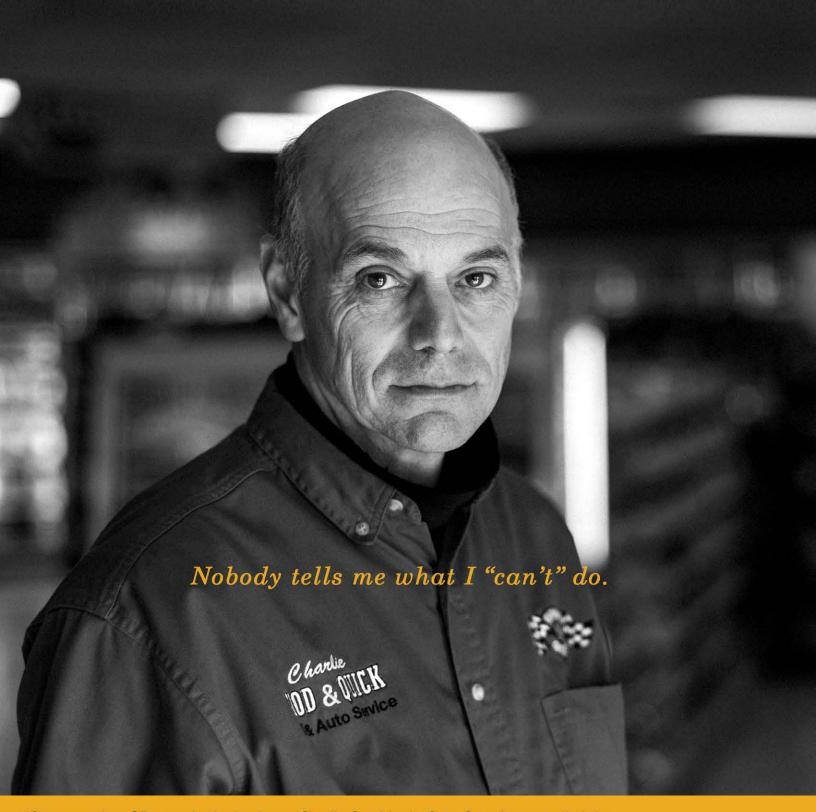


# E15 & FLEX FUEL RETAILER ROADMAP





After more than 35 years in the business, Charlie Good broke free. Once he controlled the fuel slate and added e15 and flex-fuels, his volumes took off. And so did his profits. If a veteran fuel marketer like this guy can move ahead with e15 and flex fuel blends, maybe you can too. Get Charlie's story and the tools to put you in control of your own destiny today.



flexfuelforward.com



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### READING THIS ROADMAP



If you're old enough, you may remember a time when nearly every service station had a rack full of state roadmaps and national atlases they provided free of charge to gas customers. The paper maps showed the main highways and county roads in the state, with more detailed maps of the state's larger cities. Journeys were planned by looking for the place you wanted to go, and considering all the routes that could get you there.

The *E15* and *Flex Fuel Retailer Roadmap* is designed to be like those maps. It's not a GPS system that gives you turn-by-turn instructions – because every retail station owner's journey is different. This "roadmap" is a reference to provide fuel marketers, retailers, and equipment companies with information to help them understand *E15* and flex fuels, and help identify the route they want to take, should they decide to "go there."

This guide addresses some of the most frequent questions we receive from petroleum marketers and fuel retailers. The first several pages answer the most important question we're asked: "Why would I want to do that?" We'll cover important considerations like:

- The E15/flex fuel market compared to "common" options like diesel and premium (hint: Those old options aren't as common as you think)
- Data on E15-compatible vehicles
- "Ghost stories" about E15 and flex fuels: You can't use
  existing equipment, new equipment is too expensive,
  customers don't want it, and there will be a huge "liability"
  risk all untrue, and the data is right here
- Most importantly, the "math" of E15 and flex fuels including blending economics, octane, increased customer counts and inside sales, and Renewable Identification Number (RIN) credit values

The back section of the *Roadmap* covers some of the "how-to" of adding E15 and flex fuels. Again, not a step-by-step guide, but a closer look at E15 and flex fuel requirements, and where you can find more detailed information, including:

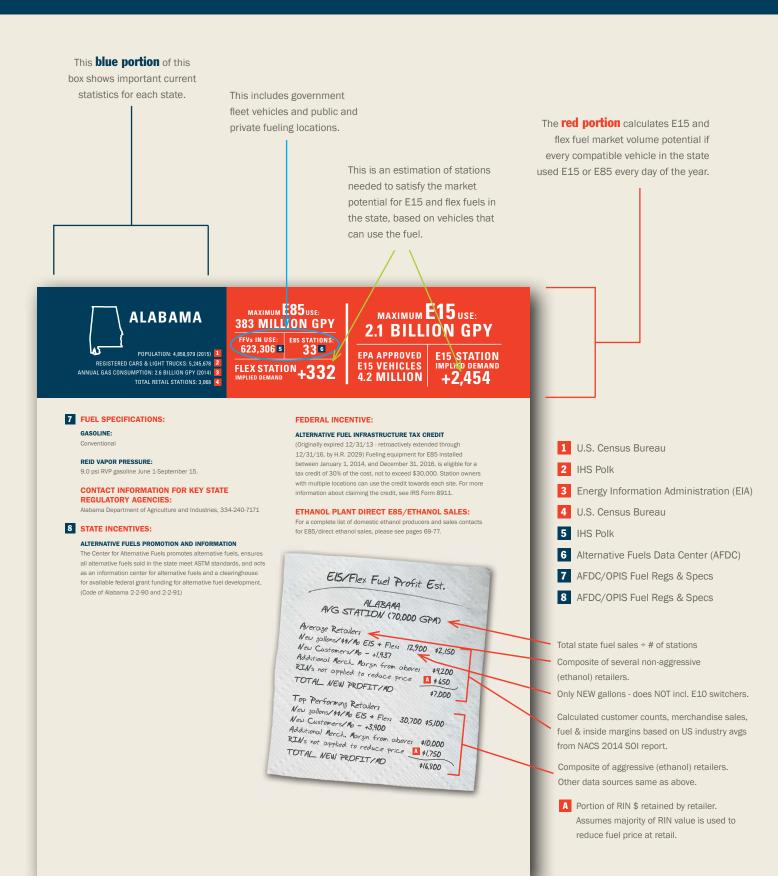
- Explanation of how a blender dispenser works when using E85 and regular gasoline to make multiple mid-level blends
- Diagrams of hose and tank configurations for E15 and flex fuels
- EPA's Underground Storage Tank (UST) and fueling equipment compatibility guidelines
- EPA's labeling requirements for E15 and the Federal Trade Commission's (FTC) requirements for labeling E85 and other flex fuels
- Registering with EPA to sell "legal" E15, and signing up for a required testing program
- A list of ethanol producers, featuring those who sell "RIN-less" E85 and/or E98 directly to marketers and retailers – often at very, very competitive prices

In between, the *Roadmap* provides state-by-state information including vehicle and driver statistics, rules and regulations, financial incentives for retailers, and a general statistical breakdown of E15 and flex fuel availability and opportunity in that state. An example state page and explanation of the information each contains is found on the adjacent page, along with an explanation of the sources of the information, and how we calculated some of the numbers.

Finally, each state section also features an informal "back-of-the-napkin" calculation of the profits a station in that state might be able to gain if the owner added E15 and flex fuels and saw increases similar to those average E15 and flex fuel retailers have shared with us, or at a pace similar to those reported by the highest performing flex fuel retailers currently in the market.

Neither example should be considered a "prediction." Station owners and retailers understand their customer base and market conditions well enough to make their own assessment. These examples are included to remind marketers of other areas that can be affected by adding a new fuel. Most E15 and flex fuel retailers have stressed increased customer counts and inside sales as the most important factors in the financial success of adding higher ethanol blends.





#### WHY YOU'RE (PROBABLY) NOT ALREADY SELLING E15/FLEX FUELS

You're thinking about adding or switching to a new fuel grade on your product slate, and you've considered premium and diesel, because those are the fuels all station owners consider. But today, the market is different, and you're looking at this E15 and Flex Fuel Retailer Roadmap, curious about what E15, E85, and other flex fuels could do for your business. Good move.

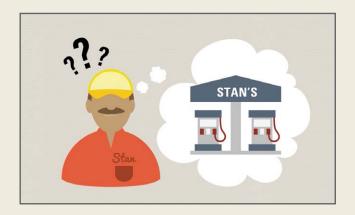
### "THE MATH" SAYS YOU SHOULD LOOK AT E15, E85, AND FLEX FUELS

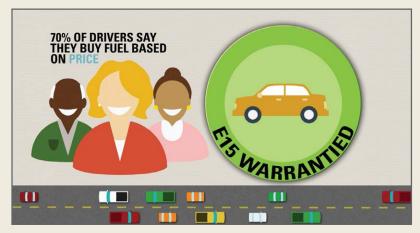
The numbers surprise a lot of people. Of the 253 million cars and light duty trucks on the road today, only seven million take diesel. Eighteen million require premium gasoline.

You know about E85 and flex fuel vehicles (FFVs) that can run on any blend between E0 and E85, but did you know there are more of them than diesel and premium cars and light trucks combined? FFVs now total about 27 million in operation.

On top of that, since the 2012 model year, 25 million cars and light trucks have been built and warrantied by their manufacturers to run on E15. Add FFVs to those E15 vehicles, and you've got more than 50 million cars and trucks built to use E15. Along with the cars and trucks EPA has approved to run on E15 (every car or light truck built since 2001), you've got a whopping two hundred million cars approved to run on E15. That is 80 percent of the cars and light trucks on the road today.

This Roadmap was created by the people who bring you FlexFuelForward.com, which features retailers who've added E15 and flex fuels to their fuel slate and have been rewarded with higher fuel volumes, higher customer counts and inside sales, and most importantly, higher profits. From "Mom and Pop" stores to some of the nation's most well-





known and well-respected c-store chains, some who have been selling E85 and are adding E15, and others who have never sold anything above E10, and are adding E15, E85, and other flex fuel blends like E25 and E30.

They're selling E15 and flex fuels because they're cleaner, higher octane fuels that differentiate them from the crowd and cost less than the fuel everybody else is selling now. That has to make you wonderr: "Why isn't everyone already selling E15 and flex fuel?" We talk to a lot of petroleum marketers, and the reasons they've decided against E15 (for now, at least) generally fall into a few categories:

#### "NOBODY WANTS E15. THERE'S NO MARKET FOR IT."

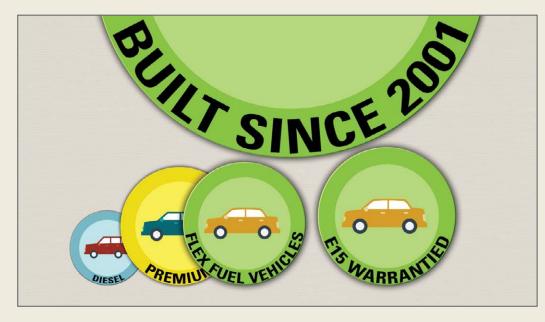
That has been a common talking point of anti-ethanol lobbyists and politicians. They say "No one is calling my office, asking about E15." Probably true. Sort of like no one asked for an iPod before it was invented... Actually, gas station customers ask for E15 all the time. They don't specifically mention E15, but aren't they always asking for lower-priced gas? You've read all the consumer surveys – 70 percent of drivers say they buy fuel based on price. Every year, in one survey or another, consumers say they'll turn across a busy street or drive five minutes out of their way to save money.

That matches the real world experience of current E15 retailers. Since EPA approved E15, retailers who've added it say it has become the first or second best-seller. Not because they quit selling the other grades of gas - E15 doesn't replace "regular." Eighty percent of cars can use E15, but 100 percent can still use regular Most retailers adding E15 experience a gain in overall customer count while retaining all or most of their E0 and E10 volume.



### "WHAT ABOUT THE LIABILITY..."

Liability, liability, liability. Although most marketers have trouble describing what kind of liability problem they're worried about, it is still one of the top reasons given for not offering E15. Ask your insurance carrier, you'll find E15 "liability" is the same as liability for any other fuel. But that's really a moot point. No business wants a customer to have a problem, regardless of insurance coverage. That goes for ethanol



producers, too, by the way. They wouldn't be promoting E15 if they thought it would bring a rash of lawsuits. Fortunately, it hasn't, and contrary to the "ghost stories" you've heard about E15 destroying all kinds of things, nothing has happened. The ghost isn't real.

Ethanol opponents spent (and continue to spend) a lot of money hiring PR firms to terrify stations away from offering E15, and their huge, expensive misinformation campaign has been effective. Four years after the first stations added E15, with a complete and utter lack of damage complaints or claims and not a single warranty voided over the use of E15, concerns over nebulous "liability" issues still exist. How do you know no engine has been damaged and no warranty voided? Simple. If even ONE had, the PR machine that created the liability boogeyman to scare retailers would have made the victims household names.

If you're still worried, as mentioned above, over 25 million cars on the road today are built and warrantied to use E15, all FFVs can use it under warranty, and that market grows by ten million vehicles or more every year. The market is here today and getting bigger, and you are "liable" (see what we did there?) to lose a lot of customers by not offering E15...

### "I CAN'T AFFORD TO ADD ALL THAT EQUIPMENT FOR E15 AND FLEX FUELS"

Most of the staggering cost estimates you've heard are the result of purposeful confusion between the expense of adding E15 (which can cost very little) versus E85 (which is more expensive than standard fueling equipment). If you've heard crazy-big cost estimates of several hundred thousand dollars, those assume you would build a new station from the ground up to sell E85.

Actually, according to the United States Department of Energy's National Renewable Energy Lab (NREL), virtually all underground storage tanks and UST systems are already compatible with up to 100 percent ethanol. NREL audited equipment companies and verified this equipment compatibility fact. *Roadmap* contains some of this information, with links to where you can find more detailed info.

As far as "above ground" equipment goes – dispensers and hanging hardware - according to the Petroleum Equipment Institute and United States Department of Agriculture, most stations can add E15 for as little as \$1000 and stations that want to convert dispensers for E15 pay less than \$1000 per fueling position. The cost of the E25 compatibility option on new dispenser is only a couple hundred dollars, and if you need to upgrade, financial assistance is often available. Program descriptions and contact details can be found on the state pages of this guide.

#### "I CAN'T. THEY WON'T LET ME."

If you have a branded oil company sign sitting in front of your station, you could be stuck, prohibited from selling E15, unless you can afford to quit the brand and/or can get out of paying a penalty to get out of the contract. We know of

#### WHY YOU SHOULD BE SELLING E15/FLEX FUELS

examples of station owners who have broken free from oil company contracts, began offering E15, and were able to make it work (watch Charlie Good's story on flexfuelforward. com), and we're aware that's the exception, not the rule. If you're unbranded, consider yourself lucky, and if your contract is coming to an end, consider your options before you sign another one. You don't want to have to compete with E15 using higher-priced, lower-octane regular for ten more years.

Note: Some states have enacted legislation that does not allow oil company contracts to restrict the sale of E15 and flex fuels. Check out your state's regulations in the State section of the *Roadmap*.

