

1 **RETROFIT COMPRESSED NATURAL GAS VEHICLES**

2 **AMENDMENTS**

3 2010 GENERAL SESSION

4 STATE OF UTAH

5 **Chief Sponsor: Jack R. Draxler**

6 Senate Sponsor: Mark B. Madsen

| | | | |
|----|-------------------|-----------------------|-----------------|
| 7 | Cosponsors: | Christopher N. Herrod | Patrick Painter |
| 8 | Stephen D. Clark | Eric K. Hutchings | Kraig Powell |
| 9 | Bradley M. Daw | Brian S. King | Paul Ray |
| 10 | Susan Duckworth | Todd E. Kiser | Evan J. Vickers |
| 11 | Julie Fisher | Curtis Oda | R. Curt Webb |
| 12 | Francis D. Gibson | | |



13
14 **LONG TITLE**

15 **General Description:**

16 This bill addresses the retrofiting of vehicles to operate on compressed natural gas.

17 **Highlighted Provisions:**

18 This bill:

- 19 ▶ requires certain inspections, emission standards, and certifications for retrofit
- 20 compressed natural gas vehicles;
- 21 ▶ authorizes the Division of Air Quality to develop programs to coordinate amongst
- 22 government and private entities to facilitate use of retrofit compressed natural gas
- 23 vehicles;
- 24 ▶ provides that a retrofit compressed natural gas vehicle in compliance with certain
- 25 requirements satisfies fleet requirements;
- 26 ▶ prohibits a retrofit compressed natural gas vehicle from receiving a clean fuel
- 27 vehicle tax credit, unless it meets certain requirements; and
- 28 ▶ makes technical changes.

29 **Monies Appropriated in this Bill:**

30 None

31 **Other Special Clauses:**

32 None

33 **Utah Code Sections Affected:**

34 AMENDS:

35 **19-2-105.3**, as last amended by Laws of Utah 2009, Chapter 183

36 **59-7-605**, as last amended by Laws of Utah 2008, Chapter 153

37 **59-10-1009**, as last amended by Laws of Utah 2008, Chapter 153

38 ENACTS:

39 **19-1-406**, Utah Code Annotated 1953



41 *Be it enacted by the Legislature of the state of Utah:*

42 Section 1. Section **19-1-406** is enacted to read:

43 **19-1-406. Retrofit compressed natural gas vehicles -- Inspections, standards, and**
44 **certification -- Compliance with other law -- Programs to coordinate.**

45 (1) An owner of a retrofit compressed natural gas vehicle that is retrofit on or after
46 July 1, 2010, may not operate the retrofit compressed natural gas vehicle before the owner has
47 the retrofit compressed natural gas vehicle:

48 (a) inspected and certified as safe in accordance with relevant standards, including the
49 National Fire Protection Association 52 Vehicular Gaseous Fuel Systems Code, by a CSA
50 America CNG Fuel System Inspector; and

51 (b) tested to ensure that the retrofit compressed natural gas vehicle satisfies the
52 emissions standards:

53 (i) if any, for the county in which the retrofit compressed natural gas vehicle is
54 registered; or

55 (ii) for the county in the state with the most lenient emissions standards, if the retrofit
56 compressed natural gas vehicle is registered in a county with no emissions standards.

57 (2) A person who performs a retrofit on a retrofit compressed natural gas vehicle shall
58 certify to the owner of the retrofit compressed natural gas vehicle that the retrofit does not

59 tamper with, circumvent, or otherwise affect the vehicle's on-board diagnostic system, if any.

60 (3) (a) After the owner of a retrofit compressed natural gas vehicle that is retrofit on or

61 after July 1, 2010, has the retrofit compressed natural gas vehicle inspected under Subsection

62 (1), the owner shall have the retrofit inspected for safety by a CSA America CNG Fuel System

63 Inspector:

64 (i) the sooner of:

65 (A) every three years after the retrofit; or

66 (B) every 36,000 miles after the retrofit; and

67 (ii) after any collision occurring at a speed of greater than five miles per hour.

