement plans developed pursuant to section 145 of chapter 164 of the General Laws with the applicable statewide greenhouse gas emission limits and sublimits established pursuant to chapter 21N of the General Laws and the commonwealth's emissions

629 strategies. The working group shall be convened not later than October 1, 2022 and shall
630 include: the attorney general, or a designee; the commissioner of energy resources, or a designee;
631 the chairman of the department of public utilities, or a designee; the commissioner of
632 environmental protection, or a designee; the chairs of the joint committee on
633 telecommunications, utilities and energy, or their designees; and 8 members appointed by the
634 secretary of energy and environmental affairs, 1 of whom shall be a representative of a natural
635 gas local distribution company, 1 of whom shall be an advocate for low-income residents of the
636 commonwealth, 1 of whom shall be an advocate for middle-income residents of the
637 commonwealth, 1 of whom shall be a representative of municipalities or groups of
638 municipalities, 1 of whom shall be a representative of a labor union representing gas distribution
639 workers, 1 of whom shall be a nonprofit organization with expertise in energy supply and
640 demand, 1 of whom shall be a nonprofit organization with expertise in the transition to clean
641 thermal energy and 1 of whom shall be a nonprofit environmental organization. The working
642 group shall consider the gas system enhancement plans' impacts on, and implications for, public
643 health, safety, equity, affordability, reliability, reductions in greenhouse gas emissions and cost
644 recovery for repair and replacement of pipeline infrastructure including, but not limited to,
645 embedded costs, potential stranded assets and opportunity costs and benefits; provided, however,
646 that said working group shall evaluate opportunities to advance utility-scale renewable thermal
647 energy under said section 145 of said chapter 164; and provided further, that any change
648 recommended shall enable natural gas local distribution companies to maintain a safe and
649 reliable gas distribution system during the commonwealth's transition to net zero emissions. The
650 working group shall submit its report to the department of public utilities, the joint committee on
651 telecommunications, utilities and energy, the senate and house committees on global warming

and climate change and the clerks of the senate and house of representatives not later than July 31, 2023.

SECTION 50. The department of energy resources shall make recommendations to the general court on a successor program to the commonwealth's solar incentive program established in section 11 of chapter 75 of the acts of 2016. In developing recommendations, the department shall consider: (i) the benefits provided by distributed generation facilities including, but not limited to: (A) avoided energy purchases; (B) avoided capacity purchases; (C) avoided transmission and distribution costs; (D) avoided line losses; (E) avoided environmental compliance costs; (F) avoided damages from greenhouse gas emissions; (G) enhanced reliability; (H) equity and environmental justice benefits; and (I) any other benefits as may be determined by the department; (ii) time differentiated rates and alternative rates that encourage equity and alignment with the commonwealth's energy, climate and natural resources programs and policies; and (iii) the siting of clean energy projects in underserved communities and within the built environment on developed or degraded land. The department shall file the report with the clerks of the senate and house of representatives and the joint committee on telecommunications, utilities and energy not later than December 31, 2022.

SECTION 51. Notwithstanding any general or special law to the contrary, the executive office of energy and environmental affairs shall promulgate regulations to implement section 2A of chapter 61A of the General Laws, as amended by section 26, within 6 months after the effective date of this act. The regulations shall include, but not be limited to: (i) appropriate construction practices and allowable building materials for renewable energy generating sources installed pursuant to said section 2A of said chapter 61A to protect the water and soil quality of the land and minimize adverse environmental impacts; (ii) appropriate data collection and

reporting requirements for land sited for renewable energy generation under said section 2A of said chapter 61A; and (iii) a definition of “continued use” of agricultural and horticultural land under subsection (b) of said section 2A of said chapter 61A. The executive office shall hold not less than 3 public hearings to receive feedback on the draft regulations in geographically-diverse regions throughout the commonwealth.

SECTION 52. (a) For the purposes of this section, the following terms shall have the following meanings unless the context clearly requires otherwise:

“Fossil fuel-free”, as defined by a city or town to include, but not be limited to, an entire building or entire condominium unit that does not, in support of its operation after construction, utilize coal, oil, natural gas, other fuel hydrocarbons, including synthetic equivalents, or other fossil fuels.

