HOUSE No. 2849

The Commonwealth of Massachusetts

PRESENTED BY:

Lori A. Ehrlich and Christina A. Minicucci

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act for utility transition to using renewable energy (FUTURE).

PETITION OF:

NAME:	DISTRICT/ADDRESS:
Lori A. Ehrlich	8th Essex
Christina A. Minicucci	14th Essex
Cynthia Stone Creem	First Middlesex and Norfolk
Christine P. Barber	34th Middlesex
Natalie M. Blais	1st Franklin
Joseph A. Boncore	First Suffolk and Middlesex
Linda Dean Campbell	15th Essex
Harriette L. Chandler	First Worcester
Michelle L. Ciccolo	15th Middlesex
Mike Connolly	26th Middlesex
Edward F. Coppinger	10th Suffolk
Julian Cyr	Cape and Islands
Marjorie C. Decker	25th Middlesex
Sal N. DiDomenico	Middlesex and Suffolk
Mindy Domb	3rd Hampshire
Daniel M. Donahue	16th Worcester
Carolyn C. Dykema	8th Middlesex
James B. Eldridge	Middlesex and Worcester

Nika C. Elugardo	15th Suffolk
Sean Garballey	23rd Middlesex
Carmine Lawrence Gentile	13th Middlesex
Carlos González	10th Hampden
Kenneth I. Gordon	21st Middlesex
Tami L. Gouveia	14th Middlesex
James K. Hawkins	2nd Bristol
Jonathan Hecht	29th Middlesex
Patrick Joseph Kearney	4th Plymouth
Mary S. Keefe	15th Worcester
Kay Khan	11th Middlesex
John J. Lawn, Jr.	10th Middlesex
David Henry Argosky LeBoeuf	17th Worcester
Jack Patrick Lewis	7th Middlesex
Jason M. Lewis	Fifth Middlesex
Jay D. Livingstone	8th Suffolk
Adrian C. Madaro	1st Suffolk
John J. Mahoney	13th Worcester
Frank A. Moran	17th Essex
Brian W. Murray	10th Worcester
Tram T. Nguyen	18th Essex
Alice Hanlon Peisch	14th Norfolk
Denise Provost	27th Middlesex
Rebecca L. Rausch	Norfolk, Bristol and Middlesex
Maria Duaime Robinson	6th Middlesex
David M. Rogers	24th Middlesex
Lindsay N. Sabadosa	1st Hampshire
Jon Santiago	9th Suffolk
Thomas M. Stanley	9th Middlesex
Bruce E. Tarr	First Essex and Middlesex
José F. Tosado	9th Hampden
Andres X. Vargas	3rd Essex
Tommy Vitolo	15th Norfolk

HOUSE No. 2849

By Representatives Ehrlich of Marblehead and Minicucci of Boston, a petition (accompanied by bill, House, No. 2849) of Lori A. Ehrlich, Christina A. Minicucci and others for legislation to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging renewable sources of energy and other energy policies. Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

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

An Act for utility transition to using renewable energy (FUTURE).

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

- SECTION 1. Section 1 of chapter 21N, as appearing in the 2016 Official Edition of the
- 2 General Laws, is hereby amended by inserting after line 35, the following words and lines:-
- 3 "Fossil fuel", coal, coke, distillate oil, residual oil, used oil fuel, natural gas,
- 4 manufactured gas, peat and derivatives from such fuels.
- 5 SECTION 2. Said section 1 of chapter 21N, as so appearing, is hereby amended by
- 6 striking out lines 50 through 52, and inserting in place thereof the following:-
- 7 "Indirect emissions", emissions associated with the distribution and consumption of
- 8 purchased electricity, natural gas and other sources of energy derived from fossil fuels, steam
- 9 and heating or cooling by an entity or facility.
- SECTION 3. Said section 1 of chapter 21N, as so appearing, is hereby amended by
- inserting, in line 72, after the word "including" the following:-

12 "(i)".

- SECTION 4. Said section 1 of chapter 21N. as so appearing, is hereby amended by inserting, in line 76, after the word "imported;" the following words:-
- "(ii) all emissions of greenhouse gases from the delivery and consumption of natural gas
 in the commonwealth, including emissions from lost and unaccounted for gas as defined in
 section 147 of chapter 164; (iii) all emissions of greenhouse gases from any energy source
 derived from fossil fuels; and (iv) all emissions of biomass, biogas and liquid biofuel
 technologies,".
 - SECTION 5. Subsection (a) of section 2 of said chapter 21N, as so appearing, is hereby amended by striking out, lines 35 through 39, after the words "chapter 164A" in line 35, and inserting in place thereof the following paragraphs:-
 - "; (6) require reporting of greenhouse gas emissions from natural gas distributed by a gas company as defined in section 1 of chapter 164, including emissions from lost and unaccounted for gas as defined in section 147 of chapter 164; (7) ensure rigorous and consistent accounting of emissions and provide reporting tools and formats to ensure collection of necessary data; and (8) ensure that greenhouse gas emissions sources maintain comprehensive records of all reported greenhouse gas emissions."
 - SECTION 6. Subsection (c) of section 3 of said chapter 21N, as so appearing, is hereby amended by inserting, in line 21, after the word "sector" the following words:-
- 31 "and the natural gas sector".