68 (b) An inspector at a state-required safety inspection shall verify that a retrofit

69 compressed natural gas vehicle is inspected in accordance with Subsection (3)(a).

70 (4) (a) The Division of Air Quality may develop programs to coordinate amongst

71 government agencies and interested parties in the private sector to facilitate:

72 (i) testing to ensure compliance with emissions and anti-tampering standards

73 established in this section or by federal law; and

74 (ii) the retrofitting of vehicles to operate on compressed natural gas vehicles in a

75 manner that provides for:

76 (A) safety;

77 (B) compliance with applicable law; and

78 (C) potential improvement in the air quality of this state.

79 (b) In developing a program under this Subsection (4), the Division of Air Quality

80 shall:

81 (i) allow for testing using equipment widely available within the state, if possible; and

82 (ii) consult with relevant federal, state, and local government agencies and other

83 interested parties.

84 Section 2. Section **19-2-105.3** is amended to read:

85 **19-2-105.3. Clean fuel requirements for fleets.**

86 (1) As used in this section:

- 87 (a) "1990 Clean Air Act" means the federal Clean Air Act as amended in 1990.
- 88 (b) "Clean fuel" means:
- 89 (i) propane, compressed natural gas, or electricity;
- 90 (ii) other fuel the Air Quality Board created in Title 19, Chapter 2, Air Conservation
- 91 Act, determines annually on or before July 1 is at least as effective as fuels under Subsection
- 92 (1)(b)(i) in reducing air pollution; and
- 93 (iii) other fuel that meets the clean fuel vehicle standards in the 1990 Clean Air Act.
- 94 (c) "Fleet" means 10 or more vehicles:
- 95 (i) owned or operated by a single entity as defined by board rule; and
- 96 (ii) capable of being fueled or that are fueled at a central location.
- 97 (d) "Fleet" does not include motor vehicles that are:
- 98 (i) held for lease or rental to the general public;
- 99 (ii) held for sale or used as demonstration vehicles by motor vehicle dealers;
- 100 (iii) used by motor vehicle manufacturers for product evaluations or tests;
- 101 (iv) authorized emergency vehicles as defined in Section 41-6a-102;
- 102 (v) registered under Title 41, Chapter 1a, Part 2, Registration, as farm vehicles;
- 103 (vi) special mobile equipment as defined in Section 41-1a-102;
- 104 (vii) heavy duty trucks with a gross vehicle weight rating of more than 26,000 pounds;
- 105 (viii) regularly used by employees to drive to and from work, parked at the employees'
- 106 personal residences when they are not at their employment, and not practicably fueled at a
- 107 central location;
- 108 (ix) owned, operated, or leased by public transit districts; or
- 109 (x) exempted by board rule.
- 110 (2) (a) After evaluation of reasonably available pollution control strategies, and as part
- 111 of the state implementation plan demonstrating attainment of the national ambient air quality
- 112 standards, the board may by rule, subject to Subsection (2)(c), require fleets in specified
- 113 geographical areas to use clean fuels if the board determines fleet use of clean fuels is:
- 114 (i) necessary to demonstrate attainment of the national ambient air quality standards in

115 any area where they are required; and

116 (ii) reasonably cost effective when compared to other similarly beneficial control
117 strategies for demonstrating attainment of the national ambient air quality standards.

118 (b) State implementation plans developed prior to July 1, 1995, may require fleets to
119 use clean fuels no earlier than July 1, 1995, unless the board determines fleet use of clean fuels
120 is necessary prior to July 1, 1995, to demonstrate attainment of the national ambient air quality
121 standards in any area by an attainment date established by federal law.

122 (c) The board may not require more than 50% of those trucks in a fleet that are heavy
123 duty trucks having a gross vehicle weight rating of more than 8,500 pounds and not more than
124 26,000 pounds to convert to clean fuels under Subsection (2)(b).

