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## FISCAL IMPACT REPORT

**ORIGINAL DATE** 01/23/14  
**LAST UPDATED** 02/12/14     **HB** 30/a HTPWC

**SPONSOR** Gonzales & Keller

**SHORT TITLE** Alternative Fuel Tax Definitions & Payment     **SB** \_\_\_\_\_

**ANALYST** Graeser

### REVENUE (dollars in thousands)

Estimated Revenue					Recurring or Nonrecurring	Fund Affected
FY14	FY15	FY16	FY17	FY18		
	\$0,000.0	\$0,000.0	\$0,000.0	\$0,000.0	Recurring	State Road Funds
	\$0,000.0	\$0,000.0	\$0,000.0	\$0,000.0	Recurring	Local Road Funds

(Parenthesis ( ) Indicate Revenue Decreases)

As amended, the bill has no fiscal impact. The original bill reduced the tax imposed on compressed natural gas (CNG) by 10 percent and the tax imposed on liquefied natural gas (LNG) by 42 percent.

See “Bill Summary” and “Fiscal Implications” below.

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

New Mexico Department of Transportation (DOT)

New Mexico Taxation and Revenue Department (TRD)

### SUMMARY

#### Synopsis of HTPWC Amendment

The House Transportation and Public Works Committee amendment accomplishes two things: (1) repeals the currently unused annual permit option for all alternative fuels, and (2) adjusts the tax rates for liquefied natural gas (LNG) to \$.206 per redefined gallon and for compressed natural gas (CNG) to \$.133 per redefined gallon equivalent to equal the \$.12 per gallon tax imposed on propane and other hydrocarbon alternate fuels on a per gallon basis under prior definitions. However; as amended, the tax rate per BTU, per cu. foot, and per pound remains unchanged from current law. The tax rate on CNG and propane will still be less than the \$0.17 per gallon imposed on gasoline. The tax rate on LNG will also remain slightly below the \$0.21 imposed on diesel. The original bill sought to equalize the gallon definition of CNG with gasoline and LNG with diesel; the amendment correspondingly adjusts the tax rates (rounding down to the nearest tenth of a cent). In other words, the effect of the amendment will be to

remain revenue/tax neutral while helping the natural gas industry to define “gallons” in their preferred and more consumer friendly gasoline and diesel gallon equivalents.

### Synopsis of Original Bill

House Bill 30, introduced for the Transportation Infrastructure Revenue Subcommittee, eliminates annual alternative fuel tax payments for liquefied natural gas (LNG) and compressed natural gas (CNG) and redefines the gallon equivalent of these two fuels based on energy content equivalence. Currently, alternative motor vehicle fuels are taxed by one of two methods at the choice of the taxpayer. The taxpayer can choose to pay an annual fixed fee per vehicle for unlimited annual fuel or the alternative fuel is subject to a 12 cent per gallon tax. This bill removes the annual fee option for CNG and LNG, but does not change the 12 cents per gallon tax. Liquefied natural gas used as a motor fuel will be taxed at the distributor level based on a gallon equivalent of 6.06 pounds of LNG. CNG will also be taxed at the distributor level based on a gallon equivalent of 126.67 cubic feet of compressed natural gas or the equivalent of 5.66 pounds. Liquefied petroleum gas (LPG) or propane, and water-phased hydrocarbon fuel emulsion used as motor fuels will continue to be subject to the annual alternative fuel tax and no alternative.

### **FISCAL IMPLICATIONS**

The Taxation and Revenue Department has no record of any taxpayers choosing to pay the alternative fuel tax on an annual fixed fee basis (annual permit) in recent years; pursuant to the provisions of the bill as amended, the annual permit option has been eliminated.

The gasoline energy equivalents referenced in the definitions are industry standard equivalents. After amendment, the three alternate fuels are taxed the same as under current law. Corresponding and offsetting gallon and rate changes of 11 percent are applied to CNG and 72 percent for LNG. (See discussion of equivalence below).