32	SECTION 7. Said subsection (c) of section 3 of chapter 21N, as so appearing, is hereby
33	amended by inserting, in line 23, after the word "based" the following:-
34	"(i)".
35	SECTION 8. Said subsection (c) of section 3 of chapter 21N,as so appearing, is hereby
36	amended by inserting, in line 26, after the word "standard" the following:-
37	", (ii) on the consumption and purchases of natural gas entering the commonwealth
38	through the natural gas city gates, and (iii) on the consumption and purchases of any other source
39	of greenhouse gases."
40	SECTION 9. Subsection (d) of said section 3 of chapter 21N, as so appearing, is hereby
41	amended by inserting, in line 27, after the word "regulations" the following words:-
42	"that apply to all sources in the commonwealth that emit greenhouse gases".
43	SECTION 10. Subsection (a) of section 4 of said chapter 21N, as so appearing, is hereby
44	amended by inserting, in line 8, after the word "generation," the following words:-
45	"distribution of natural gas," .
46	SECTION 11. Said subsection (a) of section 4 of chapter 21N, as so appearing, is hereby
47	amended by inserting, in line 13, after the word "manner" the following words:-
48	"; provided, however, that nothing in this section shall impede the transition of the
49	commonwealth to non-emitting renewable sources of energy."
50	SECTION 12. Subsection (b) of section 4 of said chapter 21N, as so appearing, is hereby
51	further amended by inserting, in line 20, after the word "economy," the following words:-

52 "including distribution of natural gas, heating oil and propane,". 53 SECTION 13. Section 9 of said chapter 21N, as so appearing, is hereby amended by 54 striking out, in line 2, the words "public utility commission" and inserting in place thereof the 55 following words:-56 "department of public utilities". 57 SECTION 14. Said section 9 of chapter 21N, as so appearing, is hereby further amended 58 by striking out, in line 2, after the word "electrical" the word "utility" and inserting in place 59 thereof the following words:-60 "company or a gas company". 61 SECTION 15. Said section 9 of chapter 21N, as so appearing, is hereby further amended 62 by inserting, in line 3, after the word "service" the following words:-"or with safe and reliable natural gas service, provided, however, that the department of 63 64 public utilities shall actively encourage a transition from the use of natural gas or other fossil 65 fuels to the use of non-emitting renewable energy sources." SECTION 16. Subsection (c) of said section 9 of chapter 23J, as appearing in the 2016 66 67 Official Edition of the General Laws, is hereby amended by inserting, in line 45, after the word "facilities" the following:-68 69 "and with the distribution and consumption of fossil fuels, including but not limited to, 70 oil and natural gas;"

SECTION 17. Subsection (d) of said section 9 of chapter 23J, as so appearing, is amended by inserting, in line 76, after the word "electricity" the following words:-

"and the transition to the use of renewable energy by all energy customers in the commonwealth including, but not limited to, customers using natural gas, fuel oil and propane;"

SECTION 18. Chapter 25, as appearing in the 2016 Official Edition of the General Laws, is hereby amended by inserting after section 1 the following section:-

Section 1A. In administering its responsibilities under this and other chapters of the general laws, the department shall promote the interest of the public, including equitable access to energy efficiency and renewable energy and shall actively promote implementation of the provisions of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging renewable sources of energy.

SECTION 19. Section 2 of said chapter 25, as so appearing, is hereby amended by striking out lines 1 through 18, after the words "Section 2." and inserting in place thereof the following paragraph:-

"The department shall be under the supervision and control of the commonwealth utilities commission, in this chapter called the commission, which shall consist of 3 members appointed by the governor in consultation with the attorney general following an opportunity for the public to provide written comments. Prospective appointees shall disclose any potential conflicts of interest, including any financial interest in the energy sector. The terms of two such commissioners shall be coterminous with that of the governor, and the term of the third member shall be for 4 years. The commissioners shall report to the secretary of energy and environmental affairs. The secretary may remove a commissioner upon the approval of the governor. The

secretary shall designate one commissioner as chairman, who shall serve as chairman for 2 years, and may be reappointed, unless removed as chairman by the secretary, with the approval of the governor. Commission members shall have background and expertise in renewable energy and in electricity or natural gas matters. The commissioners shall devote their full time to the duties of their office. Not more than 2 members of the commission shall be members of the same political party. Any decision made or order issued by the commission may be made by majority vote of a quorum of 2 members."

SECTION 20. Subsection (b) of section 19 of said chapter 25, as so appearing, is hereby amended by inserting after the word "programs", in line 32, the following:-

"and may approve and fund renewable energy and district energy infrastructure programs proposed by gas distribution companies."

SECTION 21. Said subsection (b) of section 19 of said chapter 25, as so appearing, is hereby further amended by inserting, in line 39, after the word "opportunities," the following words:- "maximizing the use of renewable energy and the reduction of greenhouse gas emissions pursuant to the mandates of chapter 21N, and".

SECTION 22. Subsection (a) of section 20 of said chapter 25, as so appearing, is hereby amended by inserting, in line 2, the following words:-

"14.65 mill per therm for all natural gas customers and a mandatory charge of".

SECTION 23. Subsection (a) of section 11F 1/2 of chapter 25A, as appearing in the 2016 Official Edition of the General Laws, is hereby amended by inserting, in line 3, after the word "commonwealth" the following words:-

"and for all retail gas suppliers selling gas for useful thermal energy to end-use customers in the commonwealth."

