

HOUSE No. 4081

The Commonwealth of Massachusetts

PRESENTED BY:

Thomas A. Golden, Jr.

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 concerning the expansion of renewable heating fuels and renewable thermal heating.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Thomas A. Golden, Jr.</i>	<i>16th Middlesex</i>	<i>2/15/2021</i>

HOUSE No. 4081

By Mr. Golden of Lowell, a petition (accompanied by bill, House, No. 4081) of Thomas A. Golden, Jr., relative to the expansion of renewable heating fuels and renewable thermal heating. Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

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

An Act concerning the expansion of renewable heating fuels and renewable thermal heating.

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

1 SECTION 1. Section 9 of chapter 23J of the General Laws, as appearing in the 2018
2 Official Edition, is hereby amended by striking out, in line 6, the word “collected” and inserting
3 in place thereof the following words:- allocated to the trust fund.

4 SECTION 2. Section 3 of chapter 25 of the General Laws, as so appearing, is hereby
5 amended by striking out, in line 14, the words “chapter 164” and inserting in place thereof the
6 following words:- chapters 164, 164C and 164D.

7 SECTION 3. Section 20 of said chapter 25, as so appearing, is hereby amended by
8 striking out, in line 2, the figure “0.5” and inserting in place thereof the following figure:- 0.75.

9 SECTION 4. Subsection (a) of said section 20 of said chapter 25, as so appearing, is
10 hereby further amended by striking out the second sentence and inserting in place thereof the
11 following 2 sentences:- Two-thirds of revenues generated by the mandatory charge shall be
12 deposited into the Massachusetts Renewable Energy Trust Fund, established in section 9 of

13 chapter 23J. One-third of revenues generated by the mandatory charge shall be deposited into the
14 Renewable Thermal Program Development Fund established in section 2QQQQQ of chapter 29.

15 SECTION 5. Chapter 29 of the General Laws is hereby amended by inserting after
16 section 2OOOOO, as inserted by section 13 of chapter 358 of the acts of 2020, the following 2
17 sections:-

18 Section 2PPPPP. (a) There is hereby established and set up on the books of the
19 commonwealth a fund known as the Renewable Heating Fuels Development Fund to be
20 administered by the commissioner of energy resources. The purpose of the fund shall be to
21 increase the supply of heating renewable energy credits available for compliance use by
22 obligated entities, as defined in section 1 of chapter 164C. There shall be credited to the fund all
23 alternative compliance payments made by obligated entities as provided in section 2 of said
24 chapter 164C. Amounts credited to the fund shall be expended without further appropriation.
25 Money remaining in the fund at the end of a fiscal year shall not revert to the General Fund and
26 shall be available for expenditure in subsequent fiscal years. No expenditure shall be made from
27 said fund that shall cause said fund to be in deficit at the close of a fiscal year.

28 (b) Money in the fund shall be expended to: (i) stimulate investment in renewable natural
29 gas development by entering into agreements, including multi-year agreements, for heating
30 renewable energy credits as defined in chapter 164C, hereinafter referred to as HRECs; (ii)
31 provide technical and financial assistance for interconnection and feasibility studies, the
32 development or the installation of qualified renewable heating fuel projects; (iii) issue assurances
33 or guarantees to support the acquisition of HRECs; (iv) establish escrows, reserves or acquire
34 insurance for the obligations of the fund; and (v) pay administrative costs of the fund incurred

35 not to exceed 10 per cent of the income of the fund, including, but not limited to, alternative
36 compliance payments.

37 (c) The department shall adopt plans and guidelines for the management and use of the
38 fund and enter into agreements with obligated entities to accept alternative compliance payments
39 consistent with rules or purposes of the renewable heating fuel standards established in said
40 section 2 of said chapter 164C. The department shall pursue opportunities at the state or federal
41 level to advance the research and development of eligible resources, as defined in section 1 of
42 said chapter 164C.

43 Section 2QQQQQ. There is hereby established and set up on the books of the
44 commonwealth a fund known as the Renewable Thermal Program Development Fund, to be
45 administered by the commissioner of energy resources. The purposes of the fund shall be to
46 promote renewable thermal program development, including renewable thermal district heating
47 development, feasibility studies, engineering design and construction support in partnership with
48 utility renewable thermal investment. There shall be credited to the fund all revenues allocated to
49 the fund under section 20 of chapter 25 and any income derived from the investment of amounts
50 credited to the fund.