125 (d) A vehicle retrofit to operate on compressed natural gas in accordance with Section
126 19-1-406 qualifies as a clean fuel vehicle under this section.

127 (3) (a) After evaluation of reasonably available pollution control strategies, and as part
128 of a state implementation plan demonstrating only maintenance of the national ambient air
129 quality standards, the board may by rule, subject to Subsection (3)(b), require fleets in
130 specified geographical areas to use clean fuels if the board determines fleet use of clean fuels
131 is:

132 (i) necessary to demonstrate maintenance of the national ambient air quality standards
133 in any area where they are required; and

134 (ii) reasonably cost effective as compared with other similarly beneficial control
135 strategies for demonstrating maintenance of the national ambient air quality standards.

136 (b) Under Subsection (3)(a) the board may require no more than:

137 (i) 30% of a fleet to use clean fuels before January 1, 1998;

138 (ii) 50% of a fleet to use clean fuels before January 1, 1999; and

139 (iii) 70% of a fleet to use clean fuels before January 1, 2000.

140 (c) The board may not require more than 50% of those trucks in a fleet that are heavy
141 duty trucks having a gross vehicle weight rating of more than 8,500 pounds and not more than
142 26,000 pounds to convert to clean fuels under Subsection (3)(b).

- 143 (4) Rules the board makes under this section may include:
144 (a) dates by which fleets are required to convert to clean fuels under the provisions of
145 this section;
146 (b) definitions of fleet owners or operators;
147 (c) definitions of vehicles exempted from this section by rule;
148 (d) certification requirements for persons who install clean fuel conversion equipment,
149 including testing and certification standards regarding installers; and
150 (e) certification fees for installers, established under Section 63J-1-504.

151 (5) Implementation of this section and rules made under this section are subject to the
152 reasonable availability of clean fuel in the local market as determined by the board.

153 Section 3. Section **59-7-605** is amended to read:

154 **59-7-605. Definitions -- Tax credit -- Cleaner burning fuels.**

155 (1) As used in this section:

156 (a) "Air quality standards" means that a vehicle's emissions are equal to or cleaner
157 than the standards established in bin 2 in Table S04-1, of 40 C.F.R. 86.1811-04(c)(6).

158 (b) "Board" means the Air Quality Board created under Title 19, Chapter 2, Air
159 Conservation Act.

160 (c) "Certified by the board" means that:

161 (i) a motor vehicle on which conversion equipment has been installed meets the
162 following criteria:

163 (A) before the installation of conversion equipment, the vehicle does not exceed the
164 emission cut points for a transient test driving cycle, as specified in 40 C.F.R. Part 51,
165 Appendix E to Subpart S, or an equivalent test for the make, model, and year of the vehicle;

166 (B) the motor vehicle's emissions of regulated pollutants, when operating on a fuel
167 listed in Subsection (2)(c)(i) or (ii), is less than the emissions were before the installation of
168 conversion equipment; and

169 (C) a reduction in emissions under Subsection (1)(c)(i)(B) is demonstrated by:

170 (I) certification of the conversion equipment by the federal Environmental Protection

171 Agency or by a state whose certification standards are recognized by the board;

172 (II) testing the motor vehicle, before and after installation of the conversion

173 equipment, in accordance with 40 C.F.R. Part 86, Control of Emissions from New and In-use

174 Highway Vehicles and Engines, using all fuel the motor vehicle is capable of using; or

175 (III) any other test or standard recognized by board rule, which may not include a

176 retrofit compressed natural gas vehicle that is retrofit in accordance with Section 19-1-406,

177 unless that motor vehicle also satisfies Subsection (1)(c)(i)(C)(I); or

178 (ii) special mobile equipment on which conversion equipment has been installed meets

179 the following criteria:

180 (A) the special mobile equipment's emissions of regulated pollutants, when operating

181 on fuels listed in Subsection (2)(d)(i) or (ii), is less than the emissions were before the

182 installation of conversion equipment; and

183 (B) a reduction in emissions under Subsection (1)(c)(ii)(A) is demonstrated by:

184 (I) certification of the conversion equipment by the federal Environmental Protection

185 Agency or by a state whose certification standards are recognized by the board; or

186 (II) any other test or standard recognized by board rule.