SECTION 24. Said subsection (a) of said section 11F 1/2 of chapter 25A, as so appearing, is hereby amended by inserting, in line 11, after the word "sources." the following sentence:-

"Every such retail electric supplier and every such retail gas supplier shall obtain and retire annually alternative energy credits generated by renewable thermal technologies."

SECTION 25. Said section 11F 1/2 of chapter 25A, as so appearing, is hereby amended by inserting after subsection (e) the following subsection:-

(f) The department shall determine the requirement for each retail electric supplier and each retail gas supplier to obtain and annually retire renewable thermal alternative energy credits, provided, however, that such requirement shall be proportional to the annual thermal energy consumed by each such supplier's customers and shall be established so as to effect a transition for all heating oil customers in the commonwealth from oil-fired thermal energy technologies to renewable thermal energy technologies by December 31, 2030, and to effect a transition for all other customers of fossil fuel thermal energy sources to renewable thermal energy technologies by December 31, 2048.

SECTION 26. Chapter 30A, as so appearing in the 2016 Official Edition of the General Laws, is hereby amended by inserting after section 10A the following section:-

Section 10B. Notwithstanding the provisions of section 10, in any adjudicatory proceeding conducted by the department of public utilities regarding any petition, request for

approval or investigation of a gas company or an electric company, as defined in section 1 of chapter 164, the following shall be allowed to participate fully as a party in such proceeding: (a) any municipality that is within the service area of such company; (b) any member of the general court whose district includes ratepayers within the service area of such company; and (c) any group of not fewer than 10 persons who are ratepayers within the service area of such company.

SECTION 27. Section 1 of Chapter 164, as appearing in the 2016 Official Edition of the General Laws, is hereby amended by striking out, lines 201 through 205, and inserting in place thereof the following:-

"Gas company", a corporation organized for the purpose of making and selling or distributing and selling gas within the commonwealth, even though subsequently authorized by the department to make or sell electricity or to make, distribute or sell thermal energy, provided, however, that such thermal energy will reduce emissions of greenhouse gases in accordance with chapter 21N; further provided, however, that gas company shall not mean an alternative energy provider.

SECTION 28. Subsection (a) of section 1E of said chapter 164, as so appearing, is hereby amended by inserting after the word "standards", in line 7, the following:-

151 "for".

SECTION 29. Said subsection (a) of section 1E of chapter 164, as so appearing, is hereby amended by striking out, in line 10, after the words "billing service,", lines 10 through 13, and inserting in place thereof the following:-

"compliance with the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging use of renewable sources of energy and public health and safety, provided, however, that such service quality standards shall include benchmarks for employee staff levels and employee training programs for each such distribution, transmission, and gas company."

SECTION 30. Section 1I of said chapter 164, as so appearing, is hereby amended by striking out, in line 6, the following words:-

"be authorized to".

SECTION 31. Said chapter 164, as so appearing, is hereby amended by inserting after section 1K the following section:-

Section 1L. No right to exclusive service or franchise established within Section 1B or elsewhere in this chapter shall prevent a municipality, an agency of the commonwealth or private electric or gas customers within the service territory of an electric or gas company from procuring local or district energy services, establishing an energy microgrid, or utilizing public rights of way for the purposes of energy generation or resiliency.

SECTION 32. Section 5 of said chapter 164, as so appearing, is hereby amended by striking out, in line 9, the words "will be promoted thereby" and inserting in place thereof the following:-

"and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging renewable sources of energy will be promoted thereby."

176	SECTION 33. Subsection (a) of section 8A of said chapter 164, as so appearing, is
177	hereby amended by striking out the words "convenience will be promoted thereby;", in lines 13
178	and 14, and inserting in place thereof the following:-
179	"health, safety and convenience will be promoted thereby, and that the mandates of
180	chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency
181	and encouraging renewable sources of energy will be promoted thereby;"
182	SECTION 34. Section 69H of said chapter 164, as so appearing, is hereby amended by
183	striking out, in line 6, the following words "at the lowest possible cost" and inserting in the place
184	thereof the following:-
185	"and public health and safety at the lowest possible cost in compliance with the mandates
186	of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency
187	and encouraging renewable sources of energy."
188	SECTION 35. Said section 69H of chapter 164, as so appearing, is hereby amended
189	inserting after the word "environmental", in line 7" the following words:-
190	"and public health and safety".
191	SECTION 36. Said section 69H of chapter 164, as so appearing, is hereby further
192	amended by inserting, in line 13, after the word "facilities" the following:-
193	", subject to the mandates of chapter 21N to reduce greenhouse gas emissions by
194	reducing energy use, increasing efficiency and encouraging renewable sources of energy."
195	SECTION 37. Section 69I of said chapter 164, as so appearing, is hereby amended by
196	inserting, in line 11, after the words "electric companies" the following:-