51 Amounts credited to the fund shall be expended without further appropriation. Money
52 remaining in the fund at the end of a fiscal year shall not revert to the General Fund and shall be
53 available for expenditure in subsequent fiscal years. No expenditure shall be made from said
54 fund which shall cause said fund to be in deficit at the close of a fiscal year.

55 SECTION 6. Section 6 of chapter 62 of the General Laws, as amended by section 57 of
56 chapter 358 of the acts of 2020, is hereby amended by adding the following 3 subsections:-

57 (x) (1) A partnership, limited liability corporation or other legal entity engaged in
58 business in the commonwealth that: (i) is not a business corporation subject to the excise under
59 chapter 63; and (ii) produces qualified renewable heating fuels, as defined in section 1 of chapter
60 164C, shall be allowed a refundable credit against its excise due under this chapter.

61 (2) The credit under this subsection shall be attributed on a pro rata basis to the owners,
62 partners or members of the legal entity entitled to the credit under this subsection and shall be
63 allowed as a credit against the tax due under this chapter from the owners, partners or members
64 in a manner determined by the commissioner.

65 (3) The commissioner, in consultation with the commissioner of energy resources, shall
66 promulgate regulations for the administration and implementation of this subsection.

67 (y) (1) As used in this subsection the following terms shall, unless the context clearly
68 requires otherwise, have the following meanings:

69 “Qualified heating equipment”, renewable heating systems approved by the department
70 of energy resources, including but not limited to air source heat pumps, ground source heat
71 pumps, and heating equipment using low-carbon hydrogen.

72 “Taxpayer”, a taxpayer subject to taxation under this chapter.

73 (2) A taxpayer shall be allowed a tax credit against the taxes imposed by this chapter
74 equal to 15 per cent of the total qualified expenditures incurred in connection with the purchase
75 and installation of qualified heating equipment during the taxable year; provided, however, that
76 the amount of credit allowed shall not exceed 15 per cent of the net expenditure for renewable
77 energy source property.

78 (3) If the amount of the credit allowed under this subsection exceeds the taxpayer's tax
79 liability, the commissioner shall treat the excess as an overpayment and shall pay the taxpayer
80 the entire amount of the excess.

81 (4) The commissioner, in consultation with the commissioner of energy resources, shall
82 promulgate regulations for the administration and implementation of this subsection.

83 (z) (1) As used in this subsection the following terms shall, unless the context clearly
84 requires otherwise, have the following meanings:

85 “Geothermal district heating”, as defined in section 1 of chapter 164D.

86 “Taxpayer”, a taxpayer subject to taxation under this chapter.

87 (2) A taxpayer shall be allowed a tax credit against the taxes imposed by this chapter
88 equal to 15 per cent of the total qualified expenditures incurred in connection with the purchase
89 and installation of geothermal district heating infrastructure during the taxable year.

90 (3) If the amount of the credit allowed under this subsection exceeds the taxpayer's tax
91 liability, the commissioner shall treat the excess as an overpayment and shall pay the taxpayer
92 the entire amount of the excess.

93 (4) The commissioner, in consultation with the commissioner of energy resources, shall
94 promulgate regulations for the administration and implementation of this subsection.

95 SECTION 7. Chapter 63 of the General Laws is hereby amended by inserting after
96 section 38HH, as appearing in the 2018 Official Edition, the following 3 sections:-

97 Section 39II. There is hereby established a qualified renewable heating fuels production
98 tax credit. A corporation engaged in business in the commonwealth that produces qualified
99 renewable heating fuels, as defined in section 1 of chapter 164C, shall be allowed a refundable
100 credit against its excise due under this chapter. The credit shall be calculated based on the
101 production of qualified renewable heating fuels and the purchase of equipment to produce
102 qualified renewable heating fuels.

103 The credit allowed under this section shall be allowed for the taxable year in which the
104 production of qualified renewable heating fuels or purchase of equipment to produce qualified
105 renewable heating fuels is made. The commissioner, in consultation with the commissioner of
106 energy resources, shall promulgate regulations for the administration and implementation of this
107 section.

108 Section 39JJ. There is hereby established a renewable heating systems tax credit. A
109 corporation engaged in business in the commonwealth that purchases or installs qualified heating
110 equipment, as defined in paragraph (1) of subsection (y) of section 6 of chapter 62, shall be
111 allowed a refundable credit against its excise due under this chapter equal to 15 per cent of the
112 total qualified expenditures incurred in connection with said purchase and installation during the
113 taxable year; provided, however, that the amount of credit allowed shall not exceed 15 per cent
114 of the net expenditure for renewable energy source property.

