HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 4013 Florida Renewable Fuel Standard Act
SPONSOR(S): Gaetz and others
TIED BILLS: **IDEN./SIM. BILLS:** SB 238

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Energy & Utilities Subcommittee		Whittier	Collins
2) State Affairs Committee			

SUMMARY ANALYSIS

In 2008, the Legislature passed the Florida Renewable Fuel Standard Act (ss. 526.201-526.207, F.S.), which provided findings that "it is vital to the public interest and to the state's economy to establish a market and the necessary infrastructure for renewable fuels in this state by requiring that all gasoline offered for sale in this state include a percentage of agriculturally derived, denatured ethanol." Further, "that the use of renewable fuel reduces greenhouse gas emissions and dependence on imports of foreign oil, improves the health and quality of life for Floridians, and stimulates economic development and the creation of a sustainable industry that combines agricultural production with state-of-the-art technology."[1]

Based on these findings, the Legislature established the standard that, beginning December 31, 2010, all gasoline sold or offered for sale in Florida by a terminal supplier, importer, blender, or wholesaler shall be blended gasoline.[2] The Act does not address retail sales of gasoline.

"Blended gasoline" is defined in the law as a mixture of 90 to 91 percent gasoline and 9 to 10 percent fuel ethanol, by volume.

The Act provides specific exemptions from the standard.[3] They include the following:

- Fuel used in aircraft
- Fuel sold for use in boats and similar watercraft
- Fuel sold to a blender
- Fuel sold for use in collector vehicles or vehicles eligible to be licensed as collector vehicles, off-road vehicles, motorcycles, or small engines
- Fuel unable to comply due to requirements of the United States Environmental Protection Agency
- Fuel transferred between terminals
- Fuel exported from the state in accordance with s. 206.052
- Fuel qualifying for any exemption in accordance with chapter 206
- Fuel for a railroad locomotive
- Fuel for equipment, including vehicle or vessel, covered by a warranty that would be voided, if explicitly stated in writing by the vehicle or vessel manufacturer, if the equipment were to be operated using fuel meeting the requirements of the Act.

HB 4013 repeals the entire Florida Renewable Fuel Standard Act from the statutes, thereby removing the requirement that all gasoline sold or offered for sale in Florida by a terminal supplier, importer, blender, or wholesaler shall be blended gasoline.

The bill appears to have no fiscal impact on state or local government.

[1] Section 526.202, F.S.
[2] Section 526.203(2), F.S.
[3] Section 526.203(3), F.S.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Federal Renewable Fuel Standard

The federal government requires the Environmental Protection Agency (EPA) to develop and implement regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel, through a Renewable Fuel Standard (RFS). The RFS program was created under the Energy Policy Act of 2005, which established the first renewable fuel volume mandate in the United States. Originally, the program required 7.5 billion gallons of renewable- fuel to be blended into gasoline by 2012.[4] However, the federal Energy Independence and Security Act of 2007, signed into law on December 19, 2007, set the renewable fuels standard minimum annual goal for renewable fuel use at 9 billion gallons in 2008 and 36 billion gallons by 2022.[5]

Also in accordance with the Energy Independence and Security Act of 2007, the EPA is required to set the annual standards under the RFS program each November for the following year based on gasoline and diesel projections from the Energy Information Administration (EIA) and is required to set the cellulosic biofuel standard each year based on the volume projected to be available during the following year, using EIA projections and assessments of production capability from industry.[6]

Florida Renewable Fuel Standard Act

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Based on these findings, the Legislature established the standard that, beginning December 31, 2010, all gasoline sold or offered for sale in Florida by a terminal supplier, importer, blender, or wholesaler shall be blended gasoline.[8] The Act does not address retail sales of gasoline.