197 "and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing 198 energy use, increasing efficiency and encouraging renewable sources of energy". 199 SECTION 38. Said section 69I of said chapter 164, as so appearing, is hereby further 200 amended by inserting, in line 11, after the words "electric companies" the following:-201 "and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing 202 energy use, increasing efficiency and encouraging renewable sources of energy." 203 SECTION 39. Subparagraph (2) of said section 69I of chapter 164, as so appearing, is 204 hereby further amended by striking out, in line 37, the words "and energy policies as adopted by 205 the commonwealth" and inserting in place thereof the following:-206 "and the mandates of chapter 21N to reduce greenhouse gas emissions by reducing 207 energy use, increasing efficiency and encouraging renewable sources of energy and other energy 208 policies as adopted by the commonwealth." 209 SECTION 40. Subparagraph (3) of said section 69I of chapter 164, as so appearing, is 210 hereby further amended by striking out, in lines 48 through 49, the words "impact of each 211 proposed facility" and inserting in the place thereof the following:-212 "and public health and safety impact of each proposed facility and its emission of 213 greenhouse gases;" 214 SECTION 41. Said subparagraph (3) of section 69I of chapter 164, as so appearing, is 215 hereby further amended by inserting, in line 56, after the words "radiation impact," the following 216 words:-

"public health and safety impact,".

218 SECTION 42. Said subparagraph (3) of section 69I of chapter 164, as so appearing, is 219 hereby further amended by striking out, in line 63, the following words: "impacts, facilities 220 agreements and" and inserting in the place thereof the following words:-221 "and public health and safety impacts, emissions of greenhouse gases, facilities 222 agreements and compliance with the mandates of chapter 21N to reduce greenhouse gases by 223 reducing energy use, increasing efficiency and encouraging renewable sources of energy and 224 other". 225 SECTION 43. Said section 69I of chapter 164, as so appearing, is hereby further 226 amended by striking out, in line 78, the following words ", environmental protection," and 227 inserting in place thereof the following:-228 "and safety, environmental protection, reduction in greenhouse gas emissions as 229 mandated by chapter 21N by reducing energy use, increasing efficiency and encouraging 230 renewable sources of energy,". 231 SECTION 44. Said section 69I, of said chapter 164, as so appearing, is hereby further 232 amended by inserting, in line 82, after the words "impact on the environment" the following 233 words:-234 "and public health and safety".

SECTION 45. Said section 69I of said chapter 164, as so appearing, is hereby further

amended by inserting, in line 109, after the word "interest" the following words:-

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"; provided, however, that such exemption complies with the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging use of renewable sources of energy."

SECTION 46. Section 70 of said chapter 164, as so appearing, is hereby amended by inserting, in line 9, after the word "nuisance." the following:-

"For the purposes of this section, damage to property shall include any tree on public property damaged or killed by gas migrating into the root zone of such tree, as defined as the area of the ground under the canopy of such tree; or by construction during the course of repairing or replacing gas infrastructure. A municipality or person whose property is alleged to have been damaged by a gas company may submit a claim for such damages with the department which shall follow the procedures of chapter 30A for the resolution of any such claim, provided, however, that such claim for damage to a tree as a result of a gas leak must be substantiated by a certified arborist. Nothing in this section shall prevent a municipality from further regulating the opening of streets or the use of public ways by a gas company, or from conditioning the consent of such municipality to dig up and open the ground."

SECTION 47. Said chapter 164, as so appearing, is hereby amended by striking out section 75 and inserting in place thereof the following section:-

Section 75. (a) The city council, aldermen or selectmen of a municipality may regulate, restrict and control all acts and doings of a corporation subject to this chapter which may in any manner affect the health, safety, convenience or property of the inhabitants of their towns.

Beginning in January 1, 2020, a municipality may require an electric company or a gas company to establish or renew a license, permit, right or franchise agreement in accordance with the terms,

conditions and limitations of regulatory acts of the municipality, including the placing of distribution lines and facilities underground. An electric company or gas company required by municipal ordinance to establish a franchise agreement shall enact such agreement in order to retain the exclusive obligation to provide distribution service to all retail customers within its service territory. Such franchise may be established in 10-year increments and may be renegotiated and renewed upon expiration or in the year prior to expiration. Under the license, permit, right or franchise, an electric company or a gas company may be obligated by a municipality (i) to pay to such municipality fees to raise revenue or to defray any increase in municipal costs accruing as a result of operations by such company; and (ii) to share data or information regarding electric or gas infrastructure or operations, provided that such data would not unreasonably expose Critical Energy/Electric Infrastructure Information as designated by the Federal Energy Regulatory Commission. Such fees may include, but not be limited to, a sum of money based upon gross operating revenues or upon gross earnings from the operations of such company in such municipality so long as such company shall continue to operate in such municipality, unless upon request at any time of such company, such municipality expressly releases such company from the obligation. No fees charged pursuant to this section shall be recoverable by such company in a proceeding conducted in accordance with Section 94 of this Chapter.

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(b) A municipality may file with the department a complaint alleging a breach by an electric or gas company of its franchise or of any regulation issued by such department. The department shall investigate any such complaint, including holding a public hearing at which the municipality shall participate as a party, according to the procedures of chapter 30A. The

department shall issue a written decision describing the resolution of such complaint, which decision shall be made public.

SECTION 48. Section 76 of said chapter 164, as so appearing, is hereby amended by inserting, in line 5, after the words "with reference to the" the following words:-

"public health and".