115 The credit allowed under this section shall be allowed for the taxable year in which the
116 purchase or installation of qualified heating equipment is made. The commissioner, in
117 consultation with the commissioner of energy resources, shall promulgate regulations for the
118 administration and implementation of this section.

119 Section 39KK. There is hereby established a geothermal district heating infrastructure tax
120 credit. A corporation engaged in business in the commonwealth that purchases or installs
121 infrastructure supporting geothermal district heating, as defined in section 1 of chapter 164D,
122 shall be allowed a refundable credit against its excise due under this chapter equal to 15 per cent
123 of the total qualified expenditures incurred in connection with said purchase and installation
124 during the taxable year.

125 The credit allowed under this section shall be allowed for the taxable year in which the
126 purchase or installation of qualified heating equipment is made. The commissioner, in
127 consultation with the commissioner of energy resources, shall promulgate regulations for the
128 administration and implementation of this section.

129 SECTION 8. The General Laws are hereby amended by inserting after chapter 164B the
130 following 2 chapters:-

131 Chapter 164C

132 Renewable Heating Fuel

133 Section 1. As used in this chapter the following terms shall, unless the context clearly
134 requires otherwise, have the following meanings:

135 "Alternative compliance payment", a payment to the renewable heating fuels
136 development fund established in section 2PPPPP of chapter 29, which may be made in lieu of
137 standard means of compliance with this statute.

138 “Biogas”, a mixture of carbon dioxide and hydrocarbons, primarily methane gas, released
139 from the biological decomposition of organic materials, which can be upgraded to meet the
140 standards for injection into a common carrier pipeline.

141 “Biomass”, energy feedstocks that can be converted or upgraded to meet the standards for
142 injection into a common carrier pipeline, including brush; stumps; lumber ends and trimmings;
143 wood pallets; bark; wood chips; shavings; slash and other clean wood; agricultural waste; food
144 and vegetative material; energy crops; landfill methane; or biogas.

145 "Commission", the commonwealth utilities commission established in section 2 of
146 chapter 25.

147 "Compliance year", a calendar year beginning January 1 and ending December 31 for
148 which an obligated entity must demonstrate that it has met the requirements of this chapter.

149 “Department”, the department of energy resources.

150 “Eligible resources”, resources producing qualified renewable heating fuels where the
151 energy produced by the resource is: (i) delivered into the commonwealth for use by the
152 commonwealth’s end-use customers; or (ii) used to provide heating service to customers in the
153 commonwealth. Delivery of energy from an eligible resource may include: (1) a unit-specific
154 bilateral contract for the sale and delivery of the energy into the commonwealth; (2) confirmation
155 from the appropriate control entity that the renewable energy was actually settled in the system;
156 or (3) any other requirements as the department deems appropriate.

157 “Environmental attributes”, any credits, emissions reductions, offsets, allowances or
158 other benefits attributable to the production and delivery of renewable natural gas.

159 “Heating renewable energy credit” or “HREC”, a tradable certificate of proof of 1 unit of
160 qualified renewable heating fuel sold to an obligated entities’ end-use customers that is issued,
161 monitored, accounted for and transferred by a system as provided in section 3 and includes all of
162 the environmental attributes associated with the production of that unit. One HREC shall be
163 equal to 1 dekatherm of natural gas.

164 “Low-carbon hydrogen”, hydrogen produced with electricity generated from renewable
165 energy systems or from conventional sources where any associated emissions are curtailed or
166 offset by carbon management. Renewable energy systems include those that generate electric or
167 thermal energy through the use of solar thermal, photovoltaics, wind, hydroelectric, geothermal
168 electric, geothermal ground source heat, biogas produced by the anaerobic digestion or
169 fermentation of biodegradable materials, tidal energy, wave energy, ocean thermal and fuel cells
170 that do not utilize a fossil fuel resource.

171 “Obligated entity”, a person or entity that sells natural gas to end-use customers.

172 “Qualified investment”, any capital investment in gas distribution infrastructure incurred
173 by a natural gas utility for the purpose of providing natural gas service while complying with the
174 renewable heating fuel standard, such as renewable natural gas, hydrogen, or a blend of either or
175 both with fossil natural gas. Qualified investments include costs of procurement of renewable
176 natural gas and hydrogen from third parties that contribute to the obligated entity meeting the
177 targets set forth in this chapter.