#### "IT'S TOO MUCH HASSLE."

Registration, testing, and oil-lobby inspired weird hose rules and RVP restrictions that apply only to E15 can be a pain. EPA requires a unique hose configuration to "protect" someone from pumping a gallon or two of E10 from getting E10.5 or E11 because of leftover E15 in a hose. As unlikely

as that is to happen, there are ways to address it using minimum purchase notification stickers or a separate E15-less fuel. Not ideal, but marketers seem resigned to clear that hurdle.

Not as many want to deal with the biggest hurdle to E15, which is the hassle of having to comply with EPA's outdated evaporative emissions (Reid vapor pressure or RVP) regulations regarding gasoline in the summer months (defined as June 1 through September 15). EPA's stubborn refusal to allow E15 - a cleaner, less-emitting fuel - to be used from June 1 through September 15, means station owners in conventional gasoline areas can't offer the fuel year-round to their customers. To comply, stations would have to re-configure their tanks and pump hoses to sell E15 as a standard fuel most of the year, and a flex fuel in the summer. Many can't. But even the ones that can, don't want to. And EPA doesn't like the "E15-as-flex-fuel" approach, so look for them to add another E15 hurdle soon. We're working to fix this problem and encourage you to contact your congressional delegation and EPA to help.





#### "IT'S 2016. DO YOU KNOW WHERE YOUR RINS ARE?"

Throughout this *Roadmap*, we talk about higher ethanol blends being less expensive than gas or providing better margins than gasoline. Over the past ten years or so, the rack prices of ethanol and E85 have usually been lower than the price of gasoline. However, that has not always been the case.

Most marketers don't get higher blend information beyond what is shown on Table 1. In a fuel market where ethanol costs more than gasoline, E85 costs more than E10, and prices increase along with ethanol content (prices are for illustration only). When station owners say they don't want to start selling blends above E10, "fuel price" is one of the primary reasons given. When we ask about prices and how the RINs are accounted for, the response is usually, "The what?" (For more detail on how RINs work, see page 10.)

#### TABLE 1

E85 > GAS, NO RIN	PRICES	E85	E70	E30(92)	E15(88)	E10(87)
E10	1.5000		0.2700	1.0950	1.3950	1.5000
E85	1.7000	1.7000	1.3940	0.4590	0.1190	
RIN VALUE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NET COST	1.7000	1.6640	1.5540	1.5140	1.5000	
Taxes	0.4500	0.4500	0.4500	0.4500	0.4500	0.4500
TOTAL COST		2.1500	2.1140	2.0040	1.9640	1.9500

Successful E85 and flex fuel retailers know what RINs are, what they're worth, and how to use their value to lower fuel cost and increase volume and profits. Table 2 shows the same scenario as the first Table, with RIN values reflected in the final calculations. Granted, RIN value is not guaranteed to hold until a blender has enough RINs to sell, yet successful flex fuel retailers find a way to use at least some portion of the RIN value to reduce pump prices and dramatically increase volume and customer traffic – while still earning a very healthy margin.

**TABLE 2** 

E85 > GAS, PARTIAL RIN	PRICES	E85	E70	E30(92)	E15(88)	E10(87)
E10	1.5000		0.2700	1.0950	1.3950	1.5000
E85	1.7000	1.7000	1.3940	0.4590	0.1190	
RIN VALUE	-0.7500	-0.6375	-0.5228	-0.1721	-0.0446	
NET COST		1.0625	1.1413	1.3819	1.4694	1.5000
Taxes	0.4500	0.4500	0.4500	0.4500	0.4500	0.4500
TOTAL COST		1.5125	1.5913	1.8319	1.9194	1.9500

RINs have risk associated with them, and most marketers would prefer not to take that risk. Fortunately, you don't have to become a RIN trading expert to benefit from RIN credits. Knowing about RINs and/or letting wholesale flex fuel suppliers know you know (and expect to share in the value) might be all you need to be competitive in the E15 and flex fuel marketplace. More and more wholesalers

and even ethanol plants are selling E85 direct to retailers at a deep discount, which is made possible when the supplier keeps the RIN and uses a portion of its value to discount the price (see Table 3). The final prices aren't as attractive as the previous example, but the retailer has no risk and no additional work in tracking and trading RINs (see state pages and the ethanol producer list on pages 73-75 for plants selling ethanol and/or flex fuels directly to petroleum marketers).

#### **TABLE 3**

E85 < GAS NO RIN	PRICES	E85	E70	E30(92)	E15(88)	E10(87)
E10	1.5000		0.2700	1.0950	1.3950	1.5000
E85 (DISCOUNT - NO RIN)	1.1500	1.1500	0.9430	0.3105	0.0805	
RIN VALUE	0.0000	0.0000	0.0000	0.0000	0.0000	
NET COST		1.1500	1.2130	1.4055	1.4755	1.5000
Taxes	0.4500	0.4500	0.4500	0.4500	0.4500	0.4500
TOTAL COST		1.6000	1.6630	1.8555	1.9255	1.9500

Tables 4 and 5 are example of the same types of transactions with pricing reflecting a market that has been more typical in the last decade – ethanol price is lower than gasoline. Again, the prices are only for illustration, and Table 4 assumes the retailer receives that RIN, while Table 5 is an example of a "RIN-less" ethanol price with the retailer.

Finally, don't forget octane. E15 made with 84-octane "v-grade" will have an AKI octane of at least 88 – a full point higher than E10 or E0 regular. A mid-level blend like E30 has an octane rating higher than straight premium gasoline. While the price of the E15 will almost always cost less than regular, in the rare instance when it may not, remember the value of octane.

**TABLE 4** 

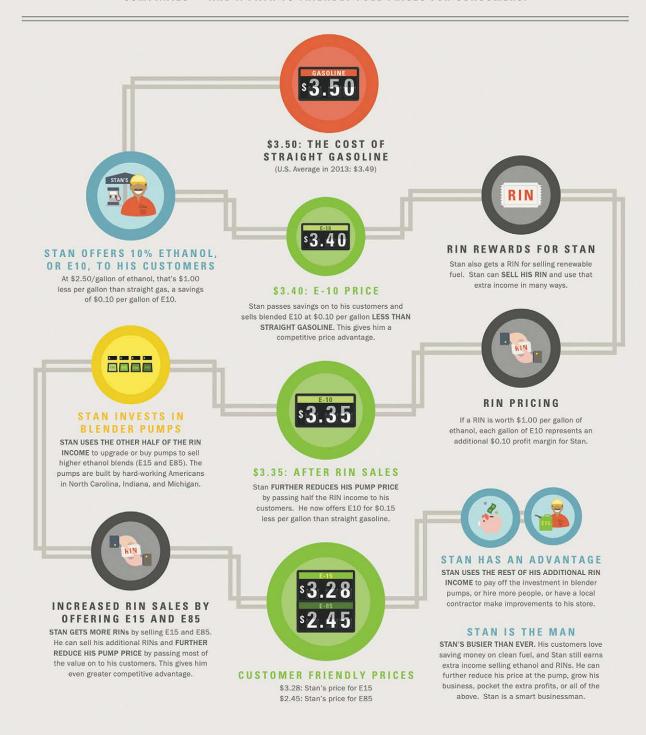
E85 < GAS, LESS RIN	PRICES	E85	E70	E30(92)	E15(88)	E10(87)
E10	1.5000		0.2700	1.0950	1.3950	1.5000
E85	1.3000	1.3000	1.0660	0.3510	0.0910	
RIN VALUE	-0.7500	-0.6375	-0.5228	-0.1721	-0.0446	
NET COST		0.6625	0.8133	1.2739	1.4414	1.5000
Taxes	0.4500	0.4500	0.4500	0.4500	0.4500	0.4500
TOTAL COST		1.1125	1.2633	1.7239	1.8914	1.9500

#### **TABLE 5**

GAS + E85 DISCOUNTED, NO RIN	PRICES	E85	E70	E30(92)	E15(88)	E10(87)
E10	1.5000		0.2700	1.0950	1.3950	1.5000
E85 (DISCOUNT - NO RIN)	0.7500	0.7500	0.6150	0.2025	0.0525	
RIN VALUE	0.0000	0.0000	0.0000	0.0000	0.0000	
NET COST		0.7500	0.8850	1.2975	1.4475	1.5000
Taxes	0.4500	0.4500	0.4500	0.4500	0.4500	0.4500
TOTAL COST		1.2000	1.3350	1.7475	1.8975	1.9500

# THE RINS CYCLE: FROM MERE COMPLIANCE WITH THE RFS TO SMART BUSINESS

RINS ARE A PATH TO PROFITS FOR INDEPENDENT RETAILERS AND PETROLEUM COMPANIES — AND A PATH TO FRIENDLY FUEL PRICES FOR CONSUMERS.



### E15 IS AN AUTOMAKER APPROVED FUEL,

covered under warranty for use in more than 55 million vehicles on the road today.

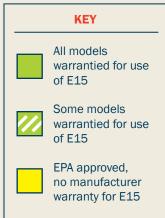
In addition to 27 million Flex Fuel Vehicles (FFVs) in operation, more than 30 million cars and light trucks in the last 5 model years

are approved to use **E15** under their auto manufacturers' warranty. Approximately **10 million** additional **E15 vehicles** will be added in **2016 and every year** after that.



2012	2013	2014	2015	2016
				//////
		//////		
		///////	///////	//////
				//////
		//////		
	2012			

"75% of MY2016 cars and light trucks are built and warrantied to use E15."





MAXIMUM E85 USE: 383 MILLION GPY

FFVs IN USE: **623,306** 

E85 STATIONS:

FLEX STATION +332

MAXIMUM E15 USE: 2.1 BILLION GPY

EPA APPROVED E15 VEHICLES 4.2 MILLION

E15 STATION IMPLIED DEMAND +2.454

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

9.0 psi RVP gasoline June 1-September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Alabama Department of Agriculture and Industries, 334-240-7171

#### **STATE INCENTIVES:**

#### **ALTERNATIVE FUELS PROMOTION AND INFORMATION**

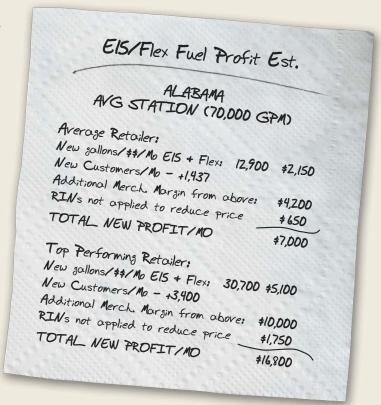
The Center for Alternative Fuels promotes alternative fuels, ensures all alternative fuels sold in the state meet ASTM standards, and acts as an information center for alternative fuels and a clearinghouse for available federal grant funding for alternative fuel development. (Code of Alabama 2-2-90 and 2-2-91)

#### **FEDERAL INCENTIVE:**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 738,432 (2015)

REGISTERED CARS & LIGHT TRUCKS: 764,845

ANNUAL GAS CONSUMPTION: 280 MILLION GPY (2014)

TOTAL RETAIL STATIONS: 220

MAXIMUM E85 USE:

FFVs IN USE: **73,320** 

E85 STATIONS:

FLEX STATION
IMPLIED DEMAND

**+2**1

# MAXIMUM E15 USE: 220 MILLION GPY

EPA APPROVED E15 VEHICLES 611,876

E15 STATION IMPLIED DEMAND +176

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Exempt from EPA's summer requirements, which only apply to the lower 48 states.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

State Fire Marshal's Office, 907-269-5491

#### STATE INCENTIVES:

#### **ETHANOL FUEL BLEND TAX RATE**

The tax rate on fuel containing ethanol is \$0.06 per gallon less than the tax rate on other motor fuels in certain geographic areas. This reduced rate is in effect during months ethanol fuel blends must be sold, transferred, or used to operate motor vehicles to reduce carbon monoxide emissions and attain federal or state air quality standards. (Alaska Statutes 43.40.010)

#### **ALTERNATIVE FUEL VEHICLE ACQUISITION REQUIREMENT**

The Alaska Department of Transportation and Public Facilities must evaluate the cost, efficiency, and commercial availability of alternative fuels for automotive purposes every 5 years, and purchase or convert vehicles to operate using alternative fuels whenever practical. The Department may participate in joint ventures with public or private partners to increase availability of alternative fuels for consumers. (Alaska Statutes 44.42.020)

#### **FEDERAL INCENTIVE:**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 6,828,065 (2015)
REGISTERED CARS & LIGHT TRUCKS: 5,386,055
ANNUAL GAS CONSUMPTION: 2.7 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,672

# MAXIMUM E85 USE: 329 MILLION GPY

FFVs IN USE: **530,658** 

E85 STATIONS:

FLEX STATION +134

# MAXIMUM E15 USE: 2.1 BILLION GPY

EPA APPROVED E15 VEHICLES 4.3 MILLION

E15 STATION IMPLIED DEMAND +1,338

#### **FUEL SPECIFICATIONS:**

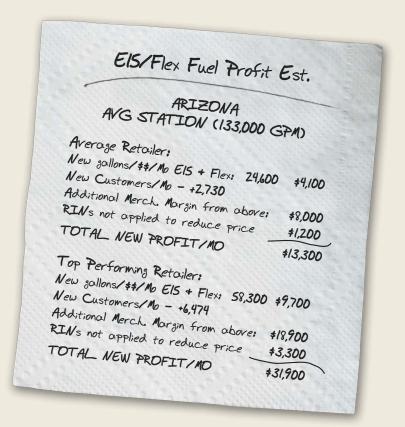
#### **GASOLINE:**

The state requires Arizona Cleaner Burning Gasoline (ACBG) year round in Maricopa County and parts of Yavapai and Pinal counties, and from May 1-September 30 in the western half of Pinal County (Phoenix metro area). From November 1-March 31, ACBG specifications require CARB Phase 2 RFG and either CARB Phase 2 RFG or Federal RFG for the rest of the year. A minimum fuel oxygenate requirement is in effect from November 1-March 31.

#### **REID VAPOR PRESSURE:**

Other rules for ACBG include a 7.0 psi RVP from June 1-September 30 at the retail level, and a 9.0 psi RVP from October 1-May 31 (10 psi RVP is permitted only during the month of April). The Tucson metro region has a minimum fuel oxygenate requirement from October 1-March 31.

While Arizona has no specific ban on E15, other regulations prevent the sale of E15 at this time.



### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Arizona Department of Weights and Measures, 602-542-5729

#### **STATE INCENTIVES:**

#### STATE VEHICLE ACQUISITION AND FUEL USE REQUIREMENTS

Arizona state agencies, boards, and commissions must purchase alternative fuel vehicles (AFVs) or use alternative fuels, with the goal that all state vehicles be AFVs by January 2012. At least 75% of light-duty state fleet vehicles operating in counties with a population of more than 250,000 people must be capable of operating on alternative fuels. If the AFVs operate in counties with populations of more than 1.2 million people, those vehicles must meet U.S. Environmental Protection Agency emissions standards for Low Emission Vehicles. Alternatively, the state fleet may meet AFV acquisition requirements through biodiesel or alternative fuel use or apply for waivers. For the purpose of these requirements, alternative fuels include propane, natural gas, electricity, hydrogen, qualified diesel fuel substitutes, E85, and a blend of hydrogen with propane or natural gas. (Executive Order 2010-14, 2010, and Arizona Revised Statutes 41-803)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

PINAL ENERGY (MARICOPA)
 Keith Kor, Phone: 520-483-1780



POPULATION: 2,978,204 (2015)

REGISTERED CARS & LIGHT TRUCKS: 2,674,203

ANNUAL GAS CONSUMPTION: 1.4 BILLION GPY (2014)

TOTAL RETAIL STATIONS: 1,571

# MAXIMUM E85 USE: 280 MILLION GPY

FFVs IN USE: 419,310

E85 STATIONS:

FLEX STATION +199

# MAXIMUM E15 USE: 1.1 BILLION GPY

EPA APPROVED E15 VEHICLES **2,139,362** 

E15 STATION IMPLIED DEMAND +1.257

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

9.0 psi RVP gasoline is sold year round.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Arkansas Department of Environmental Quality, 501-682-0744

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**







FFVs IN USE: **1,532,820** 

**129** 

FLEX STATION +286

# MAXIMUM **E15** USE: 11.7 BILLION GPY

EPA APPROVED E15 VEHICLES 22,223,848

E15 STATION IMPLIED DEMAND +6.010

#### **FUEL SPECIFICATIONS:**

#### GASOLINE:

RFG is required across the state year round. All gas sold in state must meet certain specifications determined by the state's predictive model.

#### **REID VAPOR PRESSURE:**

During winter months, the RVP reference limit is 9.0 psi. In summer months, the RVP point is 7.0 psi. The summer season varies for different regions in the state, but if a producer or importer uses the CaRFG Phase 3 Predictive Model to certify a final blend that does not contain ethanol, the RVP reference point is then 6.9 psi. The RVP limit is expressed as a range: minimum RVP is 6.40 psi, and the maximum is 7.2 psi. Lower-RVP gasoline is required to be at the terminal and retail level for these time periods: April 1-October 31 (South Coast Air Basin, Ventura County, San Diego Air Basin, Mojave Desert Air Basin, Salton Sea Air Basin), May 1-September 30 (Great Basin Valley Air Basin), May 1-October 31 (San Francisco Air Basin, San Joaquin Air Basin, Sacramento Valley Air Basin, Mountain Counties Air Basin, Lake Tahoe Air Basin), June 1-October 31 (South Central Coast Air Basin excluding Ventura County, North

ElS/Flex Fuel Profit Est. CALIFORNIA AVG STATION (162,000 GPM) Average Retailer: New gallons/\$\$/Mo E15 + Flex: 30,000 \$5,000 New Customers/Mo - +3331 Additional Merch. Margin from above: RIN's not applied to reduce price \$9.700 TOTAL NEW PROFIT/MO \$1,500 \$16,200 Top Performing Retailer: New gallons/\$\$/Mo E15 + Flex; 71,000 New Customers/Mo - +7900 \$11,800 Additional Merch Margin from above: RIN's not applied to reduce price \$23,100 TOTAL NEW PROFIT/MO \$4,100 \$39,000

Central Coast Air Basin). Producers and importers must also comply with the RVP limits one month before the time periods, in order to help facilitate the sales transition to lower-RVP gasoline.

While California has no specific ban on E15, other regulations prevent the sale of E15 at this time.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Division of Measurement Standards, 916-654-0466

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUEL AND VEHICLE INCENTIVES**

The California Energy Commission (CEC) administers the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) to provide financial incentives for businesses, vehicle and technology manufacturers, workforce training partners, fleet owners, consumers, and academic institutions, with the goal of developing and deploying alternative and renewable fuels and advanced transportation technologies. The CEC must prepare and adopt an annual Investment Plan for the ARFVTP to establish funding priorities and opportunities that reflect program goals and to describe how program funding will complement other public and private investments.

Funded projects include:

- Commercial alternative fuel vehicle (AFV) demonstrations and deployment;
- Alternative and renewable fuel production;
- Research and development of alternative and renewable fuels and innovative technologies;
- · AFV manufacturing;
- · Workforce training; and
- Public education, outreach, and promotion.

The program will be available until January 1, 2024. For more information, see the ARFVTP website. (California Health and Safety Code 44270-44274.7 and California Code of Regulations, Title 13, Chapter 8.1)

#### LOW CARBON FUEL STANDARD

California's Low Carbon Fuel Standard (LCFS) Program requires a reduction in the carbon intensity of transportation fuels that are sold, supplied, or offered for sale in the state by a minimum of 10% by 2020. The California Air Resources Board (ARB) regulations require transportation fuel producers and importers to meet specified average carbon intensity requirements for fuel. In the regulations, carbon intensity reductions are based on reformulated gasoline mixed with 10% corn-derived ethanol and low-sulfur diesel fuel. Liquefied petroleum gas (propane) is exempt from LCFS requirements, as are

non-biomass-based alternative fuels that are supplied in California for use in transportation at an aggregated volume of less than 3.6 million gasoline gallon equivalents per year. Other exemptions apply to transportation fuel used in specific applications. The LCFS Program allows producers and importers to generate, acquire, transfer, bank, borrow, and trade credits. Fuel producers and importers regulated under the LCFS must meet quarterly and annual reporting requirements. For more information, see the LCFS Program website. (California Code of Regulations Title 17, Section 95480-95490; Executive Order S-01-07, 2007; and California Health and Safety Code 38500-38599)

#### **ALTERNATIVE FUEL TAX**

The excise tax on ethanol and methanol fuel blends containing up to 15% gasoline or diesel fuel is one-half the tax on gasoline and diesel prescribed by California Revenue and Taxation Code section 8651.

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

For a complete list of domestic ethanol producers and sales contacts for E85/direct ethanol sales, please see pages 69-77.



American roads today, 200 million are ready for E15. That's 80% of the marketplace. Better still, each year nearly every new car that hits the road is warrantied by its manufacturer to run on E15.

That's a fuel 80% of the market can use for a few cents less per gallon than regular.

GET THE NUMBERS. GET AHEAD.



FLEXFUELFORWARD.COM



### **COLORADO**

POPULATION: 5,464,574 (2015)
REGISTERED CARS & LIGHT TRUCKS: 4,620,397
ANNUAL GAS CONSUMPTION: 2.2 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,638

# MAXIMUM E85 USE: 270 MILLION GPY

FFVs IN USE: 454,421

E85 STATIONS:

FLEX STATION IMPLIED DEMAND

+72

# MAXIMUM **E15** USE: **1.7 BILLION GPY**

E15 STATION IMPLIED DEMAND +1.310

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

All areas sell 9.0 psi RVP from May 1-September 15, with the exception of the Denver-Boulder area, which sells 7.8 psi RVP gasoline from June 1-September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Division of Oil and Public Safety, 303-318-8525



#### **STATE INCENTIVES**

#### **ETHANOL INFRASTRUCTURE GRANTS**

The Colorado Corn Blender Pump Program provides funding assistance for each qualified station dispensing mid-level ethanol blends. Projects must meet the application requirements and receive approval from Colorado Corn and the Colorado Department of Oil and Public Safety.

#### **Point of Contact**

Katrina Davis

Ethanol Project Manager

Colorado Corn

Phone: 970-351-8201

kdavis@coloradocorn.com

http://www.coloradocorn.com/core-directives/market-development

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



POPULATION: 3,590,886 (2015)
REGISTERED CARS & LIGHT TRUCKS: 2,764,520
ANNUAL GAS CONSUMPTION: 1.4 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,056

# MAXIMUM E85 USE:

FFVs IN USE: **184,684** 

E85 STATIONS:

FLEX STATION
IMPLIED DEMAND

+67

# MAXIMUM **E15** USE: 1.1 BILLION GPY

EPA APPROVED E15 VEHICLES 2.2 MILLION

E15 STATION IMPLIED DEMAND

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Northern-grade RFG is used statewide; it is required in Fairfield County, cities of Bridgeport, Bristol, Danbury, Hartford, Middletown, New Britain, Norwalk and Stamford, and parts of Litchfield, Middlesex, New Haven, New London and Tolland counties, while the remainder of the state opted into the RFG program.

#### **REID VAPOR PRESSURE:**

N/A

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Consumer Protection, 860-713-6100

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 945,936 (2015)
REGISTERED CARS & LIGHT TRUCKS: 922,771
ANNUAL GAS CONSUMPTION: 430 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 249

# MAXIMUM E85 USE: 47 MILLION GPY

FFVs IN USE: **80,367** 

E85 STATIONS:

FLEX STATION
IMPLIED DEMAND

+21

# MAXIMUM **E15** USE: 344 MILLION GPY

EPA APPROVED E15 VEHICLES 738,216

E15 STATION IMPLIED DEMAND +199

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Northern-grade RFG is used statewide; it is required in Kent and New Castle counties. Sussex County opted in.

#### **REID VAPOR PRESSURE:**

N/A

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 302-698-4500

#### **STATE INCENTIVES**

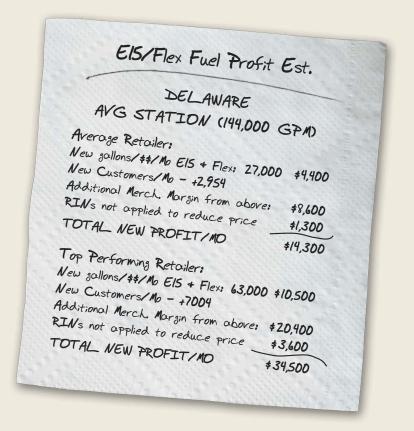
Alternative Fuel and Advanced Vehicle Acquisition Requirements All new light-duty vehicles purchased by Delaware state agencies, departments, and offices must be hybrid electric, alternative fuel, fuel-efficient, or low emission vehicles, unless such a purchase compromises health, safety, or law enforcement needs. (Executive Order 18, 2010)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





MAXIMUM E85 USE: 947 MILLION GPY

FFVs IN USE: **1,346,439** 

E85 STATIONS:

FLEX STATION+495

MAXIMUM **E15** USE: 6.7 BILLION GPY

EPA APPROVED E15 VEHICLES 11,909,370

E15 STATION IMPLIED DEMAND +5,082

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Entire state requires 9.0 psi RVP from May 1-September 15 on a retail level. Selected counties including Broward, Dade, Duval, Hillsborough, Palm Beach and Pinellas are required to use low-RVP gasoline in the summer months.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Consumer Services, 850-410-3800

#### **STATE INCENTIVES**

#### **BIOFUELS INVESTMENT TAX CREDIT**

An income tax credit is available for 75% of all capital, operational, maintenance, and research and development costs incurred in connection with an investment in the production, storage, and distribution of renewable fuel in the state, up to \$1 million annually per taxpayer and \$10 million annually for all taxpayers combined. Costs associated with retrofitting gasoline fueling station dispenser retrofits for renewable fuel distribution also qualify. Taxpayers must incur costs between July 1, 2012, and June 30, 2016. If the credit is not fully used in any one tax year, the unused amount may be carried forward through December 31, 2018. Any entity that is allowed the investment tax credit may transfer the credit, in whole or in part, to any taxpayer by written agreement without transferring ownership interest in the qualified property. Renewable fuel is defined as a fuel produced from biomass that is used to replace or reduce conventional fuel use. (Florida Statutes 212.08 and 220.192)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 10,214,860 (2015)
REGISTERED CARS & LIGHT TRUCKS: 7,914,089
ANNUAL GAS CONSUMPTION: 4.7 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 5,150

# MAXIMUM E85 USE: 700 MILLION GPY

FFVs IN USE: **945,194** 

E85 STATIONS:

FLEX STATION +556

# MAXIMUM E15 USE: 3.7 BILLION GPY

EPA APPROVED E15 VEHICLES 6,331,271

E15 STATION IMPLIED DEMAND +4,120

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

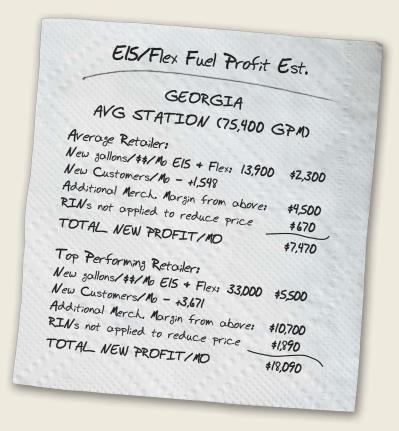
Conventional (effective October 1, 2015)

#### **REID VAPOR PRESSURE:**

9.0 psi RVP gas is required statewide from May 1-September 15 with RVP further reduced to 7.8 psi from June 1-September 15 in the 13-county Atlanta metro area, which includes Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Agriculture (Fuels and Measures Division), 404-656-3605



#### **STATE INCENTIVES**

#### **ETHANOL BLENDING REGULATION**

Gasoline suppliers who provide fuel to distributors in the state must offer gasoline that is suitable for blending with fuel alcohol. Suppliers may not prevent or inhibit a gasoline distributor from being a blender or from qualifying for any federal or state tax credit offered to blenders. (Georgia Code 10-1-234.1)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



POPULATION: 1,431,603 (2015)

REGISTERED CARS & LIGHT TRUCKS: 1,347,508

ANNUAL GAS CONSUMPTION: 450 MILLION GPY (2014)

TOTAL RETAIL STATIONS: 283

MAXIMUM E85 USE: 22 MILLION GPY

FFVs IN USE: **52,765** 

E85 STATIONS:

FLEX STATION
IMPLIED DEMAND

+8

MAXIMUM **E15** USE: 360 MILLION GPY

EPA APPROVED E15 VEHICLES 1,078,006

E15 STATION IMPLIED DEMAND +226

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

9.0 psi RVP gasoline is required at the retail level from June 1-September 15.

### **CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:**

Department of Health (Clean Air Division), 808-586-4200

#### STATE INCENTIVES

#### **ALTERNATIVE FUEL STANDARD DEVELOPMENT**

The state's alternative fuels standard contains a non-binding goal of having alternative fuels provide 20% of highway fuel demand by 2020 and 30% by 2030. (Hawaii Revised Statutes 196-42)

### ALTERNATIVE FUEL AND ADVANCED VEHICLE ACQUISITION REQUIREMENTS

State and county agencies must purchase light-duty vehicles that reduce petroleum consumption and meet the needs of the agency. State agencies must purchase alternative fuels and ethanol-blended gasoline when available. For more information, see the Hawaii State Energy Office's Vehicle Purchasing Guidelines website. (Hawaii Revised Statutes 103D-412 and 196-9)

#### **ALTERNATIVE FUEL TAX RATE**

Ethanol is taxed at .145 times the rate for diesel fuel on both the state and county level. State tax on ethanol is 2.4 cents per gallon while gasoline and diesel are 16 cpg. County taxes on ethanol/gas are: Hawaii – 1.3/8.8 cpg; Honolulu – 2.4/16.5 cpg; Kauai – 2.5/17 cpg; and Maui, 4.2/18 cpg. When those rates are applied, E10 is taxed 2.1 to 2.8 cents lower than straight gasoline.