DOT comments on the original bill, “...in FY2013, there were no reported LNG vehicle fuel sales and only 75,000 gallons of taxable CNG sales. Although these volumes are very low, they are expected to grow quickly. On an energy equivalent basis natural gas has averaged around \$1.00 less than a gallon of diesel. Higher vehicle costs, fleet conversion logistics, and infrastructure issues will keep numbers of natural gas fueled vehicles relatively small in the near term; however, some industry analysts have estimated that the interstate trucking fleet could be comprised of as much as 10 percent natural gas fueled trucks in five years. If those trucks are fueled by LNG, this bill would reduce Road Fund revenues by around \$3 million...the timing and growth rate of the long term future revenue impact are very uncertain at this point. Most current industry estimates range from five to ten years before any significant market penetration is achieved. As an illustration, at a point when 20 percent of current diesel use switched to LNG, this bill would have negative impact to the Road Fund of \$9 million.”

### **SIGNIFICANT ISSUES**

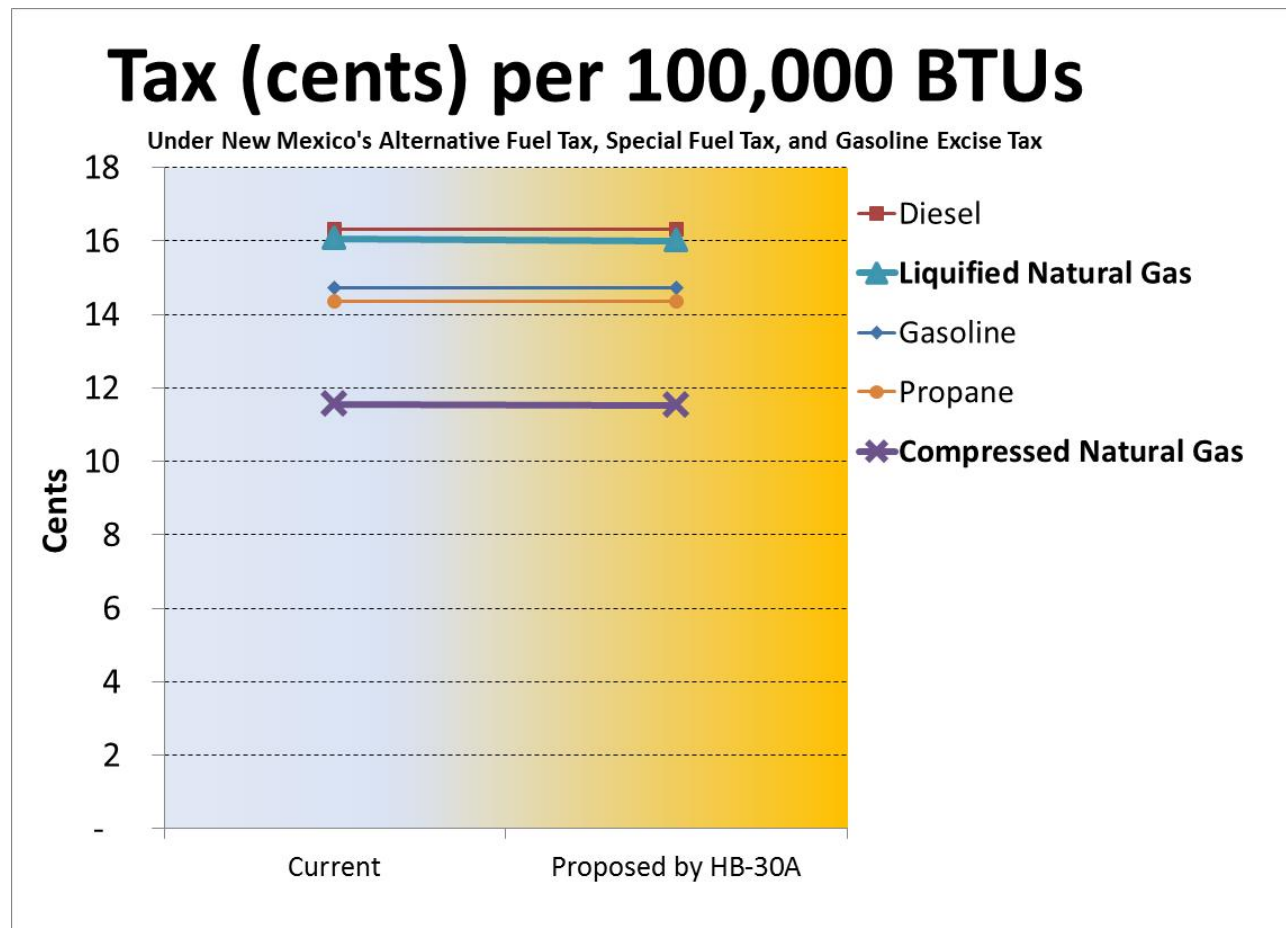
The New Mexico Natural Gas Vehicle Coalition has indicated it is important to create the same “Pay at the Pump” energy equivalent experience for consumers across all transportation fuels. <http://www.nmlegis.gov/lcs/handouts/TRANS%20111213%20Item%203%20NMNGVC%20Natural%20Gas%20Presentation.pdf>

