

New federal law addresses excise tax on LNG, LPG, and CNG

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Overview

President Obama recently signed into law the Surface Transportation and Veterans Health Care Choice Improvement Act of 2015 (H.R. 3236).¹ Effective January 1, 2016, the new law equalizes the federal excise tax treatment of liquefied natural gas (LNG) and liquefied petroleum gas (LPG) and provides further guidance applicable to the taxation of compressed natural gas (CNG).

This Tax Alert summarizes these federal excise tax law changes.

The federal excise tax on alternative fuels

Currently, under Internal Revenue Code (I.R.C.) §4041, the federal excise tax on “alternative fuels” is imposed when such fuels are sold for use or used as a fuel in a motor vehicle or motorboat.² The term “alternative fuels” includes, but is not limited to, LNG, CNG, and LPG.³

LNG is currently subject to tax at the federal diesel fuel tax rate of 24.3 cents per gallon.⁴ However, LNG contains a lower energy content than diesel. According to the Oak Ridge National Laboratory, LNG has an energy content of 74,700 Btu per gallon (lower heating value), while diesel has an energy content of 128,450 Btu per gallon (lower heating value).⁵ Therefore, one gallon of LNG has the energy equivalency of 58 percent of one gallon of diesel fuel, although LNG is currently taxed as having the energy equivalency of 100 percent of one gallon of diesel fuel.⁶

Similarly, LPG is currently subject to tax at the federal gasoline tax rate of 18.3 cents per gallon.⁷ However, LPG contains a lower energy content than gasoline. According to the Oak Ridge National Laboratory, LPG has an energy content of 84,950 Btu per gallon (lower heating value), while gasoline has an energy content of 116,090 Btu per gallon (lower heating value).⁸ Therefore, one gallon of LPG has the energy equivalency of 72 percent of one gallon of gasoline, although LPG is currently taxed as having the energy equivalency of 100 percent of one gallon of gasoline.⁹

For purposes of the alternative fuel tax credit under I.R.C. §6426(d), a gasoline gallon equivalent definition has been in place since 2005 for all nonliquid alternative fuels in the amount of 124,800 Btu.¹⁰ IRS Notice 2006-92, effective 2006, further clarified (for purposes of the alternative fuel credit) the energy content of one gallon of gasoline for CNG as equal to 121 cubic feet.¹¹ Notice 2006-92 also clarified that the gasoline gallon equivalency for CNG, as applicable to the imposition of tax, was equal to 126.67 cubic feet.

¹ The Surface Transportation and Veterans Health Care Choice Improvement Act of 2015; Pub. L. 114-4; 2015 Enacted H.R. 3236 (Jul. 31, 2015).

² I.R.C. §4041(a)(2).

³ I.R.C. §4041(a)(2) and (3).

⁴ I.R.C. §4041(a)(2)(B)(ii).

⁵ See Lower and Higher Heating Values of Gas, Liquid and Solid Fuels, available [here](#).

⁶ See Joint Committee on Taxation, *Description of the Chairman's Mark of a Proposal to Convert the Tax on Liquefied Petroleum Gas and Liquefied Natural Gas to an Energy Equivalent Basis* (JCX-32-15), Feb. 9, 2015.

⁷ I.R.C. §4041(a)(2)(B)(i).

⁸ See Lower and Higher Heating Values of Gas, Liquid and Solid Fuels, available [here](#).

⁹ See Joint Committee on Taxation, *Description of the Chairman's Mark of a Proposal to Convert the Tax on Liquefied Petroleum Gas and Liquefied Natural Gas to an Energy Equivalent Basis* (JCX-32-15), Feb. 9, 2015.

¹⁰ I.R.C. §6426(d)(3).

¹¹ IRS Notice 2006-92.

H.R. 3236

Effective January 1, 2016, H.R. 3236 rectifies the unequal excise tax treatment of LNG and LPG.¹² The new law provides a diesel fuel gallon equivalency for LNG of 128,700 Btu (lower heating value), and a gasoline gallon equivalency for LPG of 115,400 Btu (lower heating value).¹³

Therefore, one gallon of LNG will be taxed at a rate equal to 128,700 Btu. As a result, the federal excise tax on LNG will effectively decrease from 24.3 cents per gallon to 14.1 cents per gallon, based on the new conversion standards.

Additionally, one gallon of LPG will be taxed at a rate equal to 115,400 Btu. As a result, the federal excise tax on LPG will effectively decrease from 18.3 cents to 13.2 cents per gallon for LPG, based on the new conversion standards.

The new law also provides an energy equivalent of a gallon of gasoline to CNG of 5.66 pounds.¹⁴ An energy equivalent of a gallon of gasoline for CNG purposes was not previously defined by the I.R.C.; however, it was provided by Notice 2006-92. As noted previously, Notice 2006-92 provided a gasoline gallon equivalent rate for CNG of 126.67 cubic feet. According to the National Conference of Weights and Measures, 5.66 pounds of CNG is equal to 126.67 cubic feet of CNG. Therefore, no change to the CNG tax rate will occur as a result of H.R. 3236.

Contacts

If you have questions regarding H.R. 3236 or other issues related to the LNG and LPG equalization, please contact any of the following Deloitte Tax professionals.

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¹² H.R. 3236, Sec. 2008.

¹³ *Id.*

¹⁴ *Id.*