178 “Qualified investment infrastructure”, (i) a facility or any part of the equipment located at
179 a facility that is used to create, gather and process biogas into renewable natural gas; inject
180 renewable natural gas into a natural gas pipeline; or determine the constituents of renewable

181 natural gas before the injection of the renewable natural gas into a natural gas pipeline; or (ii) a
182 facility or part of equipment located at a facility that is used to create, gather, methane or inject
183 hydrogen into the pipeline.

184 “Qualified renewable heating fuels”, liquid and gaseous fuels and electricity derived from
185 renewable biomass energy sources intended for use as heating oil, including low-carbon
186 hydrogen and renewable natural gas.

187 “Renewable heating fuel standard” or “standard”, the required percentage sale of
188 renewable heating fuels described in subsection (a) of section 2.

189 “Renewable natural gas”, pipeline quality methane derived from any combination of
190 biogas, biomass, the methanation of hydrogen and waste carbon dioxide, or the thermal
191 gasification of renewable feedstocks.

192 Section 2. (a) Beginning in compliance year 2025, at least 3 per cent of the total therms
193 sold annually by obligated entities, adjusted for losses, shall come from qualified renewable
194 heating fuels. Beginning in compliance year 2030, at least 5 per cent of the total therms sold
195 annually by obligated entities, adjusted for losses, shall come from qualified renewable heating
196 fuels. Beginning in compliance year 2035, at least 7 per cent of the total therms sold annually by
197 obligated entities, adjusted for losses, shall come from qualified renewable heating fuels.
198 Beginning in compliance year 2040, at least 10 per cent of the total therms sold annually by
199 obligated entities, adjusted for losses, shall come from qualified renewable heating fuels.

200 (b) If the department determines that achievement of the renewable heating fuel standards
201 caused total customer bills for local distribution companies to rise more than by more than 2.5

202 per cent for a compliance year, the department shall suspend compliance for the next compliance
203 year immediately following the determination.

204 (c) The department shall review whether adjustments to the renewable heating fuel
205 standards for the following 2 compliance years are necessary to ensure that the total increase in
206 customer bills remain below the percentage increase identified in subsection (b). This review
207 shall assess the total incremental annual cost to meet the renewable heating fuel standards,
208 including accounting for (i) any value received by a natural gas utility upon any resale of eligible
209 fuels, such as any environmental credits or other credits associated with environmental attributes;
210 and (ii) any savings achieved through avoidance of conventional gas purchases or development,
211 such as avoided pipeline costs or carbon costs.

212 (d) The department may adjust prospective compliance year targets described in
213 subsection (a); provided, however, that the cumulative annual percentage of natural gas sold
214 shall comply with the 2040 target.

215 (e) If the department determines that there are not enough eligible resources to meet the
216 targets identified in subsection (a) within the constraints of subsections (b) to (d), inclusive, the
217 department shall direct natural gas utilities to develop qualified investments sufficient to meet
218 the targets.

219 Section 3. (a) Compliance of an obligated entity with the renewable heating fuel standard
220 may be demonstrated through: (i) procurement of HRECs; (ii) payment of alternative compliance
221 payments to the renewable heating fuels development fund established in section 2PPPPP of
222 chapter 29; or (iii) a combination of HREC procurement and alternative compliance payments.
223 HRECs shall be issued, monitored, accounted for and transferred through a system maintained

224 and administered by the department or ISO-NE, as defined in section 1 of chapter 164. Obligated
225 entities shall receive 1 HREC for each dekatherm of renewable heating fuel sourced from
226 renewable sources. The commissioner shall promulgate rules and regulations for the payment of
227 alternative compliance payments.

228 (b) To procure an HREC, an obligated entity's production source shall be certified by the
229 commission as using eligible resources. Use of eligible resources shall be evidenced by reports
230 issued by the commissioner of energy resources.

231 (c) In meeting the obligations of the renewable heating fuel standards, to the extent
232 feasible and consistent with state and federal law, all investments, projects and activities
233 undertaken pursuant to this chapter by any person or the department shall provide employment
234 opportunities for all segments of the population and workforce, including minority-owned and
235 female-owned business enterprises, and utilize labor and materials within the commonwealth to
236 ensure the environmental benefits of avoided carbon emissions are not diminished by emissions
237 associated with the transportation of labor or materials. The investments, projects and activities
238 shall not discriminate based on race or socioeconomic status.