SECTION 49. Section 76C of said chapter 164, as so appearing, is hereby amended by inserting, in line 3, after the word "thereof." the following:-

"In establishing and enforcing such rules and regulations, the department shall comply with the commonwealth's plan for statewide greenhouse gas emissions limits as mandated by chapter 21N to reduce energy use, increase efficiency and encourage renewable sources of energy."

SECTION 50. Said chapter 164, as so appearing, is hereby amended by inserting after section 94I the following section:-

Section 94J. (a) Any base rate proceeding conducted by the department under section 94 for electric companies or gas companies must include full decoupling, as specified in D.P.U. 07-50-A. The department shall consider the impact of decoupling on the gas or electric company's return on equity and make any necessary adjustments thereto.

(b) In any base rate proceeding commencing on or after July 31, 2020, the department may not approve a decoupling mechanism for gas companies based on a revenue per customer approach, or any other method that disincentivizes customers using fossil fuel for heating and

cooling from converting to use of heat pumps, solar thermal, or other heating or cooling 302 technologies using renewable sources of energy that do not emit greenhouse gases. 303 SECTION 51. Section 116B of said chapter 164, as so appearing, is hereby amended by 304 inserting, in line 5, after the word "accessible" the following words:-305 "; provided, further, that the gas company shall comply with the requirements of section 306 144." 307 SECTION 52. Section 141 of said chapter 164, as so appearing, is hereby amended by 308 inserting, in line 4, after the word "efficiency," the following words:-309 "the replacement of natural gas infrastructure with district energy infrastructure and the 310 reduction of greenhouse gases as mandated by chapter 21N to reduce energy use, increase 311 efficiency and encourage renewable sources of energy, including the reduction of lost and 312 unaccounted for gas as defined in section 147,". 313 SECTION 53. Said section 141 of chapter 164, as so appearing, is hereby amended by 314 inserting, in line 7, after the word "discount." the following:-315 "The department shall not approve rate designs or other plans that include payment by a 316 gas company or an electric company of fees or other costs associated with membership in trade 317 associations or similar associations." 318 SECTION 54. Section 142 of said chapter 164, as so appearing, is hereby amended by 319 inserting, in line 3, after the word "power" the following words:-320 "and district energy,".

SECTION 55. Said section 142 of chapter 164, as so appearing, is hereby further
amending by striking out, lines 5 to 8, beginning with the words "For the purposes" and inserting
in place thereof the following:-

"The department shall issue regulations to expand municipal aggregation provided in section 134 of chapter 164 to authorize a municipality or group of municipalities to establish district energy where it will result in reducing greenhouse gas emissions, reducing consumer cost and improving public health and safety. For the purposes of this section, "efficient, low-emission" shall mean use of the best available energy efficient technology, as determined annually by the department of energy resources, for the purpose of meeting the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging renewable sources of energy."

SECTION 56. Subsection (b)(2) of section 144 of said chapter 164, as so appearing, is hereby amended by striking out, in line 11, the words "whenever appropriate and feasible,".

SECTION X. Said subsection (b)(2) of section 144 of chapter 164, as so appearing, is hereby amended by inserting, in line 12, after the word "notify" the following words:-

"within an hour or less of detection".

SECTION 57. Subsection (b)(3) of said section 144 of chapter 164, as so appearing, is hereby amended by striking out, lines 16 through 22, after the word "future", and inserting in place thereof the following:-

"hazard to be completed as immediately as possible. The gas company shall immediately schedule a completion of repairs, such repair to be completed within 6 months, and the condition

of such leak shall be kept under surveillance at a frequency of not less than once every two weeks until the hazard or source of the leak is eliminated. For the purposes of this section, a Grade 2 leak shall include: (i) any leak migrating into the root zone of a tree, defined as coextensive with the canopy of such tree; (ii) any leak within 10 feet of any foundation or wall; (iii) any gas-in-air reading of up to 1 per cent in any manhole or confined space; (iv) any leak deemed of sufficient magnitude by the fire chief of a municipality to be hazardous or to be a public nuisance; and (v) any gas leak within 150 feet of a school zone, as defined in subsection (d). A gas company shall notify within an hour or less of detection the fire department and chief law enforcement officer in each city or town where a Grade 2 leak is identified.

- (A) A municipality or person whose property is alleged to have been damaged by a gas company may submit a claim for such damages with the department, which shall follow the procedures of chapter 30A for the resolution of any such claim.
- (B) Any suspected damage to a tree due to a natural gas leak should be reported to the gas company for mandatory inspection by a qualified arborist. If a qualified arborist determines that a tree is damaged or killed by a natural gas leak, the gas company shall provide the entity which owns the tree with the funds of equal or greater value to replace the compromised tree. The department shall promulgate rules and regulations to implement this section.
- SECTION 58. Said subsection (b) (4) of section 144 of chapter 164, as so appearing, is hereby amended by inserting after the word "safety.", in line 32, the following:-
- "A gas company shall notify within an hour or less of detection the fire department and chief law enforcement officer in each city or town where a Grade 3 leak is identified."