The national Clean Vehicle Education Foundation has echoed that statement with stated goals for energy equivalent gallon definitions to 1) provide the natural gas vehicle industry a method of sale that would be familiar and acceptable to consumers, 2) provide weights and measures officials a verifiable and quantifiable means to determine the accuracy of natural gas dispensers; and 3) meet these requirements with a uniform, national standard.

<http://www.cleanvehicle.org/committee/technical/PDFs/DGEforCNGandLNGJustificationDocument.pdf>

DOT explains the gasoline gallon equivalent concept. “Each type of fuel contains different amounts of energy. For example, one gallon of gasoline contains 114,000 British Thermal Units (BTU) while one gallon of diesel contains 129,500 BTU. At their current definitions, a “gallon” of CNG contains around 102,600 BTU, and a gallon of LNG contains only 75,000 BTU. While this is a lower energy content than either gasoline or diesel, the per gallon tax is also considerably less (12 cents/gallon for alternative fuels compared to 17 cents/gallon for gasoline and 21cents/gallon for diesel).”

The tables below illustrate New Mexico’s fuel tax on a 100,000 BTU equivalent basis, with the rates proposed by HTPWC amendment. The rates on diesel, gasoline, and propane are untouched. The rates for LNG and CNG remain constant after corresponding gallon and rate adjustments (rounded down to the nearest tenth of one cent). The table and graph use heat content values for various fuels from The Transportation Energy Data Book published for the US Department of Energy by Oak Ridge National Laboratory (<http://cta.ornl.gov/data/index.shtml>):



Tax (cents) per 100,000 BTUs			
	Current	HB-30Amd.	Change
Gasoline	14.73	14.73	-
Diesel	16.32	16.32	-
Compressed Natural Gas	11.55	11.53	(0.029)
Liquified Natural Gas	16.06	16.01	(0.058)
Propane	14.37	14.37	-

“Currently, one gallon of CNG is defined as 114 cubic feet. The bill would increase the amount to 126.67 cubic feet or 5.66 pounds. A gallon of LNG is currently defined as one liquid gallon, which is approximately 3.5 pounds. This bill would define one “gallon of LNG” as 6.06 pounds.”

“Under the new definitions, a “LNG gallon” of 6.06 pounds would be equal in energy to a gallon of diesel; however, it would remain taxed at 12 cents per gallon compared to 21 cents for diesel.”