"Blended gasoline" is defined as a mixture of 90 to 91 percent gasoline and 9 to 10 percent fuel ethanol, by volume, that meets the specifications as adopted by the Department of Agriculture and Consumer Services (DACS or Department). The fuel ethanol portion may be derived from any agricultural source. "Fuel ethanol" means an anhydrous denatured alcohol produced by the conversion of carbohydrates that meets the specifications as adopted by the Department.[9]

A "terminal supplier" means any licensed position holder that is registered under s. 4101 of the Internal Revenue Code for transactions involving the bulk storage and transfer of taxable motor or diesel fuels.[10] An "importer" means any person that is licensed by the Department of Revenue (DOR) to

[4] See the EPA website: http://www.epa.gov/otaq/fuels/renewablefuels/
[5] *EPA Proposes 2012 Renewable Fuel Standards and 2013 Biomass-Based Diesel Volume,* EPA-420-F-11-018, Office of Transportation and Air Quality, June 2011, p. 1.
[6] Id.
[7] Section 526.202, F.S.
[8] Section 526.203(2), F.S.
[9] Section 526.203(1), F.S.
[10] Section 206.01(19), F.S.

import motor fuel or diesel fuel upon which no precollection of tax has occurred, other than through bulk transfer, into this state by common carrier or company-owned trucks.[11] A "blender" means any person who blends any product with motor or diesel fuel and who has been licensed or authorized by the DOR as a blender.[12] A "wholesaler" means any person who holds a valid wholesaler of taxable fuel license issued by the DOR.[13]

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- Fuel qualifying for any exemption in accordance with chapter 206
- Fuel for a railroad locomotive
- Fuel for equipment, including vehicle or vessel, covered by a warranty that would be voided, if explicitly stated in writing by the vehicle or vessel manufacturer, if the equipment were to be operated using fuel meeting the requirements of the Act.

All records of sale of unblended gasoline by terminal suppliers, importers, blenders, and wholesalers are required to include the following statement: "Unblended gasoline may be sold only for the purposes authorized under s. 526.203(3), F.S."[15]

Further, the Act provides that if a terminal supplier, importer, blender, or wholesaler is unable to obtain fuel ethanol or blended gasoline at the same or lower price as unblended gasoline, then the sale or delivery of unblended gasoline by the terminal supplier, importer, blender, or wholesaler is not a violation of the Act. The terminal supplier, importer, blender, or wholesaler shall, upon request of the Department, provide the required documentation regarding the sales transaction and price of fuel ethanol, blended gasoline, and unblended gasoline.[16]

If the Department determines that the Act has been violated, the Department must enter an order imposing one or more of the following penalties:

- Issuance of a warning letter.
- Imposition of an administrative fine of not more than $1,000 per violation for a first-time offender. For a second-time or repeat offender, or any person who is shown to have willfully and intentionally violated any provision of this act, the administrative fine shall not exceed $5,000 per violation.

If imposing a fine, the Department is to consider the monetary benefit to the violator as a result of noncompliance, whether the violation was committed willfully, and the compliance record of the violator.[17]

The Department reports that, as of September 16, 2011, there have been no penalties issued for noncompliance with the Renewable Fuel Standard.

[11] Section 206.01(3), F.S.
[12] Section 206.01(30), F.S.
[13] Section 206.01(04), F.S.
[14] Section 526.203(3), F.S.
[15] Id.
[16] Section 526.204(1), F.S.
[17] Section 526.205(2), F.S.

Ethanol

The U.S. Department of Energy (DOE) describes "ethanol" as a "clear, colorless liquid… [whose] molecules contain a hydroxyl group (-OH) bonded to a carbon atom." It may be produced from corn grain or sugar cane, in a process called biochemical conversion, or from cellulosic feedstocks, such as grass, wood, and crop residues, in a process called thermochemical conversion.[18]

There is great debate over the benefits of blending ethanol in gasoline. Proponents claim that there has not been enough time for the market to respond to the new standard. Florida currently has no operational ethanol production facilities.[19] According to the Florida Biofuels Association, there are several commercial advanced biofuel ethanol projects in development that encompass a total investment in excess of $1 billion in capital.[20] The state has invested approximately $39 million in grant awards for the development of ethanol since 2006.[21]

Proponents of ethanol also state that by reducing the amount of greenhouse gases and ozone created by car exhaust, ethanol is a much better alternative to pure gasoline. The DOE states, on a life-cycle analysis basis, corn-based ethanol production and use reduces greenhouse gas emissions (GHGs) by up to 52% compared to gasoline production and use, and that cellulosic ethanol use could reduce GHGs by as much as 86%.[22] Further, proponents assert that ethanol comes from a renewable energy source, reducing reliance on fossil fuels, thereby reducing dependence on other countries for the United States' energy. It is argued that the production of ethanol benefits the economy by increasing employment among many sectors within the industry, such as farming, processing, building plants, transportation, etc.