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 1,654,930 (2015)
REGISTERED CARS & LIGHT TRUCKS: 1,693,092
ANNUAL GAS CONSUMPTION: 712 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 681

MAXIMUM E85 USE: 82 MILLION GPY

FFVs IN USE: **155,873** 

E85 STATIONS:

FLEX STATION +

+57

# MAXIMUM **E15** USE: **570 MILLION GPY**

EPA APPROVED E15 VEHICLES 1,354,473

E15 STATION IMPLIED DEMAND

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

9.0 psi RVP gasoline is required at the retail level from June 1-September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 208-332-8690

#### **STATE INCENTIVES:**

None

#### EIS/Flex Fuel Profit Est. AVG STATION (87,200 GPM) Average Retailer: New gallons/\$\$/Mo ElS + Flex: New Customers/Mo - +1,789 16,100 \$2,700 Additional Merch. Margin from above: RIN's not applied to reduce price \$5,200 TOTAL NEW PROFIT/MO \$780 \$8,680 Top Performing Retailer: New gallons/\$\$/Mo El5 + Flex: 38,200 \$6,300 New Customers/Mo - +4,243 Additional Merch. Margin from above: \$12,400 RIN's not applied to reduce price TOTAL NEW PROFIT/MO \$2,200 \$20,900

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



POPULATION: 12,859,995 (2015)
REGISTERED CARS & LIGHT TRUCKS: 10,011,322
ANNUAL GAS CONSUMPTION: 4.6 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 3,854

# MAXIMUM E85 USE: 665 MILLION GPY

FFVs IN USE: 1,150,575

E85 STATIONS:

FLEX STATION +176

# MAXIMUM E15 USE: 3.7 BILLION GPY

EPA APPROVED E15 VEHICLES **8,009,058** 

E15 STATION IMPLIED DEMAND +3,083

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Northern-grade RFG is required in Chicago area counties including Cook, Du Page, Grundy (Aux Sable and Goose Lake Townships only), Kane, Kendall (Oswego Township only), Lake, McHenry, and Will, and East St. Louis area counties of Jersey, Madison, Monroe and St. Clair. Conventional gasoline is sold in remaining counties in the state.

#### **REID VAPOR PRESSURE:**

Counties not in RFG program areas require 9.0 psi RVP gasoline June 1-September 15. Madison, Monroe and St. Clair counties use 7.2 psi RVP gasoline from June 1-September 15. These three counties plus Jersey County opted into the RFG program in 2007. Illinois' most recent State Implementation Plan removed the 7.2 psi RVP requirement from those areas, but EPA has not approved the SIP as of the date of this publication.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Agriculture (Weights and Measures), 217-524-6858

#### **STATE INCENTIVES:**

#### **E85 FUELING INFRASTRUCTURE GRANTS**

The Illinois Department of Commerce and Economic Opportunity's Renewable Fuels Development Program and Illinois Corn Marketing

EIS/Flex Fuel Profit Est. Average Retailer: New gallons/\$\$/Mo E15 + Flex; 18,500 New Customers/Mo - +2,054 \$3,100 Additional Merch Margin from above; RIN's not applied to reduce price \$6,000 TOTAL NEW PROFIT/MO \$ 890 \$9,990 Top Performing Retailer: New gallons/\$\$/Mo Els + Flex; 43,900 \$7,300 New Customers/Mo - +4,871 Additional Merch. Margin from above: \$14,200 RIN's not applied to reduce price TOTAL NEW PROFITIMO \$2,500 \$24,000

Board offer grants to fund new E85 fueling infrastructure. The American Lung Association of Illinois-lowa administers grants of up to \$15,000 for a blender pump installation, \$10,000 for a new E85 dispenser installation, and \$7,500 to convert existing stations to dispense E85. The maximum grant amount is \$15,000 per facility or \$75,000 for four or more facilities. For more information see the Illinois E85 Infrastructure Development Program website.

#### **ETHANOL TAX EXEMPTION**

Sales and use taxes apply to 80% of the proceeds from the sale of fuels containing 10% ethanol (E10) made between July 1, 2003, and December 31, 2018. If at any time these taxes are imposed at a rate of 1.25%, the tax on E10 will apply to 100% of the proceeds of sales. State sales and use taxes do not apply to fuels containing between 70% and 90% ethanol (E70-E90) sold between July 1, 2003, and December 31, 2018. Taxes will apply to 100% of the proceeds from ethanol fuel blend sales made after December 31, 2018. (Reference 35 Illinois Compiled Statutes 120/2-10, 105/3-10, and 105/3-44)

#### **FEDERAL INCENTIVE:**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

ADKINS ENERGY, LLC (LENA)
 Eric Lockart, Phone: 815-494-7990

• LINCOLNLAND AGRI-ENERGY (PALESTINE)

Eric Mosbey, Phone: 618-586-2321



POPULATION: 6,619,680 (2015)
REGISTERED CARS & LIGHT TRUCKS: 5,780,865
ANNUAL GAS CONSUMPTION: 3 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 2,597

# MAXIMUM E85 USE:

720,043

**202** 

FLEX STATION +121

# MAXIMUM **E15** USE: **2.4 BILLION GPY**

EPA APPROVED E15 VEHICLES **4,624,692** 

E15 STATION IMPLIED DEMAND +2,078

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Lake and Porter counties require Northern-grade RFG.

#### **REID VAPOR PRESSURE:**

7.8 psi gasoline is required in Clark and Floyd counties from May 1-September 15. Other counties in the state, except for Lake and Porter, sell 9.0 psi RVP gasoline on a retail level from May 1-September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Health (Division of Weights, Measures, and Metrology), 317-356-7078 ext. 224

#### **STATE INCENTIVES**

#### **E85 FUEL USE INCENTIVE**

A political subdivision that purchases E85 for use in flexible fuel vehicles (FFVs) may be entitled to a monthly incentive payment of \$33.33 for each FFV owned fewer than five years. They are eligible if 75% of motor vehicle fuel purchases were E85 in the previous month. This incentive expires January 1, 2019. (Indiana Code 6-6-1.1-103, 8-14-2-8, and 36-1-2-13)

#### **E85 PROMOTION AND EDUCATION**

The Indiana State Department of Agriculture must work with automobile manufacturers to improve awareness and labeling of E85 and must coordinate with the appropriate companies to include E85 fueling stations in updates of global positioning navigation software. (Indiana Code 15-11-2-4)

#### **E85 RETAIL SALES REPORTING**

A retailer who dispenses E85 must report to the Indiana Department of State Revenue the total number of gallons of E85 sold from a metered pump. (Indiana Code 6-2.5-6 and 6-2.5-7-5)

#### **IMMUNITY FOR MISUSE OF E85**

E85 sellers, suppliers, distributors, manufacturers, and refiners are immune from civil liability for personal injury or property damage resulting from a person fueling any vehicle with E85 that is not a flexible fuel vehicle. This includes any vehicle equipped to operate when fueled entirely with E85. This immunity does not apply if an E85 seller, supplier, distributor, manufacturer, or refiner does not display all E85 warning signs that federal or state laws require. (Indiana Code 34-30-24)

#### **BIOFUELS BLEND USE REQUIREMENT**

Whenever possible, governmental entities and state educational institutions must fuel gasoline vehicles with mid-level ethanol blends between 20% and 73%, and flexible fuel vehicles with E85. This requirement does not apply if such blends are prohibited under federal regulations or have not been approved by the vehicle manufacturer. Additional exemptions apply. (Indiana Code 5-22-5-8, 6-3.1-27-2, and 21-31-9-3)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 3,123,899 (2015) REGISTERED CARS & LIGHT TRUCKS: 3,400,439 ANNUAL GAS CONSUMPTION: 1.7 BILLION GPY (2014) TOTAL RETAIL STATIONS: 1,802

# MAXIMUM E85 USE: 300 MILLION GPY

FFVs IN USE: 484,665

E85 STATIONS: 210

FLEX STATION IMPLIED DEMAND

+47

# MAXIMUM E15 USE: 1.3 BILLION GPY

EPA APPROVED E15 VEHICLES 2,720,351

E15 STATION IMPLIED DEMAND +1,442

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

**REID VAPOR PRESSURE:** 9.0 psi RVP gasoline is sold on a retail level from June 1 until September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Natural Resources, 515-715-8200

#### **STATE INCENTIVES**

#### **ETHANOL BLEND RETAILER TAX CREDIT**

The Ethanol Promotion Tax Credit is available to any fuel retailer for up to \$0.08 per gallon of pure ethanol blended into gasoline, as long as the retailer sells a certain percentage of renewable fuels (ethanol and biodiesel) as part of their total motor fuel sales on a companywide or a site-by-site basis. Retailers must meet the following annual renewable fuel goals to be eligible for the credit:

CALENDAR YEAR	% BIOFUEL (RETAILERS SELLING > 200,000 GALLONS OF MOTOR FUEL)	% BIOFUEL (RETAILERS SELLING < 200,000 GALLONS OF MOTOR FUEL)
2016	19%	15%
2017	21%	17%
2018	23%	19%
2019	25%	21%
2020	25%	25%

For retailers within 2% of meeting these goals, the tax credit will be \$0.06 for every gallon of pure ethanol blended into gasoline sold. For retailers within 4% of meeting these goals, the tax credit will be \$0.04 for every gallon of pure ethanol sold. The governor may adjust the percentages if certain flexible fuel vehicle registration targets are not met or if there is a shortage of biofuel feedstock. The tax credit expires December 31, 2020. (S.F. 2309)

#### MID-LEVEL ETHANOL BLEND RETAILER TAX CREDIT

Retail stations dispensing mid-level blends of ethanol in gasoline between 15% (E15) up to 69% (E69) for use in motor vehicles may be eligible for a tax credit. Credit amounts vary by date: September 16 through May 31 the credit is equal to \$0.03 per gallon and June 1 through September 15 the credit is equal to \$0.10 per gallon. The tax credit expires December 31, 2024. Eligible taxpayers may also claim the Ethanol Blend Retailer Tax Credit for the same ethanol gallons and tax year. (S.F. 2309)

#### **E85 RETAILER TAX CREDIT**

Retail stations dispensing gasoline fuel blends of 70% ethanol (E70) to 85% ethanol (E85) for use in motor vehicles may be eligible for a tax credit in the amount of \$0.16 per gallon sold. The tax credit expires after December 31, 2024. Eligible taxpayers may also claim the Ethanol Blend Retailer Tax Credit for the same ethanol gallons and tax year. (S.F. 2309)

#### Point of Contact for above programs

Amy Harris

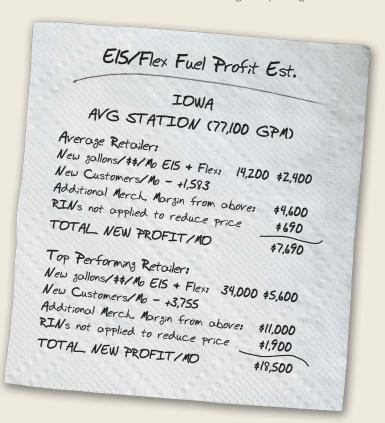
Administrator, Research and Analysis Division

Iowa Department of Revenue

Phone: 515-281-0196 amy.harris@iowa.gov

#### **BIOFUEL INFRASTRUCTURE GRANTS**

The Renewable Fuel Infrastructure Program provides financial assistance to qualified E85 and biodiesel retailers. Cost-share grants are available to upgrade or install new E85 or biodiesel infrastructure. Three-year cost-share grants are available for up to 50% of the total cost of the total project, up to \$30,000, and five-year cost-share grants are available for up to 70% of the total cost of the project, up to \$50,000. Biodiesel distributors may apply for cost-share grants for infrastructure upgrades and installations at biodiesel terminal facilities. Facilities blending or dispensing blends



ranging from 2% biodiesel (B2) to 98% biodiesel (B98) are eligible for up to 50% of the total project, up to \$50,000. Facilities blending or dispensing B99 or B100 are eligible for up to 50% of the total project, up to \$100,000.

The Renewable Fuels Infrastructure Board receives administrative support from staff within the lowa Department of Agriculture and Land Stewardship and the 11-member board has authority to determine the eligibility of applicants. For more information, refer to the Renewable Fuel Infrastructure Program website. (S.F. 2309)

#### Point of Contact

Harold Hommes

Marketing and Renewable Fuels Program

Iowa Department of Agriculture and Land Stewardship

Phone: 515-242-6237 Fax: 515-281-8025

harold.hommes@iowaagriculture.gov http://www.iowaagriculture.gov/

#### **E85 FUEL EXCLUSIVITY CONTRACT REGULATIONS**

Any motor fuel franchise contract entered into or renewed on or after May 30, 2006, must allow for the delivery of E85 at any time requested by the motor fuel dealer or allow the dealer to purchase E85 from another source. If a contract was already in effect on May 30, 2006, and does not have an expiration date, the franchisor must provide for the delivery of E85 at the request of the franchisee or allow the franchisee to purchase those volumes of E85 from another source. (S.F. 2309)

#### RENEWABLE FUEL LABELING REQUIREMENT

Biodiesel, biobutanol, and ethanol blend dispensers must be affixed with decals identifying the type of fuel blend. If fuel blends containing more than 10% ethanol are being dispensed, the decal must include the statement "For Flexible Fuel Vehicles Only." The lowa Department of Agriculture and Land Stewardship (Department) may approve an application to place a decal in a special location on a pump with special lettering or colors that are clear and conspicuous to the consumer. The application must be made in writing to the Department. (S.F. 2309)

#### **ETHANOL BLEND DISPENSER REQUIREMENT**

An ethanol retailer selling a blend of at least 9% ethanol by volume must use gasoline storage and dispensing infrastructure that the lowa Department of Natural Resources and state fire marshal have determined is compatible with the ethanol blend being dispensed. Exceptions may apply. (S.F. 2309)

#### **ALTERNATIVE FUEL TAX**

E85 is subject to the excise tax of \$0.29 per gallon through June 30, 2015, and \$0.293 per gallon thereafter. (Senate File 257, 2015, and lowa Code 452A.2 and 452A.86)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

• ABSOLUTE ENERGY (ST. ANSGAR)

E85:

Emily Black, Refined Products Marketing Group (RPMG), Email: eblack@rpmgllc.com; Phone: 952-465-3239

DENATURED ETHANOL:

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• GOLDEN GRAIN ENERGY (MASON CITY) DENATURED ETHANOL:

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• HOMELAND ENERGY SOLUTIONS (LAWLER)

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• LITTLE SIOUX CORN PROCESSORS (MARCUS)

Emily Black, Refined Products Marketing Group (RPMG), Email: eblack@rpmgllc.com; Phone: 952-465-3239

DENATURED ETHANOL:

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• QUAD COUNTY CORN PROCESSORS (GALVA)

Matt Carter - EcoEnergy, Phone: 615-786-0404



POPULATION: 2,911,641 (2015) REGISTERED CARS & LIGHT TRUCKS: 2,442,435 ANNUAL GAS CONSUMPTION: 1.3 BILLION GPY (2014) TOTAL RETAIL STATIONS: 1,190

# MAXIMUM E85 USE: 240 MILLION GPY

FFVs IN USE: 368,452

E85 STATIONS:

FLEX STATION +154

# MAXIMUM E15 USE: 1 BILLION GPY

EPA APPROVED E15 VEHICLES **1,953,948** 

E15 STATION IMPLIED DEMAND +952

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

**REID VAPOR PRESSURE:** Nearly all counties in the state use a 9.0 psi RVP from May 1-September 15 at the retail level. Kansas City area counties Johnson and Wyandotte require 7.0 psi gasoline to be sold at the retail level from June 1-September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Agriculture (Weights and Measures), 785-564-6700

#### STATE INCENTIVES

#### **ALTERNATIVE FUEL VEHICLE (AFV) TAX CREDIT**

An income tax credit is available for 40% of the incremental or conversion cost for qualified AFVs, based on gross vehicle weight rating (GVWR) as outlined in the table below. Qualified AFVs include vehicles that operate on a combustible liquid derived from grain starch, oil seed, animal fat, or other biomass, or produced from a biogas source.