239 (d) The commissioner of energy resources shall promulgate rules and regulations for the
240 implementation of the renewable heating fuel standards on or before December 31, 2022. The
241 rules and regulations shall include, but be limited to, provisions for:

242 (i) verification of eligibility and production of eligible resources, as well as the energy
243 content of qualified renewable heating fuels, including requirements to notify the commission in
244 the event of a change in status, monitor qualified facilities to ensure annual average energy
245 content matches the expected generation of HRECs;

246 (ii) certification of eligible resources by issuing statements of qualification within 90 days
247 of application, including prospective reviews for applicants seeking to determine whether a
248 facility would be eligible;

249 (iii) annual compliance filings to be made by all obligated entities within 1 month after
250 tracking system data is available for the fourth quarter of each calendar year; provided, that all
251 obligated entities shall cooperate with the commission in providing data necessary to assess the
252 magnitude of obligation and verify the compliance of all obligated entities;

253 (iv) sanctions for obligated entities that, after investigation, have been found to fail to
254 reasonably comply with the renewable heating fuel standards or department rules and
255 regulations; provided, that no sanction or penalty shall relieve or diminish an obligated entity
256 from liability for fulfilling any shortfall in its compliance obligation; provided further, that no
257 sanction shall be imposed if compliance is achieved through alternative compliance payments;
258 provided further, that the commission may suspend or revoke the certification of eligible
259 resources that provide false information or fail to notify the commission in the event of a change
260 in eligibility status or otherwise comply with commission rules; and provided further, that
261 financial penalties resulting from sanctions from obligated entities shall not be recoverable in
262 rates;

263 (v) mechanisms for the purposes of easing compliance burdens, facilitating bringing new
264 eligible resources on-line and avoiding or mitigating conflicts with state-level source disclosure
265 requirements and green marketing claims throughout the region; provided, that mechanisms shall
266 allow obligated entities to demonstrate compliance over a compliance year and bank excess

267 compliance for 2 subsequent compliance years, capped at 20 per cent of the current year's
268 obligation; and

269 (vi) public reporting on the status of the implementation of standards, including the
270 comparative use of HRECs and alternative compliance payments and the amount of rate
271 increases authorized by the standards.

272 Section 4. The commission shall adopt regulations authorizing cost recovery by natural
273 gas local distribution companies of all prudent incremental costs arising from the implementation
274 of the renewable heating fuel standards, including, without limitation: (i) the purchase of
275 qualified renewable heating fuels or HRECs or the payment of alternative compliance payments;
276 (ii) required payments to support assessments for compliance purposes; (iii) the incremental
277 costs of complying with energy source disclosure requirements; (iv) qualified infrastructure
278 investments or other activities that will grow the supply and utilization of qualified renewable
279 heating fuels and provide environmental benefits to the commonwealth, including approval of
280 investment in conditioning, injection and distribution infrastructure, such as extending the
281 transmission or distribution system for the purpose of interconnection with a qualified facility;
282 (v) making a financial investment for the purposes of interconnecting a qualified facility or
283 otherwise ensuring that gas created by the facility can be delivered to customers in accordance
284 with statutory requirements for injection, compression, quality and safety or other department
285 or federal regulatory requirements; (vi) participating in a state or federal renewable energy
286 program or project, if participation by the natural gas local distribution company (1) consists of
287 the purchase or sale of gas produced or environmental attributes and (2) results in a reduction of
288 the cost of gas produced to the company's customers; (vii) providing customers with the option
289 to purchase gas produced from a qualified investment, with or without environmental attributes,

290 directly from the natural gas local distribution company; or (viii) any other activity that develops
291 qualified renewable heating fuel sources, advances the sale of qualified renewable heating fuel
292 sources or promotes the diversification in energy supply within the commonwealth to advance
293 the commonwealth's environmental or climate goals. Costs may be recovered by means of an
294 automatic adjustment clause or any another recovery mechanism authorized by rule.