187 (d) "Clean fuel grant" means a grant awarded under Title 19, Chapter 1, Part 4, Clean

188 Fuels and Vehicle Technology Program Act, for reimbursement of a portion of the incremental

189 cost of an OEM vehicle or the cost of conversion equipment.

190 (e) "Conversion equipment" means equipment referred to in Subsection (2)(c) or (d).

191 (f) "Fuel economy standards" means that a vehicle's combined fuel economy, as

192 determined in 40 C.F.R. 600.209-95(d) is equal to or greater than:

193 (i) 31 miles per gallon for gasoline-fueled vehicles;

194 (ii) 36 miles per gallon for diesel-fueled vehicles;

195 (iii) 19 miles per gallon for vehicles fueled by a blend of 85% ethanol and 15%

196 gasoline;

197 (iv) 19 miles per gallon for liquified petroleum gas-fueled vehicles; or

198 (v) standards consistent with 40 C.F.R. 600.209-95(d) that are adopted by the Air

199 Quality Board by rule.

200 (g) "Incremental cost" has the same meaning as in Section 19-1-402.

201 (h) "OEM vehicle" has the same meaning as in Section 19-1-402.

202 (i) "Original purchase" means the purchase of a vehicle that has never been titled or
203 registered and has been driven less than 7,500 miles.

204 (j) "Special mobile equipment":

205 (i) means any mobile equipment or vehicle that is not designed or used primarily for
206 the transportation of persons or property; and

207 (ii) includes construction or maintenance equipment.

208 (2) For taxable years beginning on or after January 1, 2009, but beginning on or before
209 December 31, 2013, a taxpayer may claim a tax credit against tax otherwise due under this
210 chapter or Chapter 8, Gross Receipts Tax on Certain Corporations Not Required to Pay
211 Corporate Franchise or Income Tax Act, in an amount equal to:

212 (a) \$750 for the original purchase of a new vehicle that is not fueled by compressed
213 natural gas if the vehicle is registered in Utah and meets air quality and fuel economy
214 standards;

215 (b) for the purchase of a vehicle fueled by compressed natural gas that is registered in
216 Utah, the lesser of:

217 (i) \$2,500; or

218 (ii) 35% of the purchase price of the vehicle;

219 (c) 50% of the cost of equipment for conversion, if certified by the board, of a motor
220 vehicle registered in Utah minus the amount of any clean fuel grant received, up to a
221 maximum tax credit of \$2,500 per motor vehicle, if the motor vehicle is to:

222 (i) be fueled by propane, natural gas, or electricity;

223 (ii) be fueled by other fuel the board determines annually on or before July 1 to be at
224 least as effective in reducing air pollution as fuels under Subsection (2)(c)(i); or

225 (iii) meet the federal clean-fuel vehicle standards in the federal Clean Air Act
226 Amendments of 1990, 42 U.S.C. Sec. 7521 et seq.; and

227 (d) 50% of the cost of equipment for conversion, if certified by the board, of a special
228 mobile equipment engine minus the amount of any clean fuel grant received, up to a maximum
229 tax credit of \$1,000 per special mobile equipment engine, if the special mobile equipment is to
230 be fueled by:

231 (i) propane, natural gas, or electricity; or

232 (ii) other fuel the board determines annually on or before July 1 to be:

233 (A) at least as effective in reducing air pollution as the fuels under Subsection

234 (2)(d)(i); or

235 (B) substantially more effective in reducing air pollution than the fuel for which the
236 engine was originally designed.