GVWR	CREDIT
Less than 10,000 lbs.	Up to \$2,400
10,000 to 26,000 lbs.	Up to \$4,000
Over 26,000 lbs.	Up to \$40,000

Alternatively, a tax credit of 5% of the cost of the AFV, up to \$750, is available for the purchase of an original equipment manufacturer AFV. This credit is allowed only to the first individual to take title of the vehicle. For motor vehicles capable of operating on E85, the individual claiming the credit must provide evidence of purchasing at least 500 gallons of E85 between the time the vehicle was purchased and December 31, of the following calendar year. Excess credits may be carried over for up to three years after the year in which the expenditures were made. The credit is only available to entities with corporate income tax liability. For more information, see the Alternative Fuel Tax Credit page. (Kansas Statutes 79-32,201)

#### **ALTERNATIVE FUELING INFRASTRUCTURE TAX CREDIT**

An income tax credit is available for 40% of the total cost to install alternative fueling infrastructure after January 1, 2009. Qualified property must be directly related to the delivery of alternative fuel into the fuel tank of a motor vehicle propelled by such fuel. The tax credit may not exceed \$100,000 per fueling station. Alternative fuels are defined as combustible liquids derived from grain starch, oil seed, animal fat, or other biomass, or produced from a biogas source. Excess credits may be carried over for up to three years

after the year in which the expenditures were made. The credit is only available to entities with corporate income tax liability. For more information, see the Alternative Fuel Tax Credit page. (Kansas Statutes 79-32,201)

#### **BIOFUELS USE REQUIREMENT**

Individuals operating state-owned motor vehicles must purchase fuel blends containing at least 10% ethanol (E10), as long as these fuel blends are not more than \$0.10 per gallon higher as compared to the price per gallon of regular gasoline fuel. (Kansas Statutes 75-3744a)

#### **E85 TAX RATE AND DEFINITION**

The minimum motor vehicle fuel tax rate on E85 is \$0.17 per gallon, compared to the conventional motor fuel tax rate of \$0.24 per gallon. E85 is defined as an alternative fuel that is a blend of denatured ethanol and hydrocarbon and typically contains 85% ethanol by volume, but must contain at least 70% ethanol by volume and complies with ASTM specification D5798-99. (Kansas Statutes 79-3401; 79-3490; and 79-34,141)



#### **ETHANOL BLEND DISPENSER REQUIREMENT**

A retail motor fuel dispenser that dispenses fuel containing more than 10% ethanol by volume must be labeled with the capital letter "E" followed by the numerical value representing the volume percentage of ethanol, such as E85, as specified in Kansas Department of Agriculture guidelines (PDF). (Kansas Administrative Regulations 99-25-10)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a

tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

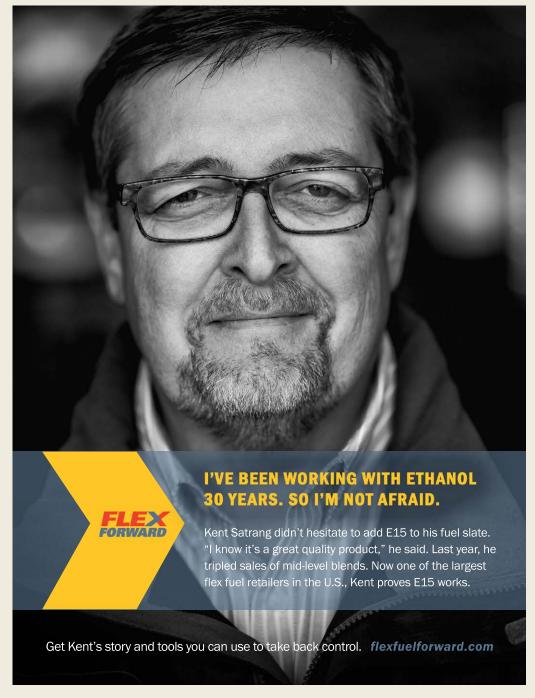
#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

• PRAIRIE HORIZON AGRI-ENERGY (PHILLIPSBURG)

Craig Palmer - Ethanol Products,

Phone: 316-303-3835





POPULATION: 4,425,092 (2015)
REGISTERED CARS & LIGHT TRUCKS: 4,027,934
ANNUAL GAS CONSUMPTION: 2.1 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 2,137

# MAXIMUM E85 USE: 300 MILLION GPY

FFVs IN USE: **454,660** 

E85 STATIONS:

FLEX STATION +167

# MAXIMUM E15 USE:

EPA APPROVED E15 VEHICLES 3,222,347

E15 STATION IMPLIED DEMAND +1,710

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Northern-grade RFG is used in the following counties: Boone, Bullitt (in certain areas), Campbell, Jefferson, Kenton and Oldham (in certain areas).

#### **REID VAPOR PRESSURE:**

In non-RFG counties, 9.0 psi RVP gasoline is required to be sold at the retail level from June 1-September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Agriculture (Weights and Measures), 502-573-0282

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 4,670,724 (2015)
REGISTERED CARS & LIGHT TRUCKS: 3,739,623
ANNUAL GAS CONSUMPTION: 2.2 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 2,462

# MAXIMUM E85 USE: 480 MILLION GPY

FFVs IN USE: **640,539** 

E85 STATIONS:

FLEX STATION +413

# MAXIMUM E15 USE: 1.8 BILLION GPY

EPA APPROVED E15 VEHICLES 2,991,698

E15 STATION IMPLIED DEMAND +1.970

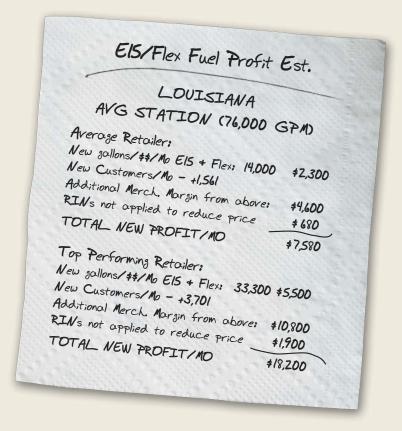
#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

These parishes or counties require that 7.8 psi RVP gasoline should be sold from June 1-September 15 at the retail level: Ascension, Beauregard, Calcasieu, East Baton Rouge, Iberville, Jefferson, Lafayette, Lafourche, Livingston, Orleans, Pointe Coupee, St. Bernard, St. Charles, St. James, St. Mary and West Baton Rouge. Those counties require 9.0 RVP gasoline in May during the transition. All other counties require 9.0 psi RVP to be sold at the retail level from May 1-September 15.



### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 225-925-3780

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



MAXIMUM E85 USE: 103 MILLION GPY

FFVs IN USE: **120,476** 

E85 STATIONS:

FLEX STATION +85

MAXIMUM E15 USE: 620 MILLION GPY

EPA APPROVED E15 VEHICLES 911,340

E15 STATION IMPLIED DEMAND +647

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

The EPA has approved a state proposal that requires the sale of a year-round RFG in these counties: Androscoggin, Cumberland, Kennebec, Knox, Lincoln, Sagadahoc and York.

#### **REID VAPOR PRESSURE:**

The counties that aren't in the RFG program have a 9.0 psi RVP requirement to be sold at the retail level for May 1-September 15. During that time span, those counties do not have the 1.0 psi RVP waiver.

### **CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:**

Department of Weights and Measures, 207-287-3841

#### **STATE INCENTIVES:**

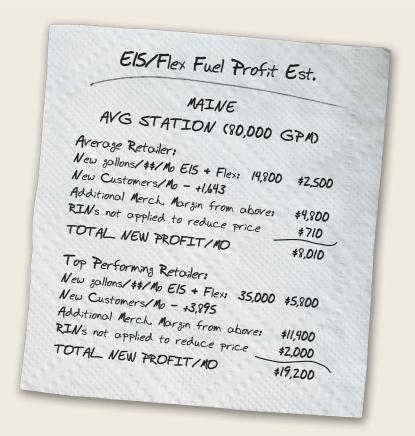
None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 6,006,401 (2015)
REGISTERED CARS & LIGHT TRUCKS: 3,915,415
ANNUAL GAS CONSUMPTION: 2.7 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,852

# MAXIMUM E85 USE:

FFVs IN USE: 384,107

E85 STATIONS:

FLEX STATION +149

# MAXIMUM E15 USE: 2.2 BILLION GPY

EPA APPROVED E15 VEHICLES 3,132,332

E15 STATION IMPLIED DEMAND +1,482

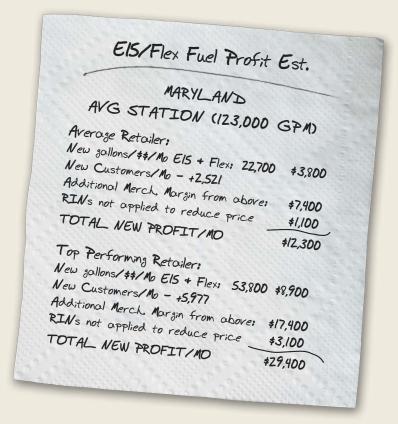
#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Southern-grade RFG is required in Anne Arundel, Baltimore, Baltimore City, Carroll, Harford and Howard counties. Northern-grade RFG is required in Cecil County. The following counties agreed to be part of the RFG program and sell Southern-grade RFG: Calvert, Charles, Frederick, Kent, Montgomery, Prince George's and Queen Anne's.

#### **REID VAPOR PRESSURE:**

Counties that aren't listed above use 9.0 psi RVP gasoline for May 1-September 15.



### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 410-841-5790

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

### **MASSACHUSETTS**

POPL

POPULATION: 6,794,422 (2015)
REGISTERED CARS & LIGHT TRUCKS: 4,855,945
ANNUAL GAS CONSUMPTION: 2.7 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 2,058

# MAXIMUM E85 USE: 240 MILLION GPY

FFVs IN USE: 345,131

E85 STATIONS:

FLEX STATION +140

# MAXIMUM **E15** USE: **2.2 BILLION GPY**

EPA APPROVED E15 VEHICLES 3,884,756

E15 STATION IMPLIED DEMAND +1,646

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

The state has opted into the RFG program and sells Northern-grade RFG.

#### **REID VAPOR PRESSURE:**

Follows RFG program.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Consumer Affairs and Business Protection, 617-727-3480

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





MAXIMUM E85 USE: 910 MILLION GPY

FFVs IN USE: **1,248,436** 

E85 STATIONS:

FLEX STATION + 342

MAXIMUM E15 USE:
3.7 BILLION GPY

EPA APPROVED E15 VEHICLES 6,287,427

E15 STATION IMPLIED DEMAND +3,009

#### **FUEL SPECIFICATIONS:**

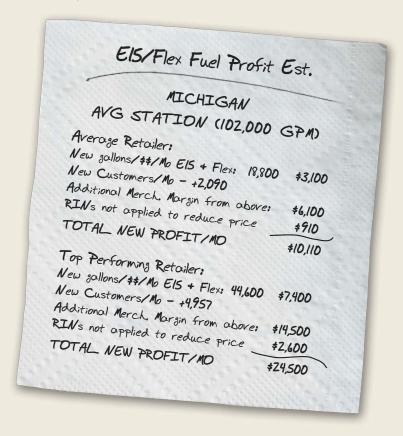
#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

These counties required the sale of 7.0 psi RVP gasoline from June 1-September 15: Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne. They require 9.0 psi RVP in May. All other counties require 9.0 psi gasoline from May 1-September 15.

**TOTAL RETAIL STATIONS: 3.761** 



### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Agriculture (Weights and Measures), 800-632-3835

#### **STATE INCENTIVES**

#### **BIOFUELS BLENDER REQUIREMENTS**

Entities blending ethanol with gasoline and biodiesel with diesel outside of the bulk transfer terminal system must obtain a blender's license and are subject to blender reporting requirements. A licensed supplier who blends ethanol and gasoline or biodiesel and diesel fuels must also obtain a blender's license. (Michigan Compiled Laws 207.1008)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



POPULATION: 5,489,594 (2015) REGISTERED CARS & LIGHT TRUCKS: 4,973,081 ANNUAL GAS CONSUMPTION: 2.5 BILLION GPY (2014) TOTAL RETAIL STATIONS: 2,177

## MAXIMUM E85 USE: 470 MILLION GPY

743,967

**297** 

FLEX STATION +2

# MAXIMUM E15 USE: 2 BILLION GPY

EPA APPROVED E15 VEHICLES 3,978,465

E15 STATION IMPLIED DEMAND +1,742

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

On a retail level, all counties use 9.0 psi RVP from June 15-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Commerce (Weights and Measures Division), 651-539-1555

#### STATE INCENTIVES

#### **ETHANOL FUELING INFRASTRUCTURE GRANTS**

The Minnesota Corn Research & Promotion Council and the Minnesota Department of Agriculture offer funding assistance to fuel retailers for the installation of equipment to dispense ethanol fuel blends ranging from E15 through E85. Grant amounts are based on the extent to which the installation meets project priorities. For more information, refer to the Clean Air Choice E85 Retailer Information website.

#### **Point of Contact**

Kelly Marczak

Director

American Lung Association in Minnesota

Phone: 651-268-7590 Fax: 651-227-5459 kelly.marczak@lung.org

http://www.cleanairchoice.org/cities

#### **ALTERNATIVE FUEL TAX**

The Minnesota Department of Revenue imposes an excise tax on the first licensed distributor that receives E85 fuel products in the state and on distributors, special fuel dealers, or bulk purchasers of other alternative fuels. E85 is taxed at the pump at a rate of \$0.2025 per gallon. Gasoline is taxed at the rate of \$0.285 per gallon. Exemptions apply. Fuel excise tax rates are updated July 1 of each year and are posted on the Minnesota Fuel Excise Tax Rates and Fees website. (Minnesota Statutes 296A.07 and 296A.08)

#### **AUTHORIZATION FOR BIOFUEL INCENTIVE**

The Agricultural Growth, Research, and Innovation Program may offer grants, loans, or other financial incentives to alternative fuel retailers for the installation of ethanol blender pumps or other rural economic infrastructure activities, or to producers of transportation fuels from cellulosic material or bio-based products. Once established, the program will remain in effect through June 30, 2025, with funding subject to legislative appropriation. (Senate File 5, 2015; House File 1554, 2015; and Minnesota Statutes 41A.12)

#### **AUTHORIZATION FOR E15 INFRASTRUCTURE GRANT PROGRAM**

The Minnesota Department of Agriculture may establish a program to provide grants to eligible fuel retailers for equipment and installation costs to dispense E15. Grants would be available to retailers with no more than 15 fueling stations in the state. (Senate File 5, Special Session 2015)

#### **BIOFUEL BLEND MANDATE**

All gasoline sold or offered for sale in Minnesota must contain at least: 10% corn-based ethanol by volume or the maximum percent by volume of corn-based ethanol authorized in a waiver issued by the U.S. Environmental Protection Agency (EPA), whichever is greater; or 10% other biofuel authorized in an EPA waiver by volume, or a biofuel formulation registered by EPA under Title 49 of the U.S. Code of Federal Regulations, section 7545.