295 Section 5. The department shall conduct a renewable heating fuels inventory, which shall
296 include:

297 (i) a list of the existing eligible resources, including the location, an estimate of lifecycle
298 greenhouse gas emissions and an assessment of supply chain infrastructure associated with each
299 eligible resource;

300 (ii) a list of the potential qualified renewable heating fuel sources, including the estimated
301 potential production quantities and energy content of sources;

302 (iii) discussion of the best use or uses for potential qualified renewable heating fuel
303 sources, taking into account estimated lifecycle greenhouse gas emissions, costs and whether the
304 potential source can be used to address local gas or electric constraints; and

305 (iv) a description of the technologies available for use at each potential qualified
306 renewable heating fuel source, including estimates from qualified renewable heating fuel
307 sources, small renewable energy generating facilities, as defined in section 143 of chapter 164,
308 renewable energy facilities that would be otherwise curtailed, or renewable energy
309 generating sources, as defined in subsection (b) of section 11F of chapter 25A,

310 Section 6. The department shall research and determine gas quality standards for the
311 injection of renewable natural gas, low-carbon hydrogen and any other resources qualifying for
312 the renewable heating fuel standards into the common carrier pipeline system. The purpose of
313 the standards shall be to identify acceptable levels of constituents of concern for safety and
314 environmental purposes, including ensuring pipeline integrity, while providing reasonable and
315 predictable access to pipeline transmission and distribution facilities. The department shall
316 consult industry groups and identify industry best practices in establishing the standards.

317 Section 7. The department may review and approve siting of low-carbon hydrogen
318 production and delivery facilities and infrastructure.

319 Chapter 164D

320 Renewable Thermal Solutions

321 Section 1. As used in this chapter the following terms shall, unless the context clearly
322 requires otherwise, have the following meanings:

323 “Commission”, the commonwealth utilities commission.

324 “Department”, the department of energy resources.

325 “District heating”, systems that (i) provide useful thermal energy to multiple buildings
326 from a central resource; (ii) distribute useful thermal energy among buildings connected to a
327 common thermal network; or (iii) both provide and distribute useful thermal energy.

328 “Geothermal district heating”, the utilization of useful thermal energy generated and
329 stored in the earth to provide heat to buildings and industry through a distribution network.

330 “Natural gas utility”, a natural gas local distribution company.

331 “Renewable thermal district heating”, district heating relying primarily on useful thermal
332 energy from a renewable thermal resource.

333 “Renewable thermal infrastructure”, infrastructure for the conversion or distribution of
334 thermal energy from a renewable thermal resource.

335 “Renewable thermal resource”, any facility that generates useful thermal energy using: (i)
336 naturally occurring temperature differences in ground, air or water, via geothermal ground loop,
337 ambient water loop, air source heat pump or other technology; (ii) excess thermal energy, also
338 referred to as waste heat, from building energy systems or commercial processes; (iii) sunlight;
339 (iv) combined heat and power; or (v) energy efficient steam technology.

340 “Useful thermal energy”, (i) energy in the form of direct heat, steam, hot water or another
341 thermal form that is used in production for which fuel or electricity would otherwise be
342 consumed; and (ii) beneficial measures for heating, cooling, humidity control, process use or
343 other valid thermal end use energy requirements for which fuel or electricity would otherwise be
344 consumed.

345 Section 2. (a) Natural gas utilities shall provide useful thermal energy through investment
346 in renewable thermal infrastructure.

347 (b) The commission shall adopt regulations authorizing a natural gas utility to make
348 investments in renewable thermal district heating networks, including geothermal district heating
349 networks. The commission may approve the recovery of prudently incurred costs associated with
350 the networks.

351 (c) Natural gas utilities may recover prudently incurred costs associated with geothermal
352 district heating investment from customers receiving heating and cooling services as a result of
353 the investment, or from gas delivery customers, until such time as a class of geothermal district
354 heating customers can be established by the commission. Once a class of geothermal district
355 heating customers has been established, the commission shall investigate the appropriate cost
356 allocation and recovery of any geothermal district heating investments made prior to the
357 establishment of the class.

358 SECTION 9. The department of energy resources shall undertake a statewide study of
359 renewable thermal district heating network potential, financing and policy options for the
360 purposes of eliminating barriers to investment and promoting use of renewable thermal district
361 heating. The department shall consult with stakeholders including, but not limited to, geothermal
362 industry, heating and cooling professionals, and electric and gas distribution companies. Not
363 later than February 1, 2022, the department shall report its findings to the governor and the clerks
364 of the house and senate.

365 SECTION 10. The credit established in subsection (y) of section 6 of chapter 62 shall be
366 available in tax years 2022, 2023, 2024, 2025 and 2026.

367 SECTION 11. The gas quality standards established in section 7 of chapter 164C shall
368 take effect not later than December 31, 2022.