“Local approval”, by a majority vote of the: (i) city council with the approval of the mayor in the case of a city with a mayor elected to serve as the chief executive officer of the city; (ii) city council in every other city; (iii) annual town meeting or a special meeting called for that purpose in the case of a municipality with a town meeting form of government; or (iv) town council in the case of a municipality with a town council form of government.

(b) Notwithstanding chapter 40A, section 13 of chapter 142 and chapter 164 of the General Laws or any other general or special law to the contrary, the department of energy resources shall establish a demonstration project in which cities and towns adopt and amend general or zoning by-laws that restrict or prohibit new building construction or major renovation projects that are not fossil fuel-free and enforce restrictions and prohibitions on new building

696 construction and major renovation projects that are not fossil fuel-free, including through the
697 withholding or conditioning of building permits.

698 The department shall approve not more than 10 applications under this section; provided,
699 however, that the department shall accept into the program any city or town that has received
700 local approval prior to the effective date of this act and such community having received local
701 approval may begin enforcement of its general or zoning by-law not sooner than 30 days after
702 submitting its application to the department. In approving an application under this section from
703 a city or town that did not receive prior local approval, the department shall consider regional
704 and demographic diversity of communities participating in the demonstration project. No city or
705 town shall apply for such demonstration project until it has received local approval.

706 Nothing in this section shall inhibit or interfere with the department's obligation to
707 promulgate a municipal opt-in specialized stretch energy code that includes, but shall not be
708 limited to, net-zero building performance standards and a definition of net-zero building under
709 section 31 of chapter 8 of the acts of 2021 nor shall anything in this section limit the ability for
710 any community to opt in to such specialized code following its promulgation; provided, however
711 , that nothing in this section shall interfere with the department's authority to set restrictions or
712 limitations on fossil fuel construction necessary to meet the department's obligation to
713 promulgate the specialized stretch energy code's net-zero building performance standards and
714 definition of net-zero building designed to achieve compliance with the commonwealth's
715 statewide greenhouse gas emission limits and sublimits established pursuant to chapter 21N of
716 the General Laws. The department shall collect data from cities and towns approved under this
717 section to monitor impacts to emissions, building costs, operating costs and other criteria as set
718 by the department in consultation with participating cities and towns.

SECTION 53. Notwithstanding any general or special law to the contrary, not later than 14 days after the effective date of this act, the state comptroller shall transfer from the General Fund: (i) \$100,000,000 to the Clean Energy Investment Fund established in section 15 of chapter 23J of the General Laws; (ii) \$100,000,000 to the Electric Vehicle Adoption Incentive Trust Fund established in section 19 of chapter 25A of the General Laws; and (iii) \$50,000,000 to the Charging Infrastructure Deployment Fund established in section 46.

SECTION 54. The division established in section 23 of chapter 25 of the General Laws shall promulgate the regulations pursuant to section 12 of chapter 159A½ of the General Laws not later than January 1, 2023 and shall implement the vehicle electrification and greenhouse gas emissions requirements for transportation network companies pursuant to said section 12 of said chapter 159A½ not later than January 1, 2024.

SECTION 55. The state board of building regulations and standards shall amend the state building and electrical codes pursuant to clauses (s) and (t) of section 94 of chapter 143 of the General Laws not later than January 1, 2024.

SECTION 56. The point-of-sale rebate model for electric vehicle sales required by subsection (b) of section 19 of chapter 25 shall be established not later than on October 1, 2022.

SECTION 57. Sections 14 to 22, inclusive, shall take effect upon their passage and shall not apply to any biomass facility qualified by the department of energy resources as a renewable energy generating source pursuant to section 11F of chapter 25A of the General Laws or as an alternative energy generating source pursuant to section 11F ½ of said chapter 25A as of January 1, 2022.

740 SECTION 58. Section 28 shall take effect upon the secretary of energy and
741 environmental affairs' certification in writing to the state secretary that a similar requirement
742 regarding the sale of zero-emission vehicles taking effect in the state of California; provided,
743 however, that said section 28 shall not take effect prior to January 1, 2035.