Per HTPWC amendment, the definition of gallon for compressed natural gas includes the phrase “at standard conditions” modifying “126.67 cu. ft.” As in the original bill, the weight equivalent of 5.66 pounds and the new volume based definition correspond to published “gallon of gasoline-equivalent” basis figures such as those published by the US Department of Energy’s Alternative Fuels Data Center [http://www.afdc.energy.gov/fuels/fuel\\_comparison\\_chart.pdf](http://www.afdc.energy.gov/fuels/fuel_comparison_chart.pdf).

When the alternative energy tax was first enacted in 1996, the purpose of a lower alternative fuel tax rate (3¢ per gallon for the first year) was, presumably, to reimburse users for a portion of the cost of conversion from gasoline to alternative fuels. There may still be a premium for a propane, multi-fuel, LNG or CNG vehicle, so there may still be a policy reason for the differential between the gasoline tax and alternative fuel tax.

This measure may serve to reduce administrative complexity. Conventional gasoline is taxed at the distributor level and TRD deals with a relatively few taxpayers compared to a tax scheme whereby users are required to purchase an annual permit. This is a far less efficient mechanism for collecting taxes than the conventional distributor level tax mechanism.

Since natural gas is relatively plentiful in New Mexico, the state might consider continuing to encourage the use of alternative fuels. An implicit subsidy, as contained in this bill, is one way of encouraging alternative fuel use.

**ADMINISTRATIVE IMPLICATIONS**

Eliminating the annual fixed fee payment option (annual permits) is an administrative advantage. It is unclear how, or if, an annual permit could be used along with the current industry practice of unmanned fueling stations.

Eliminating permits also eliminates an opportunity for non-compliance and fraud. It will allow the true amount and type of alternative fuels to be tracked and reported. Annual unlimited fuel use fees do not, and will not, fit into the framework of the International Fuel Tax Agreement; the

agreement allows distributions of fuel revenue to align with the state or province of commercial fuel use regardless of where the fuel was purchased.

### **FISCAL IMPLICATIONS**

The current alternative fuels tax allows every user to apply to TRD annually for a permit. There are more transactions for TRD to process than if the fuels were taxed at the distributor level. Removing this option will have some small benefit. It will eliminate an opportunity for non-compliance and fraud. It will also allow the true amount and type of alternative fuels to be tracked and reported. Annual unlimited fuel use fees do not, and will not, fit into the framework of the International Fuel Tax Agreement; the agreement allows distributions of fuel revenue to align with the state or province of commercial fuel use regardless of where the fuel was purchased.

### **TECHNICAL ISSUES**

The definition of gasoline gallon equivalent (GGE) for compressed natural gas should include the phrase “at standard conditions” modifying “126.67 cu. ft.” This amendment was included in the HTPWC collection of amendments.

### **ALTERNATIVES**

DOT comments, “During the November 12, 2013 meeting of the Transportation Infrastructure Revenue Subcommittee, this bill was discussed and endorsed. The discussion bill drafted is the same as this HB 30, as introduced. During that meeting Sherrie Merrow, co-chair of the New Mexico Natural Gas Vehicle Coalition, gave a presentation on “Streamlining Fueling for the Growing Natural Gas Vehicle Market” and testified on the impact of the proposed bill. According to the meeting minutes, Ms. Merrow stated that ‘the industry is seeking rates to be set so that the state would get the same revenue across vehicle fuels for the same amount of miles traveled.’ The gallon definitions proposed in this bill, combined with leaving the current rates unchanged, actually move New Mexico’s tax structure further from that goal. If the gallon definitions are equalized on an energy equivalent basis, as this bill does, then the rates would also need to be equalized.”

### **POSSIBLE QUESTIONS**

What is the premium for purchasing a multi-fuel vehicle capable of using either LNG or CNG? What is the cost of conversion from conventional gasoline vehicle to LNG or CNG vehicle? Can diesel engines (either light cars and trucks or heavy vehicles) use LNG, CNG or propane directly without conversion? If not, what are the economics of conversion of a heavy vehicle to use LNG or CNG?

LG/ds:jl