SECTION 59. Said section 144 of chapter 164, as so appearing, is here by amended by striking out subsection (c), in lines 33 through 48, and inserting in place thereof the following:-

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- (c) (1) For the purposes of this subsection, a Grade 3 leak identified as having a significant environmental impact shall be defined by the department, and such definition shall include those leaks whose estimated gas emissions per day are in the top 7% of all Grade 3 leaks in the commonwealth.
- (2) Upon the undertaking of a significant project on a public way exposing confirmed natural gas infrastructure, and with sufficient notice, a municipality or the commonwealth shall submit written notification of the project to a gas company. In response to such notice from the municipality or upon seeking a permit from a municipality to open a public way for the purpose of repairing or replacing leak-prone infrastructure, the gas company shall survey the project area for the presence of Grade 1 leaks, Grade 2 leaks and Grade 3 leaks identified as having a significant environmental impact and shall set repair and replacement schedules for all known or newly detected Grade 1 leaks, Grade 2 leaks and Grade 3 leaks identified as having a significant environmental impact. The gas company shall provide to such municipality for each such leak, the location, history, and grade classification as defined in this section, and for each such pipeline, the age, type, condition, operating pressure, size and material. Upon completion of any repair or replacement of leak-prone infrastructure, the gas company shall provide to such municipality a report from a certified gas inspector that (i) all pipes are installed at the proper depth and all new joints are sealed; (ii) all gas shutoff valves and gate boxes are uncovered, accessible, operational, tested and capable of accepting a gate key; (iii) the repaired or replaced infrastructure is free from defects that could cause new leaks; and (iv) the repair or replacement has otherwise been properly completed according to state and federal regulations.

SECTION 60. Said section 144 of chapter 164, as so appearing, is here by amended by striking out subsection (d), in lines 49 through 54, and inserting in place thereof the following:-

(d) A gas company shall survey pipelines in every school zone at least once every 12 months or during the next scheduled survey, whichever is sooner. Grade 3 gas leaks detected in a school zone shall be repaired by the gas company no later than 6 months from the date the leak was detected. Grade 1 leaks and Grade 2 leaks shall be repaired as required in subsection (b) of this section. For the purposes of this section, "school zone" shall mean on or within 150 feet of the real property comprising a public or private accredited preschool, accredited Head Start facility, elementary, vocational or secondary school.

SECTION 61. Said section 144 of chapter 164, as so appearing, is here by amended by striking out subsection (e), in lines 55 through 63, and inserting in place thereof the following:-

(e) (1) For the purposes of this subsection, the following words shall have the following meaning:-

"global positioning system," a positioning system using satellites that continuously transmit coded information. The information transmitted from the satellites is interpreted by receivers to precisely identify locations on earth by measuring distance from the satellites.

(2) As part of the annual service quality standards report required by section 1I, each gas company shall report to the department the following data as of the time of the report: (i) the location of each Grade 1, Grade 2 and Grade 3 leak; (ii) the date each Grade 1, Grade 2 and Grade 3 leak was classified; (iii) the dates of repairs performed on each Grade 1, Grade 2 and Grade 3 leak; and (iv) the positioning of each such leak according to the global positioning

system. A gas company shall specify any reclassification of previously identified leaks in its annual report.

(3) The annual service quality standards report shall be posted electronically and publically by March 1 by the department in spreadsheet format, which shall include, or be accompanied by, definitions of terms or acronyms, methodologies and instrumentation used to detect a gas leak and to determine its grade, emissions, volume and emissions impact. The report shall include the cost to ratepayers of (i) lost and unaccounted for gas; (ii) system maintenance; (iii) leak-prone infrastructure replacements and percent remaining under plans mandated by subsection (b) of section 145; (iv) safety violations by each gas company, including but not limited to, over pressurization incidents, third-party hits, and natural force pipe failures, reported both as absolute numbers as well as by incidents per linear mile of pipe; (v) the cost of replacing all leak-prone infrastructure as compared to repairing all known gas leaks in the commonwealth; and (vi) progress by the department and the gas companies regulated under this chapter towards achieving the targets and benchmarks mandated by chapter 21N. The department shall post a map of all leaks by grade classification, updated quarterly, showing the location of such leaks throughout the commonwealth.

SECTION 62. Subsection (f) of said section 144 of chapter 164, as so appearing, is hereby amended by inserting, in lines 66 through 67, after the word "reporting." the following:-

"Such oversight and monitoring by the department shall include an annual audit of leak classifications assessed by gas companies in the commonwealth, to be conducted by a qualified independent contractor. The independent contractor shall be chosen jointly by the department and the attorney general. The audit shall include (i) a randomly selected representative sample of

reported leaks; (ii) leak classification; (iii) leak extent measurement; and the (iv) success of the leak repairs. The department shall make such audit available to the public within 30 days of its issuance."

SECTION 63. Said section 144 of chapter 164, as so appearing, is hereby amended by inserting after subsection (f), the following:-

(g) The department shall promulgate regulations establishing uniform standards for winter surveillance and patrol of cast iron pipes subject to hazardous frost cap conditions. Such standards shall meet or exceed federally mandated standards for integrity management requirements for distribution pipelines and shall include criteria to determine the conditions of weather, the duration and oscillation of temperatures around and below 32 degrees Fahrenheit, the type and size of cast iron pipe segments that are prone to cracks and leaks as a result of extended frost cap conditions and the frequency of surveillance and patrol necessary to ensure public safety from hazardous leaks caused by such cracks. Such winter surveillance and patrol standards shall be in effect from December 15 to March 15 unless weather conditions warrant an earlier start or later end date. Such regulations shall be promulgated by the department within 6 months of the effective date of this provision.