Biofuel is defined as renewable fuel with an approved fuel pathway under the Energy Policy Act of 2005, as amended under the Energy Independence and Security Act of 2007.

Any biofuel may be used to meet the standards above, but corn-based ethanol may not comprise more than the following percentages of the total biofuel use in the state by the date specified:



DATE	MAXIMUM AMOUNT OF CORN-BASED ETHANOL
January 1, 2017	70%
January 1, 2020	60%
January 1, 2025	No Minimum

Effective August 30, 2015, all gasoline sold or offered for sale in the state must contain at least 20% ethanol (E20), unless EPA has not granted approval for the use of E20 in all vehicles regardless of model year. Certain exemptions apply. (Minnesota Statutes 239.761 and 239.791)

#### **ETHANOL FUEL BLEND DISPENSING REGULATIONS**

Gasoline blended for use in an alternative fuel vehicle (AFV) may contain any percentage of agriculturally derived, denatured ethanol, up to and including 85% (E85). Ethanol and gasoline blended at the point of retail sale in an ethanol-blending fuel dispenser must be clearly labeled "FLEX-FUEL VEHICLES ONLY." If a retailer sells both ethanol blends for use in AFVs as well as ethanol blends for use in standard combustion engines, the ethanol blends for use in a standard combustion engine must be dispensed from dedicated hoses, nozzles, or other equipment, and clearly labeled for use in conventional vehicles. Retailers are not responsible for customers' self-service fueling actions as long as they meet these requirements. (Minnesota Statutes 239.761 and 296A.01)

#### MINNESOTA BIOFUELS REPLACEMENT GOALS

The Minnesota Department of Weights and Measures promotes the replacement of petroleum used in the state with the goal that biofuels will account for at least the specified percentage of all gasoline offered for sale by the dates below:

CALENDAR YEAR	BIOFUEL REPLACEMENT SCHEDULE	
2017	18%	
2020	25%	
2025	30%	

(Minnesota Statutes 239.7911)

#### **BIOFUEL USE REQUIREMENT**

State agencies must take all reasonable actions to develop the infrastructure necessary to increase the availability and use of E85 and biodiesel throughout the state. Employees using state-owned vehicles are expected to use E85 fuel when operating flexible fuel vehicles whenever E85 is reasonably available. (Executive Orders 04-10, 2004, and 06-03, 2006)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

AL-CORN CLEAN FUEL (CLAREMONT)
 DENATURED ETHANOL:

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• BUSHMILLS ETHANOL, LLC (ATWATER)

Erik Osmon: 320-974-8050

 CHIPPEWA VALLEY ETHANOL CO, LLLP (BENSON) E85:

Chad Friese - Chippewa Valley Ethanol Company,

Phone: 320-843-4813. DENATURED ETHANOL:

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• GRANITE FALLS ENERGY, LLC (GRANITE FALLS)

Matt Carter - EcoEnergy: 615-786-0404

HIGHWATER ETHANOL, LLC (LAMBERTON)

DENATURED ETHANOL:

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234



POPULATION: 2,992,333 (2015)
REGISTERED CARS & LIGHT TRUCKS: 2,031,421
ANNUAL GAS CONSUMPTION: 1.7 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,966

MAXIMUM E85 USE: 430 MILLION GPY

FFVs IN USE: 421,653

E85 STATIONS:

FLEX STATION +405

MAXIMUM **E15** USE: 1.3 BILLION GPY

EPA APPROVED E15 VEHICLES 1,625,137

E15 STATION IMPLIED DEMAND +1,573

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Sales vary per time of the year in the state, from November -March (13.5 psi), April (11.5 psi), May (11.5 psi-retail, 9.0 psi-wholesale) June-September 15 (9.0 psi); September 16-October (11.5 psi)

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Agriculture and Commerce (Petroleum Products Inspection Division), 601-359-1101

#### **STATE INCENTIVES**

#### **FUEL-EFFICIENT AND ALTERNATIVE FUEL VEHICLE USE**

The State Bureau of Fleet Management operated by the Mississippi Department of Finance and Administration, coordinates and promotes fuel efficiency when state agencies purchase, lease, rent, acquire, use, maintain, and dispose of vehicles. The Bureau encourages state agencies to use fuel-efficient or hybrid electric vehicles as appropriate and, when feasible, use alternative fuels, including ethanol, biodiesel, natural gas, or electricity, to operate the vehicles. At least 75% of all vehicles titled under the Bureau must have a U.S. Environmental Protection Agency estimated fuel economy rating of at least 40 miles per gallon for highway driving. (Mississippi Code 25-1-77)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 6,083,672 (2015)
REGISTERED CARS & LIGHT TRUCKS: 5,173,201
ANNUAL GAS CONSUMPTION: 3.1 BILLION (2014)
TOTAL RETAIL STATIONS: 2.850

## MAXIMUM E85 USE: 510 MILLION GPY

FFVs IN USE: **690,131** 

E85 STATIONS: **97** 

FLEX STATION +283

# MAXIMUM E15 USE: 2.5 BILLION GPY

EPA APPROVED E15 VEHICLES 4,138,560

E15 STATION IMPLIED DEMAND +2.280

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional gasoline is used in the rest of the state, while Southern-grade RFG is used in Franklin, Jefferson, St. Charles and St. Louis.

#### **REID VAPOR PRESSURE:**

Clay, Jackson, and Platte counties sell 7.0 psi RVP gasoline June 1-September 15 on a retail level, and 9.0 psi RVP in May. All other counties require 9.0 psi RVP for May 1-September 15.

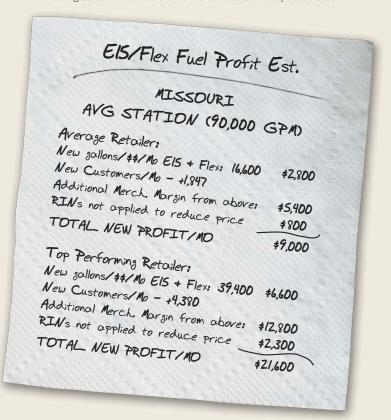
## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures (Fuel Quality Division), 573-791-2922

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUELING INFRASTRUCTURE TAX CREDIT**

For tax years beginning on or after January 1, 2015, an income tax credit is available for the cost of constructing a qualified alternative fueling station. The credit is 20% of the costs directly associated



with the purchase and installation of any alternative fuel storage and dispensing equipment or electric vehicle supply equipment (EVSE), up to \$1,500 for individuals or \$20,000 for businesses. Tax credits may be carried forward for two years and may be transferred or sold, but will be forfeited if a tax credit recipient stops dispensing alternative fuel or electricity for vehicle charging. Eligible fuels include any mixture of biodiesel and diesel fuel, as well as fuel containing at least 70% of the following alternative fuels: ethanol, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas or propane, hydrogen, and electricity. This tax credit expires on January 1, 2018. For more information, see the Missouri Alternative Fuel Infrastructure Tax Credit website. (Missouri Revised Statutes 135.710)

#### **ETHANOL BLEND MANDATE**

All gasoline offered for sale at retail stations within the state must contain 10% ethanol (E10). This requirement is waived only if a distributor is unable to purchase ethanol or ethanol-blended gasoline at the same or lower price as unblended gasoline. Premium gasoline is exempt from this requirement. Ethanol is defined as fuel that is derived from an agricultural source and that meets ASTM specification D4806. (Missouri Revised Statutes 414.255)

#### **ALTERNATIVE FUEL PROMOTION**

The Missouri Alternative Fuels Commission promotes the continued production and use of alternative transportation fuels in Missouri. The Commission submits a report annually to the governor and general assembly and provides recommendations on changes to state law to facilitate the sale and distribution of alternative fuels and alternative fuel vehicles; promotes the development, sale, distribution, and consumption of alternative fuels; promotes the development and use of alternative fuel vehicles and technology that will enhance the use of alternative and renewable transportation fuels; educates consumers about alternative fuels; and develops a long-range plan for the state to reduce consumption of petroleum fuels. For more information, see the Missouri Alternative Fuels Commission page. (Missouri Revised Statutes 414.420)

### ALTERNATIVE FUEL VEHICLE (AFV) ACQUISITION AND ALTERNATIVE FUEL USE REQUIREMENTS

A state agency that operates a vehicle fleet consisting of 15 vehicles or more must ensure that at least 50% of new vehicles purchased over a defined biennial period are capable of operating using an alternative fuel. Excess acquisitions of AFVs may be credited towards future biennial goals. If a state agency fails to meet a biennial acquisition goal, purchases of any non-AFVs are not permitted until the goals are met or an exemption or goal reduction has been granted. In addition, 30% of the fuel purchased annually for use in operating state fleet vehicles must be alternative fuels. (Missouri Revised Statutes 414.400 and 414.410)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

• MID-MISSOURI ENERGY (MALTA BEND) DENATURED ETHANOL:

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234





POPULATION: 1,032,949 (2015)
REGISTERED CARS & LIGHT TRUCKS: 1,397,442
ANNUAL GAS CONSUMPTION: 510 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 514

MAXIMUM E85 USE: 69 MILLION GPY

FFVs IN USE: **151,002** 

E85 STATIONS:

FLEX STATION +5

MAXIMUM E15 USE: 410 MILLION GPY

EPA APPROVED E15 VEHICLES 1,117,953

E15 STATION IMPLIED DEMAND

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

The state requires 9.0 psi RVP gasoline statewide from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 406-443-3289

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUEL VEHICLE (AFV) CONVERSION TAX CREDIT**

Businesses and individuals are eligible for an income tax credit of up to 50% of the equipment and labor costs for converting vehicles to operate on alternative fuels. Qualified alternative fuels are compressed and liquefied natural gas, liquefied petroleum gas (propane), hydrogen, electricity, and fuels containing at least 85% ethanol, methanol, ether, or another alcohol. The maximum credit is \$500 for the conversion of vehicles with a gross vehicle weight rating (GVWR) of 10,000 lbs. or less and \$1,000 for vehicles with a GVWR of more than 10,000 lbs. The credit is only available for the year the business or individual converts the vehicle. An alternative fuel seller may not receive a credit for converting its own vehicles to operate on the alternative fuel it sells. (Montana Code Annotated 15-30-2320)

#### **ETHANOL FUEL BLEND USE REQUIREMENT**

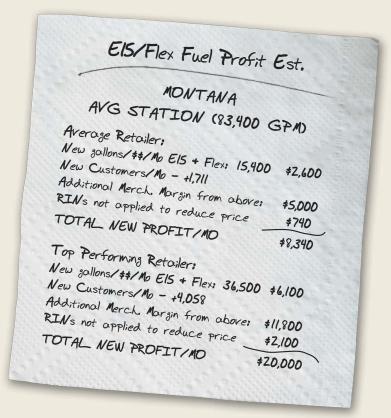
State government agencies and universities owning or operating motor vehicles capable of using ethanol-blended gasoline must take all reasonable steps to ensure that the operators of those vehicles fuel with ethanol-blended gasoline if it is commercially available within the vehicle's operating area and competitively priced as compared to conventional gasoline. (Montana Code Annotated 2-17-414)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 1,896,190 (2015) REGISTERED CARS & LIGHT TRUCKS: 1,891,179 ANNUAL GAS CONSUMPTION: 885 MILLION GPY (2014) TOTAL RETAIL STATIONS: 990

## MAXIMUM E85 USE:

FFVs IN USE: **292,671** 

E85 STATIONS:

FLEX STATION +72

# MAXIMUM **E15** USE: 710 MILLION GPY

EPA APPROVED E15 VEHICLES **1,512,943** 

E15 STATION IMPLIED DEMAND +792

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Every retailer in the state sells 9.0 psi RVP gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Weights and Measures Office, 402-471-2341

#### **STATE INCENTIVES**

## ALTERNATIVE FUEL VEHICLE (AFV) AND FUELING INFRASTRUCTURE LOANS

The Nebraska Energy Office administers the Dollar and Energy Saving Loan Program which makes low-cost loans available for a variety of alternative fuel projects, including the replacement of conventional vehicles with AFVs; the purchase of new AFVs; the conversion of conventional vehicles to operate on alternative fuels; and the construction or purchase of fueling stations or equipment. The maximum loan amount is \$750,000 per borrower, and the interest rate is 5% or less. For more information, see the Dollar and Energy Saving Loans website.

#### **ETHANOL AND BIODIESEL TAX EXEMPTION**

Motor fuels sold to an ethanol or biodiesel production facility and motor fuels manufactured at and sold from an ethanol or biodiesel facility are exempt from certain motor fuel tax laws the Motor Fuels Division of the Nebraska Department of Revenue enforces. (Nebraska Revised Statutes 66-489 and 66-496)

#### **ALTERNATIVE FUEL USE**

All state employees operating flexible fuel or diesel vehicles as part of the state fleet must use E85 or biodiesel blends whenever reasonably available. Additionally, the Nebraska Transportation Services Bureau and Nebraska Department of Roads must take steps to increase access to E85 and blends of 2% biodiesel (B2) for state vehicle operators. (Executive Order 05-03, 2005)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

• KAAPA ETHANOL, LLC (MINDEN)

Todd Kruggel - RPMG.

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• SIOUXLAND ETHANOL (JACKSON)

Nick Bowdish; Phone: 402-632-2676





POPULATION: 2,890,845 (2015)
REGISTERED CARS & LIGHT TRUCKS: 2,164,647
ANNUAL GAS CONSUMPTION: 1.1 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 756

## MAXIMUM E85 USE:

157,964

E85 STATIONS:

FLEX STATION +3

# MAXIMUM **E15** USE: **880 MILLION GPY**

EPA APPROVED E15 VEHICLES **1,731,717** 

E15 STATION IMPLIED DEMAND +605

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

The EPA approved Clark County's request to suspend its clean burning gasoline program in 2010 to switch from the Las Vegas blendstock for oxygenate.

#### **REID VAPOR PRESSURE:**

Washoe County requires 7.8 psi gasoline from June 1-September 15 to be sold on a retail basis. During that time span, blenders receive a 1.0 psi waiver for ethanol blending. Clark County has relaxed its RVP requirement in the wintertime to 13.5 psi RVP (from 9.0 psi).