237 (3) A taxpayer shall provide proof of the purchase of an item for which a tax credit is
238 allowed under this section by:

239 (a) providing proof to the board in the form the board requires by rule;

240 (b) receiving a written statement from the board acknowledging receipt of the proof;

241 and

242 (c) retaining the written statement described in Subsection (3)(b).

243 (4) Except as provided by Subsection (5), the tax credit under this section is allowed
244 only:

245 (a) against any Utah tax owed in the taxable year by the taxpayer;

246 (b) in the taxable year in which the item is purchased for which the tax credit is
247 claimed; and

248 (c) once per vehicle.

249 (5) If the amount of a tax credit claimed by a taxpayer under this section exceeds the
250 taxpayer's tax liability under this chapter for a taxable year, the amount of the tax credit
251 exceeding the tax liability may be carried forward for a period that does not exceed the next
252 five taxable years.

253 (6) The tax credit provided by this section may be taken only once per vehicle.

254 Section 4. Section **59-10-1009** is amended to read:

255 **59-10-1009. Definitions -- Cleaner burning fuels tax credit.**

256 (1) As used in this section:

257 (a) "Air quality standards" means that a vehicle's emissions are equal to or cleaner
258 than the standards established in bin 2 in Table S04-1, of 40 C.F.R. 86.1811-04(c)(6).

259 (b) "Board" means the Air Quality Board created in Title 19, Chapter 2, Air
260 Conservation Act.

261 (c) "Certified by the board" means that:

262 (i) a motor vehicle on which conversion equipment has been installed meets the
263 following criteria:

264 (A) before the installation of conversion equipment, the vehicle does not exceed the
265 emission cut points for a transient test driving cycle, as specified in 40 C.F.R. Part 51,
266 Appendix E to Subpart S, or an equivalent test for the make, model, and year of the vehicle;

267 (B) the motor vehicle's emissions of regulated pollutants, when operating on fuels
268 listed in Subsection (2)(c)(i) or (ii), is less than the emissions were before the installation of
269 conversion equipment; and

270 (C) a reduction in emissions under Subsection (1)~~(c)~~(c)(i)(B) is demonstrated by:

271 (I) certification of the conversion equipment by the federal Environmental Protection
272 Agency or by a state whose certification standards are recognized by the board;

273 (II) testing the motor vehicle, before and after installation of the conversion
274 equipment, in accordance with 40 C.F.R. Part 86, Control Emissions from New and In-use
275 Highway Vehicles and Engines, using all fuels the motor vehicle is capable of using; or

276 (III) any other test or standard recognized by board rule, which may not include a
277 retrofit compressed natural gas vehicle that is retrofit in accordance with Section 19-1-406,
278 unless that motor vehicle also satisfies Subsection (1)(c)(i)(C)(I); or

279 (ii) special mobile equipment on which conversion equipment has been installed meets
280 the following criteria:

281 (A) the special mobile equipment's emissions of regulated pollutants, when operating
282 on fuels listed in Subsection (2)(c)(i) or (ii), is less than the emissions were before the

283 installation of conversion equipment; and

284 (B) a reduction in emissions under Subsection (1)(c)(ii)(A) is demonstrated by:

285 (I) certification of the conversion equipment by the federal Environmental Protection
286 Agency or by a state whose certification standards are recognized by the board; or

287 (II) any other test or standard recognized by the board.

288 (d) "Clean fuel grant" means a grant a claimant, estate, or trust receives under Title 19,
289 Chapter 1, Part 4, Clean Fuels and Vehicle Technology Program Act, for reimbursement of a
290 portion of the incremental cost of the OEM vehicle or the cost of conversion equipment.

291 (e) "Conversion equipment" means equipment referred to in Subsection (2)(c) or (d).