SECTION 64. Subsection (a) of section 145 of said chapter 164, as so appearing, is hereby amended by inserting, in line 7, after the word "public" the following words:-

"health and".

SECTION 65. Said subsection (a) of section 145 of chapter 164, as so appearing, is hereby amended by inserting, in line 14, after the word "proceeding." the following:- "Such eligible infrastructure replacement may include replacing natural gas infrastructure with district

energy infrastructure, provided, however, that such district energy infrastructure complies with the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging renewable sources of energy."

SECTION 66. Section 145 of said chapter 164, as so appearing, is hereby amended by striking out subsection (b) and inserting in place thereof the following subsection:-

- (b) A gas company shall file with the department a plan to address aging or leaking natural gas infrastructure within the commonwealth in the interest of public health and safety and reducing lost and unaccounted for natural gas through a reduction in natural gas system leaks by number and by volume.
- SECTION 67. Section 145 of said chapter 164, as so appearing, is hereby amended by striking out subsection (c) and inserting in place thereof the following subsection:-
- (c) (1) For the purposes of this subsection, a Grade 3 leak identified as having a significant environmental impact shall be defined by the department, and such definition shall include those leaks whose estimated gas emissions per day are in the top 7% of all Grade 3 leaks in the commonwealth.
- (2) Any plan filed with the department shall include, but not be limited to: (i) eligible infrastructure replacement or repair of mains, services, meter sets and other ancillary facilities composed of non-cathodically protected steel, cast iron and wrought iron, prioritized to implement the federal gas distribution pipeline integrity management plan annually submitted to the department and consistent with subpart P of 49 C.F.R. part 192; (ii) replacement infrastructure proposed, including gas infrastructure or district energy infrastructure; (iii) an anticipated timeline for the completion of each project; (iv) the estimated cost of each project;

(v) rate change requests; (vi) a description of customer costs and benefits under the plan; (vii) work plans including location by street segments of leak-prone infrastructure scheduled to be replaced as required by this section; (viii) how the replacement infrastructure complies with the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging renewable sources of energy, and (viiii) any other information the department considers necessary to evaluate the plan. Such improvement of existing infrastructure may include repair rather than replacement of a pipe having a grade 3 leak identified as having a significant environmental impact as classified by section 144 (c), provided, however that such repair shall be cost effective and shall comply with applicable safety regulations related to pipeline infrastructure. Such plan filed with the department may include an alternative other than natural gas to provide thermal energy using renewable sources.

(3) Upon filing an initial plan under this section, a gas company shall include a timeline for removing all leak-prone infrastructure on an accelerated basis specifying an annual replacement pace and program end date with a target end date of either (i) not more than 20 years, or (ii) a reasonable target end date considering the allowable recovery cap established pursuant to subsection (f). The department shall not approve a timeline as part of a plan unless the allowable recovery cap established pursuant to subsection (f) provides the gas company with a reasonable opportunity to recover the costs associated with removing all leak-prone infrastructure on the accelerated basis set forth under the timeline utilizing the cost recovery mechanism established pursuant to this section, provided, however, that no depreciation associated with the replacement of infrastructure delivering natural gas shall be claimed by such gas company after 2050 unless such infrastructure has the capacity to deliver thermal heat from renewable sources of energy. After filing the initial plan, a gas company shall, at 5 year intervals,

provide the department with a summary of its replacement progress to date, a summary of work to be completed during the next 5 years, a report of any remaining leak-prone infrastructure by street segment remaining in the service territory of the gas company and any similar information the department may require. The department may require a gas company to file an updated long-term timeline as part of a plan if it alters the cap established pursuant to subsection (f).

SECTION 68. Subsection (d) of said section 145 of said chapter 164, as so appearing, is hereby amended by inserting, in line 63, after the word "public" the following words:-

"health and".

SECTION 69. Subsection (h) of said section 145 of chapter 164, as so appearing, is hereby amended by inserting, in line 111, after the word "section." the following:-

"Such regulations may permit and structure a performance-based financial incentive to a gas company to build eligible district energy infrastructure, provided, however, that such infrastructure complies with the mandates of chapter 21N to reduce greenhouse gas emissions by reducing energy use, increasing efficiency and encouraging renewable sources of energy."

SECTION 70. Said section 145 of chapter 164, as so appearing, is hereby amended by inserting after subsection (h) the following subsection:-

(i) Within 30 days of approval of any plan submitted to the department by a gas company for replacement or improvement of any existing infrastructure pursuant to this section, the department shall send such plan and such approval to the municipality whose service territory is covered by such plan.

SECTION 71. (a) There is hereby established within the office of the governor a Clean Energy Transition Commission to make recommendations to the governor and the general court for legislation, regulations and policies to ensure a safe, just and expeditious transition in the commonwealth from energy derived from fossil fuels to energy derived from clean, renewable sources, in order to reach 100% reduction in greenhouse gas emissions below the 1990 level by 2050.