#### WINTER OXYGENATE REQUIREMENT:

Clark County (Las Vegas) requires gasoline contain 3.5% oxygen from October to March, and Washoe County (Reno) requires gasoline with a minimum of 2.7% oxygen from October to January.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures

#### **STATE INCENTIVES:**

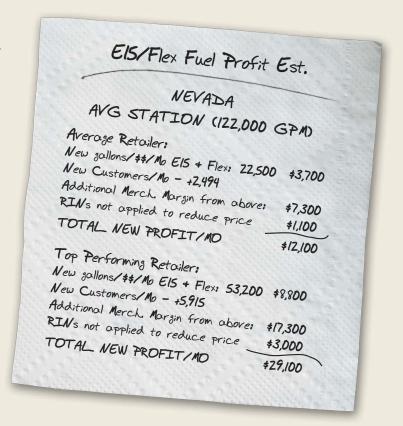
None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 1,330,608 (2015)
REGISTERED CARS & LIGHT TRUCKS: 1,231,279
ANNUAL GAS CONSUMPTION: 705 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 599

## MAXIMUM E85 USE: 73 MILLION GPY

FFVs IN USE: 101,390

E85 STATIONS:

FLEX STATION +49

# MAXIMUM E15 USE: 560 MILLION GPY

EPA APPROVED E15 VEHICLES 985,023

E15 STATION IMPLIED DEMAND

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Hillsborough, Merrimack, Rockingham, and Strafford counties have opted into the Northern-grade RFG program.

#### **REID VAPOR PRESSURE:**

The state requires 7.0 psi RVP gasoline for those four counties from May-September.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Division of Weights and Measures, 603-271-3700

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 8,958,013 (2015)

REGISTERED CARS & LIGHT TRUCKS: 6,700,307

ANNUAL GAS CONSUMPTION: 4.1 BILLION GPY (2014)

TOTAL RETAIL STATIONS: 2,336

## MAXIMUM E85 USE: 370 MILLION GPY

FFVs IN USE: 484,792

E85 STATIONS:

FLEX STATION +164

# MAXIMUM E15 USE: 3.3 BILLION GPY

EPA APPROVED E15 VEHICLES **5,360,246** 

E15 STATION IMPLIED DEMAND +1.869

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Northern-grade RFG is used statewide. The fuel blend is required in Bergen, Burlington, Camden, Cumberland, Essex, Gloucester, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Salem, Somerset, Sussex, and Union counties. All other counties in the state opted into the RFG program.

#### **REID VAPOR PRESSURE:**

The state requires that retailers sell 9.0 psi gasoline from May 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Division of Weights and Measures, 732-815-4840

#### **STATE INCENTIVES**

#### **BIOFUEL USE REQUIREMENTS**

New Jersey state departments, agencies, offices, universities, and colleges must purchase biofuels for use in motor vehicles if the cost of biofuel is the same or less than the cost of gasoline or diesel, and if the fuel replacement is reasonable. For the purpose of this regulation, a biofuel is a liquid or gaseous fuel produced from organic sources, including native noninvasive energy crops, agricultural residues, and non-recycled organic waste, such as waste cooking oil, grease, food wastes, sewage, and algae. (New Jersey Statutes 52:34-6.6-6.8)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 2,085,109 (2015) REGISTERED CARS & LIGHT TRUCKS: 1,859,060 ANNUAL GAS CONSUMPTION: 960 MILLION GPY (2014) TOTAL RETAIL STATIONS: 893

## MAXIMUM E85 USE:

FFVs IN USE: **208,772** 

E85 STATIONS:

FLEX STATION +90

# MAXIMUM E15 USE: 765 MILLION GPY

EPA APPROVED E15 VEHICLES 1,487,248

E15 STATION IMPLIED DEMAND

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

The state requires that retailers sell 9.0 psi RVP gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Petroleum Standards Division, 575-646-3007

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**







FFVs IN USE: **952,710** 

E85 STATIONS:

FLEX STATION +355

MAXIMUM E15 USE: 4.4 BILLION GPY

EPA APPROVED E15 VEHICLES 8,424,990

E15 STATION IMPLIED DEMAND +3,863

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Retailers in these counties must sell Northern-grade RFG: Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, and Westchester.

#### **REID VAPOR PRESSURE:**

The 1.0 psi RVP waiver for conventional gasoline containing 10% volume ethanol is not automatically granted.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

NYS Department of Agriculture and Markets (Bureau of Weights and Measures), 518-457-3146

#### **STATE INCENTIVES:**

### ALTERNATIVE FUEL VEHICLE (AFV) ACQUISITION REQUIREMENTS

All new light-duty vehicles procured by state agencies and other affected entities must be AFVs, with the exception of designated specialty, police, or emergency vehicles. For more information, see the New York State Alternative Fueled Vehicles Program website. (Executive Order (PDF) 111, 2001; Executive Order (PDF) 142, 2005; and Executive Order 4, 2008)

#### **FUEL EXCLUSIVITY CONTRACT REGULATION**

Motor fuel franchise dealers may obtain alternative fuels from a supplier other than a franchise distributor. Any franchise provision that prohibits or discourages a dealer from purchasing or selling E85, biodiesel blends of at least 2% (B2), hydrogen, or compressed natural gas from a firm or individual other than the distributor is null and void as it pertains to that particular alternative fuel if the distributor does not supply or offer to supply the dealer with the alternative fuel. Distributors who violate the law by entering into exclusivity contracts will be subject to a \$1,000 fine. If the distributor does offer alternative fuels, they may require the station to use their brands. (New York General Business Law 199-j)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 10,042,802 (2015)
REGISTERED CARS & LIGHT TRUCKS: 7,651,069
ANNUAL GAS CONSUMPTION: 4.3 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 4,722

## MAXIMUM E85 USE: 609 MILLION GPY

FFVs IN USE: **863,731** 

E85 STATIONS: **57** 

FLEX STATION +476

# MAXIMUM E15 USE: 3.5 BILLION GPY

EPA APPROVED E15 VEHICLES 6,120,855

E15 STATION IMPLIED DEMAND +3.778

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

All retailers are required to sell 9.0 psi RVP gasoline from June 1 - September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 919-733-3246

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUEL TAX EXEMPTION**

The retail sale, use, storage, and consumption of alternative fuels is exempt from the state retail sales and use tax. (North Carolina General Statutes 105-164.13(11))

#### **ETHANOL BLEND REQUIREMENT**

Suppliers that import gasoline for sale in North Carolina must offer fuel that is not pre-blended with fuel alcohol but that is suitable for future blending. Future contract provisions that restrict distributors or retailers from blending gasoline with fuel alcohol are void. (North Carolina General Statutes 75-90, 105-449.60)

#### **ETHANOL BLEND LABELING REQUIREMENTS**

Pumps that dispense ethanol-blended gasoline available for purchase must be labeled with the registered brand name and the volume percentage, or blend level, of the ethanol (10% or less, 10-15%, 15-85% or 85%). The labels must be affixed to the front panel of the pump in a position that is clearly visible to the vehicle driver. Graphics requirements apply. (North Carolina Administrative Code Title 2, Chapter 42, Subchapter .0401; North Carolina General Statutes 119-27.2)

#### **ALTERNATIVE FUEL VEHICLE (AFV) ACQUISITION GOAL**

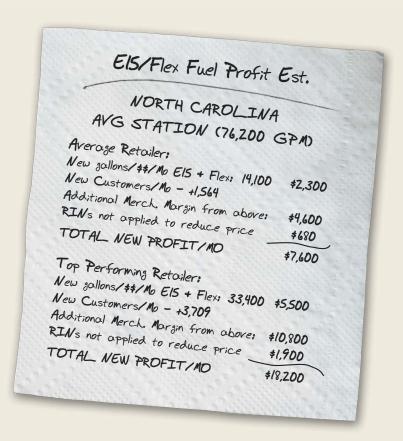
North Carolina established a goal that at least 75% of new or replacement state government light-duty cars and trucks with a gross vehicle weight rating of 8,500 pounds or less must be AFVs or low emission vehicles. Alternative fuels include reformulated gasoline; ethanol; other alcohol fuels, separately or in mixtures of eighty-five percent (85%) or more of alcohol by volume. (North Carolina General Statutes 143-215.107C)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 756,927 (2015)
REGISTERED CARS & LIGHT TRUCKS: 830,792
ANNUAL GAS CONSUMPTION: 470 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 446

## MAXIMUM E85 USE:

FFVs IN USE: **163,920** 

E85 STATIONS: **55** 

FLEX STATION +

+33

# MAXIMUM **E15** USE: 375 MILLION GPY

EPA APPROVED E15 VEHICLES 664,633

E15 STATION IMPLIED DEMAND

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

All retailers are required to sell 9.0 psi RVP gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 701-328-2400

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUEL LABELING REQUIREMENT**

Alternative fuel retailers must label retail dispensing units with the price, name, and main components of the alternative fuel or alternative fuel blend being sold. The labeling must follow established labeling specifications for petroleum-based fuels. An alternative fuel producer may provide the retailer with a label promoting the benefits of the alternative fuel if the label meets the specified requirements. Alternative fuel is defined as a fuel used in an engine or vehicle other than a petroleum-based fuel, including biodiesel and green diesel. Alcohol fuel blends containing at least 1% of alcohol by volume must also be clearly labeled at the dispenser and on any price advertisements. (North Dakota Century Code 19-10-03.1 and 19-10-03.3)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





MAXIMUM E85 USE: 674 MILLION GPY

FFVs IN USE: **1,092,983** 

E85 STATIONS:

FLEX STATION +287

MAXIMUM E15 USE: 3.9 BILLION GPY

EPA APPROVED E15 VEHICLES 8,007,045

E15 STATION IMPLIED DEMAND +3.167

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers in Butler, Clark, Clermont, Greene, Hamilton, Montgomery and Warren are required to sell 7.8 psi RVP from June 1-September 15.

### CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 614-728-6290

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUEL SIGNAGE**

The Ohio Turnpike Commission allows businesses to place their logos on directional signs within the right-of-way of state turnpikes. An alternative fuel retailer may include a marking or symbol within their logo indicating that it sells E85. For more information, see the Ohio Turnpike Commission website. (Ohio Revised Code 125.831 and 5537.30)

### ALTERNATIVE FUEL VEHICLE (AFV) ACQUISITION AND FUEL USE REQUIREMENTS

With the exception of law enforcement vehicles, all newly acquired state agency vehicles must be capable of using an alternative fuel (including E85) and must use the relevant alternative fuel if it is reasonably priced and available. (Ohio Revised Code 123.01, 125.831-125.832, 125.834 and 125.836; and Executive Order (2007-02)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 3,911,338 (2015)
REGISTERED CARS & LIGHT TRUCKS: 3,386,218
ANNUAL GAS CONSUMPTION: 2 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,827

## MAXIMUM E85 USE: 435 MILLION GPY

FFVs IN USE: **593,502** 

E85 STATIONS:

FLEX STATION +289

# MAXIMUM **E15** USE: 1.6 BILLION GPY

EPA APPROVED E15 VEHICLES **2,708,974** 

E15 STATION IMPLIED DEMAND +1.462

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers in the state are required to sell 9.0 psi RVP gasoline throughout the state from June 1-September 15.

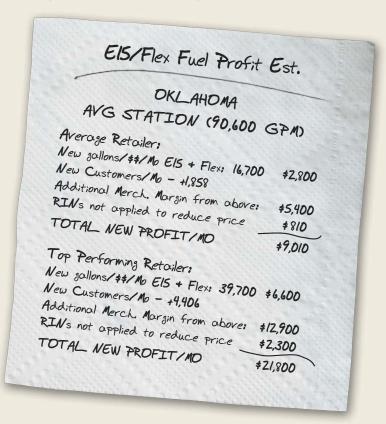
## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Oklahoma Commerce Commission, 405-521-4683

#### **STATE INCENTIVES**

#### **ETHANOL FUEL RETAILER TAX CREDIT**

Retailers that sell fuel blends of gasoline containing up to 15% ethanol by volume (E15) are eligible for a motor fuel tax credit of \$0.016 per gallon of ethanol blended into gasoline and sold in Oklahoma, as long as the retailer provides a price reduction to the purchaser of the ethanol fuel in the same amount. This incentive is effective unless the federal government mandates the use of reformulated fuel in an area within Oklahoma that is in nonattainment with the National Ambient Air Quality Standards. (Oklahoma Statutes 68-500.10-1)



#### **ETHANOL SALES TAX EXEMPTION**

The portion of ethanol (ethyl alcohol) sold and blended with motor fuel is exempt from sales tax. (Oklahoma Statutes 68-500.10-1 and 68-1359)

#### **ETHANOL LABELING REQUIREMENT**

Motor fuel containing more than 1% ethanol may not be sold or offered for sale from a motor fuel dispenser unless the individual selling or offering the fuel for sale prominently displays a label on the pump stating the fuel "Contains Ethanol." The retailer must display the label in a clear, conspicuous, and prominent way on the same side of the motor fuel pump where the price is shown. If a motor fuel pump dispenses fuel that contains at least 10% ethanol (E10), the label must also state the percentage of ethanol by volume. In addition, the person selling motor fuel or offering it for sale must provide the following information to the fuel user if requested: (Oklahoma Statutes 52-347)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



POPULATION: 4,028,977 (2015)
REGISTERED CARS & LIGHT TRUCKS: 3,322,092
ANNUAL GAS CONSUMPTION: 1.5 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 970

MAXIMUM E85 USE: 132 MILLION GPY

FFVs IN USE: **236,255** 

E85 STATIONS:

FLEX STATION
IMPLIED DEMAND

+61

MAXIMUM **E15** USE: 1.2 BILLION GPY

EPA APPROVED E15 VEHICLES 2,657,674

E15 STATION IMPLIED DEMAND +776

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers in Clackamas, Marion, Multnomah and Washington counties and parts of Marion and Polk counties sell 7.8 psi RVP gasoline from June 1-September 15. All other areas require 9.0 psi gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 503-986-4677

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUEL VEHICLE (AFV) LOAN PROGRAM**

The Oregon Department of Energy (ODOE) AFV Revolving Fund provides loans to public agencies, private entities, and tribes for the incremental cost of AFVs and AFV conversions. Priority will be given to converting petroleum-powered vehicles to AFVs. The loan recipient may be responsible for a fee of 0.1% of the loan, up to \$2,500, as well as fees to cover the cost of application processing. ODOE may set the interest rate anywhere from 0% to the current market rate, with a loan term up to six years. Eligible vehicles include those powered by electricity, biofuel, gasoline and alcohol blends with at least 20% alcohol content, hydrogen, natural gas, propane, or any other fuel ODOE approves that produces lower exhaust emissions or is more energy efficient than gasoline or diesel. For more information, including application forms and interest rate and fee information, see the ODOE website. (Oregon Revised Statutes 469.960 through 469.966)

### ALTERNATIVE FUELING INFRASTRUCTURE TAX CREDIT FOR RESIDENTS

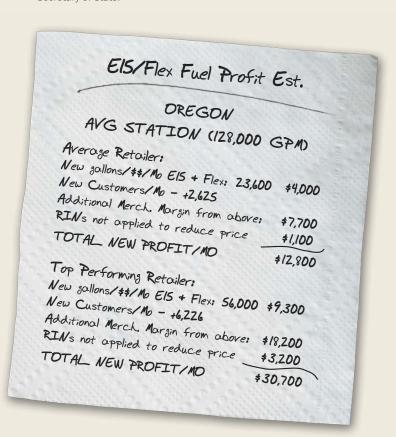
Through the Residential Energy Tax Credit program, qualified residents may receive a tax credit for 25% of alternative fuel infrastructure project costs, up to \$750. Beginning January 1, 2016, qualified residents may receive a tax credit for 50% of project costs, up to \$750. Qualified alternative fuels include gasoline blended with at least 85% ethanol (E85). A company that constructs a dwelling in Oregon and installs fueling infrastructure in the dwelling may claim the credit. This credit is available through December 31, 2017. For more information, including a list of eligible equipment and a link to the application, please see the Oregon Department of Energy Residential Energy Tax Credit website. (House Bill 2171, 2015, and Oregon Revised Statutes 316.116, 317.115, and 469B.160-469B.180)

#### **RENEWABLE FUELS STANDARD**

All gasoline sold in the state must be blended with 10% ethanol (E10). Gasoline with an octane rating of 91 or above is exempt from this mandate, as is gasoline sold for use in certain non-road applications. Gasoline that contains at least 9.2% agriculturally derived ethanol that meets ASTM specification D4806 complies with the mandate. For the purpose of the mandate, ethanol must meet ASTM specification D4806. The governor may suspend the renewable fuels mandate for ethanol if the Oregon Department of Energy finds that a sufficient amount of ethanol is not available. (House Bill 2445, 2015, Oregon Revised Statutes 646.913 through 646.923, and Oregon Administrative Rules 603-027-0410 and 603-027-0420)

#### **CLEAN FUELS PROGRAM**

In 2009, the Oregon Legislature passed HB 2186 authorizing the Oregon Environmental Quality Commission to adopt rules to reduce the average carbon intensity of Oregon's transportation fuels by 10 percent over a 10-year period. The 2015 Oregon Legislature passed SB 324 allowing DEQ to fully implement the Clean Fuels Program in 2016. The rules for the program are adopted in Oregon Administrative Rules Chapter 340 Division 253 – as filed with the Secretary of State.