Opponents of ethanol rebut that in order to produce enough corn or other crops to meet the demands of the ethanol industry, farmers may have to restrict how much of their crop will be available for other uses, which would result in higher prices for corn, flour, animal feed, and many other products. Further, that the gasoline gallon equivalent (the number of gallons of a fuel that has the equivalent amount of energy as 1 gallon of gasoline) of ethanol is 1.5 gallons.[23]

The DOE notes,

> Ethanol is a high-octane fuel. Octane helps prevent engine knocking and is extremely important in engines designed to operate at a higher compression ratio, so they generate more power. These engines tend to be found in high-performance vehicles. Low-level blends of ethanol, such as E10 (10% ethanol, 90% gasoline), generally have a higher octane rating than unleaded gasoline. Low-octane gasoline can be blended with 10% ethanol to attain the standard 87 octane requirement.[24]

Most opponents, however, claim that the major disadvantage of ethanol is that it can be very corrosive and can damage certain types of engines. Ethanol can absorb water and dirt easily, which can impair and corrode the inside of the engine block. Many boaters have reported that ethanol use has damaged their boats.

Another common grievance is an inability to obtain unblended gasoline for engines that may be damaged by ethanol. In response to this problem, several websites have been created solely for the

[18] U.S. Department of Energy website: http://www.afdc.energy.gov/afdc/ethanol/what_is.html.
[19] Department of Agriculture and Consumer Services staff correspondence, September 16, 2011.
[20] These include, but are not limited to INEOS – New Planet BioEnergy; Highlands EnviroFuels, LLC; Vercipia Biofuels/BP Biofuels; Algenol; Petro Algae; LS9**;** and Southeast Renewable Fuels, LLC.
[21] Correspondence with the Department of Agriculture and Consumer Services, December 5, 2011.
[22] U.S. Department of Energy website: http://www.afdc.energy.gov/afdc/ethanol/benefits.html.
[23] U.S. Department of Energy website: https://www.afdc.energy.gov/afdc/prep/popups/gges.html.
[24] U.S. Department of Energy website: http://www.afdc.energy.gov/afdc/ethanol/what_is.html.

purpose of apprising consumers who need unblended gasoline of locations of retailers who sell unblended gasoline. For example, pure-gas.org contains sites of over 4,500 locations within the U.S. and Canada. The website provides the city, brand, octane, station name, address, and GPS coordinates. The website is updated daily and, as of December 5, 2011, lists 282 stations in Florida that sell unblended gasoline.

Currently, almost three-fourths of the gasoline sold by a terminal suppliers, importers, blenders, or wholesalers in Florida is blended gasoline. [See chart of Sales of Sales of Unblended and Blended Gasoline in 2011 by Terminal Suppliers, Importers, Blenders, and Wholesalers, provided by the Department of Revenue.]

Sales of Unblended and Blended Gasoline in 2011 by Terminal Suppliers, Importers, Blenders, and Wholesalers