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(b) Such commission shall be chaired by the lieutenant governor and shall consist of 25 members appointed or re-appointed by the governor for specific terms in consultation with the president of the senate, the speaker of the house of representatives and the attorney general, reflecting the cultural and geographical diversity of the commonwealth. Such members shall include 2 representatives from the senate, 2 representatives from the house of representatives, the attorney general, the secretary of energy and environmental affairs, the chairman of the public utilities commission, the commissioner of the department of environmental protection, the commissioner of the department of energy resources, 1 representative from the Metropolitan Area Planning Council, 1 expert on solar energy technology and markets, 1 expert on wind energy technology and markets, 1 expert on geothermal energy technology and markets, 1 expert on energy efficiency initiatives, 1 representative of organized labor appointed from a list of three qualified names submitted by the Massachusetts State Labor Council of the AFL-CIO, 1 representative from community-based organizations focused on environmental equity, 1 representative from community-based organizations focused on inter-generational energy equity, 1 representative from faith-based organizations focused on climate change, 1 representative from youth organizations focused on climate change and 2 representatives from environmental advocacy organizations. In addition to the members of the commission, there shall be 1 nonvoting ex-officio member from each of the following: 1 representative of an investor-owned electric company, 1 representative of an investor-owned gas company, 1 representative of a district energy company, 1 representative of a renewable energy company, 1 representative of the Independent Service Operator - New England and 1 representative of the New England Clean Energy Council. A vacancy on the commission shall be filled in the manner in which the original appointment was made. Members of the commission shall receive no compensation for their services. No voting member of the commission shall be employed by a for-profit company that will directly benefit from decisions made by the commission.

- (c) Such commission shall have such staff as is required, including an executive director appointed by the governor, to carry out its functions and shall have funding from the Massachusetts Renewable Energy Trust Fund to hire and convene such staff and experts as it requires. The executive director with the approval of the lieutenant governor as chair of such commission shall carry out the administrative work of the commission and shall organize working groups to execute the mandates of such commission. Members of such working groups shall be appointed by the chair of such commission upon the recommendations of members of such commission and shall reflect the cultural and geographic diversity of the commonwealth and shall include subject matter experts on the specific mandates of the commission.
- (d) Such commission shall meet at minimum once every two months or more often as the chair directs, shall set annual goals and shall annually hold public hearings throughout the commonwealth that include opportunities for invited panelists as well as members of the public to present testimony. Such commission may request from agencies of the commonwealth such information and assistance as it may require, provided, further that such agencies are authorized to designate staff and financial resources necessary to carry out the work of such commission.

Such commission shall provide an annual report by October 1 of each year to the governor and the general court that includes its findings and recommendations for legislative, regulatory and policy changes to ensure that by 2050 the commonwealth achieves a complete and just transition from energy derived from fossil fuels to energy derived from non-emitting renewable sources of energy. Such report shall include any updates to the commonwealth's clean energy transition plan. In developing its findings and recommendations, such commission shall authorize and review research related to its mandates.

- (e) Such commission is charged with developing a comprehensive plan to ensure a safe, just and expeditious transition in the commonwealth from energy derived from fossil fuels to energy derived from clean, renewable sources, to reach 100% reduction in greenhouse gas emissions by 2050 from the 1990 level. Such annually updated commonwealth clean energy transition plan shall include but not be limited to:
- (i) an annual status report of the generated, transmitted, distributed and purchased energy in the commonwealth, and the associated emissions of such energy, prepared by the department of energy resources. This report shall assemble and integrate existing ISO-NE plans and reports, private utility industry plans, municipally owned and alternative energy generator reports, renewable energy company and individual system generation data, transportation system data, energy efficiency advisory council reports, and any other relevant existing reports or data on the energy system of the commonwealth. Such status report shall summarize any available energy use data by industry category. Such status report shall summarize resulting economic costs and benefits for the commonwealth. Such status report shall report on any emerging challenges in the commonwealth's energy system, and shall report on any emerging technologies or innovative

solutions that may impact the Commonwealth's energy system or prove useful to meeting energy goals;

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(ii) an integrated inclusive multi-year energy system transition plan for moving from the latest annual status report to 100% reduction in greenhouse gas emissions by 2050. Such plan shall consider, but not be limited to, public health and safety impacts, economic and equity impacts, the existing and projected demographics of the commonwealth, the built environment, projected impacts of climate change including weather pattern shifts, and stability, resilience, and adaptation for the social, economic, and ecological systems. Such plan shall provide for energy that is reliable, accessible and cost-effective, meeting energy needs through conservation, energy efficiency, energy system optimization, and renewable sources of energy to the maximum extent feasible and complying with the mandates set forth in Chapter 169 of the Acts of 2008; Chapter 298 of the Acts of 2008; Chapter 149 of the Acts of 2014; Chapter 251 of the Acts of 2014; Chapter 188 of the Acts of 2016; Chapter 227 of the Acts of 2018; and this Act. Such plan shall include an annual schedule with renewable energy benchmarks for each energy source, utility, including private, public and municipally owned, energy industry, energy use industry, and energy industry related work force regarding transition and & retraining. Such plan shall include an analysis of unmet benchmarks of the previous year including, but not limited to, identification of barriers to success and potential solutions;

(iii) resulting annual recommendations to the governor and to the general court for expeditious adoption of legislative changes, regulatory changes by state agencies, resource allocations needed to ensure that goals are met, and prioritized pilot studies needed to test innovative solutions.

(e) Such commission is a standing commission whose membership and mandates may change but shall continue to function until the commonwealth achieves 100% reduction in greenhouse gas emissions below the 1990 level.

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