292 (f) "Fuel economy standards" means that a vehicle's combined fuel economy, as
293 determined in 40 C.F.R. 600.209-95(d) is equal to or greater than:

294 (i) 31 miles per gallon for gasoline-fueled vehicles;

295 (ii) 36 miles per gallon for diesel-fueled vehicles;

296 (iii) 19 miles per gallon for vehicles fueled by a blend of 85% ethanol and 15%
297 gasoline;

298 (iv) 19 miles per gallon for liquified petroleum gas-fueled vehicles; or

299 (v) standards consistent with 40 C.F.R. 600.209-95(d) that are adopted by the Air
300 Quality Board by rule.

301 (g) "Incremental cost" has the same meaning as in Section 19-1-402.

302 (h) "OEM vehicle" has the same meaning as in Section 19-1-402.

303 (i) "Original purchase" means the purchase of a vehicle that has never been titled or
304 registered and has been driven less than 7,500 miles.

305 (j) "Special mobile equipment":

306 (i) means any mobile equipment or vehicle not designed or used primarily for the
307 transportation of persons or property; and

308 (ii) includes construction or maintenance equipment.

309 (2) For taxable years beginning on or after January 1, 2009, but beginning on or before
310 December 31, 2013, a claimant, estate, or trust may claim a nonrefundable tax credit against

311 tax otherwise due under this chapter in an amount equal to:

312 (a) \$750 for the original purchase of a new vehicle that is not fueled by compressed
313 natural gas if the vehicle is registered in Utah and meets air quality and fuel economy
314 standards;

315 (b) for the purchase of a vehicle fueled by compressed natural gas that is registered in
316 Utah, the lesser of:

317 (i) \$2,500; or

318 (ii) 35% of the purchase price of the vehicle;

319 (c) 50% of the cost of equipment for conversion, if certified by the board, of a motor
320 vehicle registered in Utah minus the amount of any clean fuel conversion grant received, up to
321 a maximum tax credit of \$2,500 per vehicle, if the motor vehicle:

322 (i) is to be fueled by propane, natural gas, or electricity;

323 (ii) is to be fueled by other fuel the board determines annually on or before July 1 to be
324 at least as effective in reducing air pollution as fuels under Subsection (2)(c)(i); or

325 (iii) will meet the federal clean fuel vehicle standards in the federal Clean Air Act
326 Amendments of 1990, 42 U.S.C. Sec. 7521 et seq.; and

327 (d) 50% of the cost of equipment for conversion, if certified by the board, of a special
328 mobile equipment engine minus the amount of any clean fuel conversion grant received, up to
329 a maximum tax credit of \$1,000 per special mobile equipment engine, if the special mobile
330 equipment is to be fueled by:

331 (i) propane, natural gas, or electricity; or

332 (ii) other fuel the board determines annually on or before July 1 to be:

333 (A) at least as effective in reducing air pollution as the fuels under Subsection
334 (2)(d)(i); or

335 (B) substantially more effective in reducing air pollution than the fuel for which the
336 engine was originally designed.

337 (3) A claimant, estate, or trust shall provide proof of the purchase of an item for which
338 a tax credit is allowed under this section by:

- 339 (a) providing proof to the board in the form the board requires by rule;
- 340 (b) receiving a written statement from the board acknowledging receipt of the proof;
- 341 and
- 342 (c) retaining the written statement described in Subsection (3)(b).
- 343 (4) Except as provided by Subsection (5), the tax credit under this section is allowed
- 344 only:
- 345 (a) against any Utah tax owed in the taxable year by the claimant, estate, or trust;
- 346 (b) in the taxable year in which the item is purchased for which the tax credit is
- 347 claimed; and
- 348 (c) once per vehicle.
- 349 (5) If the amount of a tax credit claimed by a claimant, estate, or trust under this
- 350 section exceeds the claimant's, estate's, or trust's tax liability under this chapter for a taxable
- 351 year, the amount of the tax credit exceeding the tax liability may be carried forward for a
- 352 period that does not exceed the next five taxable years.
- 353 (6) The tax credit provided by this section may be taken only once per vehicle.