Applied Date	Product	Sales to Licensed Dealers	Sales to End Users, Retail Dealers, and Resellers	Total Sales	Percentage
Jan-11	Gasoline (gallons)	133,122,218.5	179,181,280.4	312,303,498.9	26%
	Blended Gasoline (gallons)	394,813,484.6	483,919,593.9	878,733,078.5	72%
	Fuel Grade Ethanol (gallons)	28,926,219.0	172,469.0	29,098,688.0	2%
		556,861,922.1	663,273,343.3	1,220,135,265.4	
Feb-11	Gasoline (gallons)	128,673,786.0	177,676,295.7	306,350,081.7	26%
	Blended Gasoline (gallons)	393,227,566.0	473,265,347.6	866,492,913.6	72%
	Fuel Grade Ethanol (gallons)	27,323,303.0	187,201.0	27,510,504.0	2%
		549,224,655.0	651,128,844.3	1,200,353,499.3	
Mar-11	Gasoline (gallons)	154,097,393.7	201,083,439.0	355,180,832.7	27%
	Blended Gasoline (gallons)	391,984,009.5	530,492,055.9	922,476,065.4	71%
	Fuel Grade Ethanol (gallons)	30,568,416.0	217,713.0	30,786,129.0	2%
		576,649,819.2	731,793,207.9	1,308,443,027.1	
Apr-11	Gasoline (gallons)	163,416,476.5	177,333,814.1	340,750,290.6	26%
	Blended Gasoline (gallons)	422,141,685.8	524,391,530.9	946,533,216.7	72%
	Fuel Grade Ethanol (gallons)	27,677,517.0	200,127.0	27,877,644.0	2%
		613,235,679.3	701,925,472.0	1,315,161,151.3	
May-11	Gasoline (gallons)	174,073,771.8	164,594,017.3	338,667,789.1	26%
	Blended Gasoline (gallons)	408,181,398.8	519,421,650.6	927,603,049.4	72%
	Fuel Grade Ethanol (gallons)	29,428,611.0	214,853.0	29,643,464.0	2%
		611,683,781.6	684,230,520.9	1,295,914,302.5	
Jun-11	Gasoline (gallons)	174,504,749.3	155,768,603.9	330,273,353.2	26%
	Blended Gasoline (gallons)	392,350,247.1	501,925,409.2	894,275,656.3	71%
	Fuel Grade Ethanol (gallons)	31,357,236.2	198,641.0	31,555,877.2	3%
		598,212,232.6	657,892,654.1	1,256,104,886.7	
Jul-11	Gasoline (gallons)	177,875,092.7	152,965,003.3	330,840,096.0	26%
	Blended Gasoline (gallons)	394,109,305.3	509,646,856.5	903,756,161.8	72%
	Fuel Grade Ethanol (gallons)	28,819,213.0	200,656.0	29,019,869.0	2%
		600,803,611.0	662,812,515.8	1,263,616,126.8	
Aug-11	Gasoline (gallons)	181,337,782.7	159,907,417.6	341,245,200.3	34%
	Blended Gasoline (gallons)	349,092,848.1	285,682,474.0	634,775,322.1	63%

	Fuel Grade Ethanol (gallons)	32,558,206.8	2,964,349.2	35,522,556.0	4%
		562,988,837.6	448,554,240.8	1,011,543,078.4	
	Total Gasoline			**2,655,611,142.5**	**27%**
	Total Blended Gasoline			**6,974,645,463.8**	**71%**
	Total Fuel Grade Ethanol			**241,014,731.2**	**2%**
	Total			**9,871,271,337.5**	
				* includes ethanol	

Source: Department of Revenue

Effect of Proposed Changes

HB 4013 repeals the entire Florida Renewable Fuel Standard Act from the statutes, thereby removing the requirement that all gasoline sold or offered for sale in Florida by a terminal supplier, importer, blender, or wholesaler shall be blended gasoline.

B. SECTION DIRECTORY:

Section 1. Repeals ss. 526.201, 526.202, 526.203, 526.204, 526.205, 526.206, and 526.207, F.S.

Section 2. Amends s. 206.43, F.S., to remove blended gasoline reporting requirements to the Department of Revenue.

Section 3. Provides an effective date of July 1, 2012.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   None.

2. Expenditures:

   None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   None.

2. Expenditures:

   None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Removal of the requirement that gasoline sold in the state contain 9 to 10 percent ethanol may result in less damage to watercraft and small engines.

Removal of the requirement may negatively impact the renewable fuel industry[25] if the removal results in less of a demand for the products.

[25] The Florida Biofuels Association reports that a recent economic impact study by John Urbanchuk demonstrated that the Highlands EnviroFuels' 30 million gallon per year ethanol facility will generate 65 direct jobs, 760 indirect and induced jobs, $44 million in annual household income, and $51 million in annual GDP. "The facility will use non-food crops including biofuel cane and sweet sorghum, and provide Florida farmers another crop to grow."

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditure of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

Not applicable.

C. DRAFTING ISSUES OR OTHER COMMENTS:

The Department of Agriculture and Consumer Services suggests that the blended and unblended gasoline reporting requirements being stricken in s. 206.43, F.S. (Section 2 of the bill), be retained to provide information and statistics on blended fuel use in the state.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES