HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 4001 Florida Renewable Fuel Standard Act

SPONSOR(S): Gaetz and others

TIED BILLS: None. IDEN./SIM. BILLS: SB 320

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Energy & Utilities Subcommittee	7 Y, 6 N	Whittier	Collins
2) Regulatory Affairs Committee	10 Y, 8 N	Whittier	Hamon

SUMMARY ANALYSIS

In 2008, the Legislature passed the Florida Renewable Fuel Standard Act (ss. 526.201-526.207, F.S.), which required that, beginning December 31, 2010, all gasoline sold or offered for sale in Florida by a terminal supplier, importer, blender, or wholesaler be blended gasoline. The Act did not address retail sales of gasoline. In 2012, the Legislature clarified that the Act does not prohibit a retail dealer from selling or offering to sell unblended gasoline.

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

The Act provides specific exemptions from the standard.² 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 4001 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 also removes the requirement that each terminal supplier, importer, blender, or wholesaler include in their monthly report to the Department of Revenue, the number of gallons of blended and unblended gasoline sold.

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

² Section 526.203(3), F.S.

¹ Section 526.203(2), 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 federal 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 2012.³ However, the federal Energy Independence and Security Act of 2007, signed into law on December 19, 2007, increased the renewable fuel standard minimum annual goal for renewable fuel use to 9 billion gallons in 2008 and 36 billion gallons by 2022.⁴

Also in accordance with Section 211(o) of the Clean Air Act, as amended by 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.⁵

Florida Renewable Fuel Standard Act (Act)

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."

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.⁷ The original Act did not address retail sales of gasoline. In 2012, the Legislature clarified that the Act "does not prohibit a retail dealer...from selling or offering to sell unblended gasoline." Terminal suppliers, importers, blenders, and wholesalers are required in their monthly report to the Department of Revenue (DOR) to include the number of gallons of blended and unblended gasoline sold.

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

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³See the EPA website: http://www.epa.gov/otag/fuels/renewablefuels/.

⁴ *Id.*

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 Section 526.202, F.S.

⁷ Section 526.203(2), F.S.

⁸ Section 526.203(6), F.S.; CS/CS/HB 7117 (Chapter 2012-117, L.O.F.)

alcohol produced by the conversion of carbohydrates which meets the specifications as adopted by the Department.9

Chapter 206, F.S., relating to Motor and Other Fuel Taxes provides the following definitions:

- "Terminal supplier" means any position holder that has been licensed by the department as a terminal supplier, that has met the requirements of ss. 206.05 and 206.90, and 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
- "Importer" means any person that has met the requirements of s. 206.051 and is licensed by DOR to 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
- "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
- "Wholesaler" means any person who holds a valid wholesaler of taxable fuel license issued by the DOR.13
- "Retail dealer" means any person who is engaged in the business of selling fuel at retail at posted retail prices.¹⁴

The Act provides specific exemptions from the standard. 15 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, offroad 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, F.S.
- Fuel qualifying for any exemption in accordance with chapter 206, F.S. 16
- 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."17

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.¹⁸

Section 526.203(1)(c) and (d), F.S.

¹⁰ Section 206.01(22), F.S.

¹¹ Section 206.01(3), F.S.

¹² Section 206.01(30), F.S.

¹³ Section 206.01(4), F.S. ¹⁴ Section 206.01(5), F.S.

¹⁵ Section 526.203(3), F.S.

¹⁶ Chapter 206, F.S., is entitled *Motor and Other Fuel Taxes*.

¹⁷ Section 526.203(3), F.S.

¹⁸ Section 526.204(1), F.S. STORAGE NAME: h4001c.RAC

If the Department determines that the Act has been violated, the Department must enter an order imposing one or more of the following penalties:¹⁹

- 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 the 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.²⁰

The Department reports that, as of February 13, 2013, there have been no penalties issued for noncompliance with the Renewable Fuel Standard.²¹

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." Ethanol is made of the same chemical compound regardless of whether it is produced from starch- and sugar-based feedstocks, such as corn grain or sugar cane, or from cellulosic feedstocks, which are dedicated energy crops, such as wood chips or crop residues.²²

Florida currently has an ethanol production facility that is in the start-up phase, and is projected to begin production in the Spring of 2013.^{23, 24} In November 2011, the Florida Biofuels Association reported that there were several commercial advanced biofuel ethanol projects in development.²⁵ Since 2006, the Department has expended approximately \$26.3 million of grant monies for research and development of biofuels.²⁶

There is great debate over the benefits of blending ethanol in gasoline. Proponents of ethanol claim that there has not been enough time for the market to respond to the new standard. 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%. 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. According to the DOE, "The Renewable Fuels Association's 2012 Ethanol Industry Outlook calculated that in 2011 the ethanol industry replaced the gasoline produced from more than 485 million barrels of imported oil. Ethanol represents 25% of domestically produced and refined motor fuel for gasoline engines."²⁸

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.

¹⁹ Section 526.205(2), F.S.

²⁰ Section 526.205(2), F.S.

²¹ February 13, 2013, email correspondence with staff of the Department of Agriculture and Consumer Services.

²² U.S. Department of Energy website: http://www.afdc.energy.gov/afdc/ethanol/what_is.html.

²³ INEOS New Planet BioEnergy, located in Vero Beach, Florida.

²⁴ See article located at http://www.chemicals-technology.com/projects/ineosbioenergyfacili/.

These include, but are not limited to INEOS – New Planet BioEnergy; Highlands EnviroFuels, LLC; Algenol; LS9; and Southeast Renewable Fuels, LLC.

²⁶ February 15, 2013, correspondence with the Department of Agriculture and Consumer Services.

²⁷ U.S. Department of Energy website: http://www.afdc.energy.gov/afdc/ethanol/benefits.html.

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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 approximately 1.5 gallons, resulting in lower fuel economy.

The DOE notes, "Ethanol has a higher octane number than gasoline, providing premium blending properties. Minimum octane number requirements prevent engine knocking and ensure drivability. Low-level ethanol blends generally have a higher octane rating than unleaded gasoline. Low-octane gasoline is blended with 10% ethanol to attain the standard 87 octane requirement."²⁹

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 caused damage to their boats.

Another common grievance has been an inability to obtain unblended gasoline for engines that may be damaged by ethanol. In 2012, the Legislature directed the Department to compile a list of retail fuel stations that sell or offer to sell unblended gasoline and to provide the information on its website. This information may be accessed using Internet hyperlinks found on the Department's website: http://www.800helpfla.com/Standards/AltSiteMap.html. According to pure-gas.org, which can accessed through the Department's website, there are 363 stations in Florida that sell unblended gasoline.

Currently, almost three-fourths of the gasoline sold by terminal suppliers, importers, blenders, or wholesalers in Florida is blended gasoline. [See chart of Sales of Unblended and Blended Gasoline in 2011-2012 by Terminal Suppliers, Importers, Blenders, and Wholesalers, provided by the Department of Revenue.]

²⁹ U.S. Department of Energy website: http://www.afdc.energy.gov/afdc/ethanol/what_is.html.

Sales of Unblended and Blended Gasoline in 2011-2012 by <u>Terminal Suppliers, Importers, Blenders, and Wholesalers</u>

Applied Date	Product	Sales to Licensed Dealers	Sales to End Users, Retail Dealers, and Resellers	Total Sales	Percent of Total Sales
Nov-11	Gasoline (gallons)	171,744,683.4	154,927,579.2	326,672,262.6	26.7%
	Blended Gasoline (gallons)	361,597,680.0	501,837,975.4	863,435,655.4	70.6%
	Fuel Grade Ethanol (gallons)	32,177,312.8	208,986.0	32,386,298.8	2.6%
		565,519,676.2	656,974,540.6	1,222,494,216.8	
Dec-11	Gasoline (gallons)	181,859,935.0	160,230,823.1	342,090,758.1	27.0%
	Blended Gasoline (gallons)	371,689,983.3	525,328,309.9	897,018,293.2	70.7%
	Fuel Grade Ethanol (gallons)	29,319,912.6	233,278.0	29,553,190.6	2.3%
		582,869,830.9	685,792,411.0	1,268,662,241.9	
Jan-12	Gasoline (gallons)	178,610,236.9	156,184,296.8	334,794,533.7	27.2%
	Blended Gasoline (gallons)	358,687,326.4	508,114,278.8	866,801,605.2	70.5%
	Fuel Grade Ethanol (gallons)	28,184,339.0	214,641.0	28,398,980.0	2.3%
		565,481,902.3	664,513,216.6	1,229,995,118.9	
Feb-12	Gasoline (gallons)	190,612,532.2	222,531,632.1	413,144,164.3	33.0%
	Blended Gasoline (gallons)	363,374,193.0	447,654,680.3	811,028,873.3	64.8%
	Fuel Grade Ethanol (gallons)	26,372,022.0	212,623.0	26,584,645.0	2.1%
		580,358,747.2	670,398,935.4	1,250,757,682.6	
Mar-12	Gasoline (gallons)	207,446,195.5	171,762,356.3	379,208,551.8	27.5%
	Blended Gasoline (gallons)	401,174,013.4	565,101,335.5	966,275,348.9	70.2%
	Fuel Grade Ethanol (gallons)	31,260,862.0	231,143.0	31,492,005.0	2.3%
	,	639,881,070.9	737,094,834.8	1,376,975,905.7	
Apr-12	Gasoline (gallons)	193,985,076.4	160,496,998.4	354,482,074.8	27.7%
7,01.12	Blended Gasoline (gallons)	369,670,524.1	524,679,041.5	894,349,565.6	70.0%
	Fuel Grade Ethanol (gallons)	28,793,371.0	218,126.0	29,011,497.0	2.3%
	,	592,448,971.5	685,394,165.9	1,277,843,137.4	-
May-12	Gasoline (gallons)	191,224,477.6	161,961,736.2	353,186,213.8	27.6%
IVIGY 12	Gasohol (gallons)	370,210,003.6	526,612,317.5	896,822,321.1	70.2%
	Fuel Grade Ethanol (gallons)	27,347,213.0	234,085.0	27,581,298.0	2.2%
	. doi Orado Estario (ganono)	588,781,694.2	688,808,138.7	1,277,589,832.9	2.270
Jun-12	Gasoline (gallons)	181,964,995.5	152,832,297.6	334,797,293.1	27.3%
	Blended Gasoline (gallons)	359,202,821.0	504,252,819.9	863,455,640.9	70.5%

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	Fuel Grade Ethanol (gallons)	26,784,900.0	210,787.0	26,995,687.0	2.2%
		567,952,716.5	657,295,904.5	1,225,248,621.0	
Jul-12	Gasoline (gallons)	184,999,412.1	157,604,181.6	342,603,593.7	27.3%
	Blended Gasoline (gallons)	368,509,816.3	516,453,406.2	884,963,222.5	70.6%
	Fuel Grade Ethanol (gallons)	26,478,583.0	220,541.0	26,699,124.0	2.1%
		579,987,811.4	674,278,128.8	1,254,265,940.2	
Aug-12	Gasoline (gallons)	194,147,452.3	158,701,965.9	352,849,418.2	27.9%
	Blended Gasoline (gallons)	368,871,816.3	517,658,078.6	886,529,894.9	70.0%
	Fuel Grade Ethanol (gallons)	26,614,832.0	221,671.0	26,836,503.0	2.1%
		589,634,100.6	676,581,715.5	1,266,215,816.1	
Sep-12	Gasoline (gallons)	171,504,745.7	142,492,867.8	313,997,613.5	26.8%
	Blended Gasoline (gallons)	343,588,141.2	489,293,081.2	832,881,222.4	71.1%
	Fuel Grade Ethanol (gallons)	24,336,135.0	207,942.0	24,544,077.0	2.1%
		539,429,021.9	631,993,891.0	1,171,422,912.9	
Oct-12	Gasoline (gallons)	193,758,196.8	154,789,287.0	348,547,483.8	27.4%
	Blended Gasoline (gallons)	369,828,128.8	528,079,519.1	897,907,647.9	70.6%
	Fuel Grade Ethanol (gallons)	24,678,332.0	156,075.0	24,834,407.0	2.0%
		588,264,657.6	683,024,881.1	1,271,289,538.7	
	Grand Totals	6,980,610,201.2	8,112,150,763.8	15,092,760,965.0	

12 Month Totals and Percentages

Total Gasoline	4,196,373,961.4	27.8%
Total Blended Gasoline	10,561,469,291.3	70.0%
Total Fuel Grade Ethanol	334,917,712.4	2.2%
Grand Total	15,092,760,965.0	100.0%

Source: Department of Revenue

Effect of Proposed Changes

HB 4001 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 also removes the requirement that each terminal supplier, importer, blender, or wholesaler include in their monthly report to the Department of Revenue, the number of gallons of blended and unblended gasoline sold.

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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.; removes blended gasoline reporting requirements to the Department of Revenue.

Section 3. Provides an effective date of July 1, 2013.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

2. Expenditures:

None.

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 if the removal results in less of a demand for the products. See *Fiscal Comments*.

D. FISCAL COMMENTS:

Highlands EnviroFuels 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."31

According to INEOS Bio, their new bio-energy plant will provide approximately 400 jobs that are created and retained for the project, 63 permanent positions jobs with an average annual wage of \$50,000 and a total investment of more than \$130 million."32

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³¹ Information originally supplied by Florida Biofuels Association on November 30, 2011. Confirmed by Highlands EnviroFuels on February 15, 2013.

INEOS Bio powerpoint presentation provided by Dan Cummings, Vice President, at the Energy & Utilities Subcommittee meeting on February 19, 2012.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

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 recommends 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.³³

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

None.

³³ February 15, 2013, email correspondence with staff of the Department of Agriculture and Consumer Services. **STORAGE NAME**: h4001c.RAC