## ALTERNATIVE FUEL VEHICLE (AFV) ACQUISITION, FUEL USE, AND EMISSIONS REDUCTIONS REQUIREMENTS

All state agencies and transit districts must purchase AFVs and use alternative fuels to operate those vehicles to the maximum extent possible, except when it is not economically or logistically possible to purchase or fuel an AFV. Each state agency must develop and report a greenhouse gas reduction baseline and determine annual reduction targets. Reports to the Oregon Department of Administrative Services must include the volume of ethanol and biodiesel used by state agency fleets, as well as any cost savings attributable to driving more fuel-efficient vehicles and using alternative fuels. (Oregon Revised Statutes 283.327 and 267.030, and Executive Order 06-02, 2006)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 12,802,500 (2015)
REGISTERED CARS & LIGHT TRUCKS: 10,053,676
ANNUAL GAS CONSUMPTION: 4.9 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 3,847

## MAXIMUM E85 USE: 615 MILLION GPY

FFVs IN USE: 1,004,956

E85 STATIONS:

FLEX STATION +340

# MAXIMUM E15 USE: 3.9 BILLION GPY

EPA APPROVED E15 VEHICLES 8,042,940

E15 STATION IMPLIED DEMAND +3078

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Retailers in the Philadelphia metro area (Bucks, Chester, Delaware, Montgomery, and Philadelphia) are required to sell Northern-grade RFG.

#### **REID VAPOR PRESSURE:**

Retailers in the following counties have a 7.8 psi RVP designation for June 1-September 15: Allegheny, Armstrong, Beaver, Butler, Fayette, Washington and Westmoreland. Retailers in those counties do not allow for a 1.0 psi waiver for ethanol blending. The rest of the state, except for the Philadelphia RFG area, sells 9.0 psi RVP gasoline during the summer.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Bureau of Ride and Measurement Standards, 717-787-9089

#### **STATE INCENTIVES**

#### **ALTERNATIVE FUELS TAX**

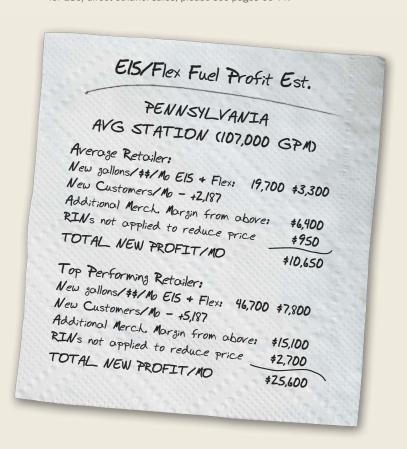
Alternative fuels used to propel vehicles of any kind on public highways are taxed at a rate determined on a gasoline gallon equivalent basis. For more information, including applicable tax rates, see the Pennsylvania Department of Revenue website. Certain exemptions apply. (Title 75 Pennsylvania Statutes, Chapter 90, Section 9004)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 1,056,298 (2015)
REGISTERED CARS & LIGHT TRUCKS: 830,774
ANNUAL GAS CONSUMPTION: 365 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 328

## MAXIMUM E85 USE: 28 MILLION GPY

FFVs IN USE: **51,618** 

E85 STATIONS:

FLEX STATION
IMPLIED DEMAND

+20

# MAXIMUM E15 USE: 292 MILLION GPY

EPA APPROVED E15 VEHICLES 664,619

E15 STATION IMPLIED DEMAND +262

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

N/A

#### **REID VAPOR PRESSURE:**

The entire state uses Northern-grade fuel and has opted into the RFG program.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Labor and Training, 401-462-8570

#### **STATE INCENTIVES:**

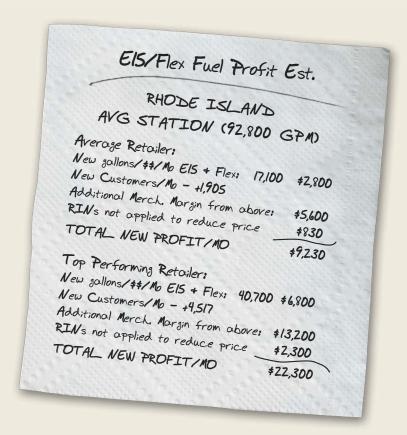
None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 4,896,146 (2015)
REGISTERED CARS & LIGHT TRUCKS: 3,885,086
ANNUAL GAS CONSUMPTION: 2.7 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 2,606

## MAXIMUM E85 USE: 472 MILLION GPY

FFVs IN USE: **549,002** 

E85 STATIONS:

FLEX STATION +299

# MAXIMUM E15 USE: 2.1 BILLION GPY

EPA APPROVED E15 VEHICLES 3,108,069

E15 STATION IMPLIED DEMAND +2,085

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers in the entire state sell 9.0 psi RVP gasoline from May 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Consumer Services Director, 803-737-9696

#### **STATE INCENTIVES**

#### **BIOFUELS DISTRIBUTION INFRASTRUCTURE TAX CREDIT**

A taxpayer that purchases, constructs, or installs, and places into service a qualified commercial facility for distributing or dispensing biofuels is eligible for an income tax credit of up to 25% of the purchase, construction, and installation costs. Eligible property includes pumps, storage tanks, and related equipment used exclusively for distributing, dispensing, and storing biofuels. A qualified facility must clearly label the equipment used to store or dispense the fuel as being associated with the biofuel. The credit must be taken in three equal annual installments beginning with the taxable year in which the facility is placed into service. Qualifying fuels include blends containing at least 70% ethanol (E70) dispensed at the retail level for use in motor vehicles, and pure ethanol or biodiesel fuel dispensed by a distributor or facility that blends these non-petroleum liquids with gasoline or diesel fuel for use in motor vehicles. (South Carolina Code of Laws 12-6-3610)

### BIOFUEL BLENDING CAPABILITY REQUIREMENTS AND LIABILITY

Terminal operators and other entities involved in the bulk transfer of gasoline or diesel, including suppliers and refiners, must offer all grades of petroleum products not already pre-blended with ethanol and biodiesel, and ensure that the motor fuel is suitable for subsequent blending with biofuels. Terminal operators and other bulk suppliers are not liable for fines, penalties, injuries, or damages resulting from subsequent blending of fuel sold at retail locations. Furthermore, no individual or entity can deny a distributor and retailer from blending biofuels for sale in South Carolina, as long as the individual or entity is registered with the U.S. Internal Revenue Service. (South Carolina Code of Laws 39-41-235)

### STATE AGENCY PREFERENCE FOR ALTERNATIVE FUEL AND ADVANCED VEHICLES

State agencies purchasing motor vehicles must give preference to hybrid, plug-in hybrid electric, biodiesel, hydrogen, fuel cell, or flexible fuel vehicles when the performance, quality, and anticipated life cycle costs are comparable to other available motor vehicles. (South Carolina Code of Laws 1-11-310)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 858,469 (2015)
REGISTERED CARS & LIGHT TRUCKS: 940,581
ANNUAL GAS CONSUMPTION: 450 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 608

## MAXIMUM E85 USE: 97 MILLION GPY

FFVs IN USE: 163,006

E85 STATIONS:

FLEX STATION +

+25

# MAXIMUM **E15** USE: 360 MILLION GPY

EPA APPROVED E15 VEHICLES 752,464

E15 STATION IMPLIED DEMAND +486

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers throughout the state sell 9.0 psi RVP gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 605-773-3697

#### **STATE INCENTIVES**

#### **ETHANOL INFRASTRUCTURE GRANTS**

The South Dakota Governor's Office of Economic Development administers the Ethanol Infrastructure Incentive Program, providing grants to offset the cost of installing ethanol blender pumps and underground storage tanks (UST) for ethanol at retail fueling stations throughout the state. Awardees may receive \$25,000 for the first pump installed and \$10,000 for each additional pump. Additionally, awardees may receive up to \$30,000 per station for the installation of a UST that allows for the use of ethanol blender pumps. For eligibility requirements, application instructions, and annual program deadlines, see the Ethanol Infrastructure Incentive Program website. (South Dakota Statutes 10-47B-162 and 10-47B-164).

#### **ETHANOL TAX**

Ethyl alcohol motor fuels are taxed at a rate of \$0.14 per gallon when used as a motor fuel. Ethyl alcohol is defined as a motor fuel that is typically derived from agricultural products that have been denatured. (Senate Bill 1, 2015, and South Dakota Statutes 10-47B-3 and 10-47B-4)

#### **BIOFUEL FRANCHISING CONTRACT REGULATIONS**

Franchise documents may not restrict a franchisee from participating in any of the following activities:

- Installing a biofuel pump or tank, except property leased from the franchisor;
- Converting an existing tank or pump for biofuels use;
- Advertising the sale of biofuels, including listing biofuel availability or prices on signage;
- · Selling biofuels;
- Purchasing biofuel from other sources if the franchisor does not offer biofuel;
- Installing or operating an ethanol blender pump, if the pump is approved for use by the appropriate jurisdictional authority; or
- Selling a biofuel in place of one grade of gasoline, if the franchisee is required to sell three grades of gasoline.
- Biofuels include biodiesel, biodiesel blends, ethanol, and ethanol blends. (South Dakota Statutes 37-2-34, 37-2-35, and 37-2-37)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

• DAKOTA ETHANOL, LLC (WENTWORTH)

Todd Kruggel - RPMG,

Email: toddk@rpmgllc.com; Phone: 952-465-3227

Patrick Griffin Boyle - RPMG,

Email: pboyle@rpmgllc.com; Phone: 952-465-3234

• GLACIAL LAKES ENERGY (WATERTOWN)

Brad Brunner; Phone: 605-882-8480

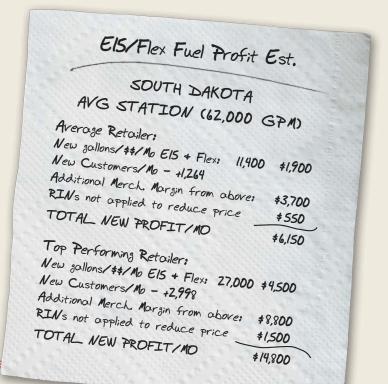
GLACIAL LAKES ENERGY (MINA)

Brad Brunner; Phone: 605-882-8480

POET BIOREFINING-BIG STONE (BIG STONE CITY)
 Craig Palmer, Ethanol Products; Phone: 316-303-3835

• REDFIELD ENERGY, LLC (REDFIELD)

Matt Carter, EcoEnergy; Phone: 615-786-0404





POPULATION: 6,600,299 (2015)
REGISTERED CARS & LIGHT TRUCKS: 5,304,908
ANNUAL GAS CONSUMPTION: 3.2 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 3,304

## MAXIMUM E85 USE: 504 MILLION GPY

FFVs IN USE: 672,652

E85 STATIONS:

FLEX STATION +342

# MAXIMUM E15 USE: 2.5 BILLION GPY

EPA APPROVED E15 VEHICLES 4,243,926

E15 STATION IMPLIED DEMAND +2,643

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers in Davison, Rutherford, Shelby, Sumner, Williamson and Wilson counties require 7.8 psi RVP gasoline from June 1-September 15. Retailers in all other locations require 9.0 psi RVP gasoline. Also, gas that contains 9%-10% ethanol receives a 1.0 psi waiver during those months. In May, the state accepts 11.5 psi gasoline at the retail level during the seasonal transition.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 615-837-5103

#### **STATE INCENTIVES**

#### **BIOFUEL BLENDING CONTRACT REGULATION**

Any provision in a contract between a fuel wholesaler and a refiner or supplier that limits or restricts the wholesaler's ability to blend petroleum products with ethanol or biodiesel is null and void. This regulation applies to contracts executed or renewed on or after January 1, 2010. (Tennessee Code 47-25-2004)

## SUPPLY OF PETROLEUM PRODUCTS FOR BLENDING WITH BIOFUELS

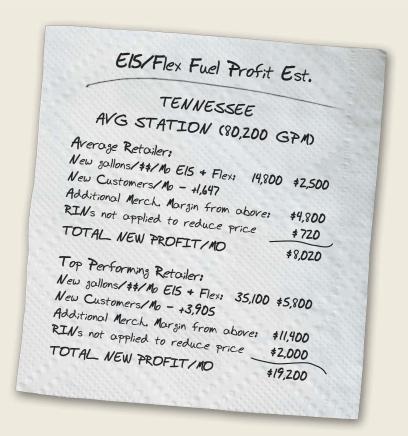
Petroleum product refiners and suppliers must make all grades of gasoline and diesel fuel available to any wholesaler in a condition that allows for the fuel to be blended with ethanol or other biobased products and sold in Tennessee. In addition, gasoline products must be available with detergent additives in sufficient concentrations such that after the addition of ethanol, the final product meets or exceeds the lowest additive concentrations that the U.S. Environmental Protection Agency requires. (Tennessee Code 47-25-2003)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 27,469,114 (2015) REGISTERED CARS & LIGHT TRUCKS: 20,329,786 ANNUAL GAS CONSUMPTION: 13.3 BILLION GPY (2014) **TOTAL RETAIL STATIONS: 11,113** 

### MAXIMUM E85use: 2.6 BILLION GPY

FFVs IN USE: 3,273,195

E85 STATIONS: 200

FLEX STATION +1,589

### MAXIMUM **E15** USE: 10.6 BILLION GPY

**EPA APPROVED** E15 VEHICLES **16,263,828 +8,890** 

E15 STATION **IMPLIED DEMAND** 

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Retailers in the Houston and Dallas metro areas use Southern-grade RFG. These areas include the counties of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller. The counties of Collin, Dallas, Denton and Tarrant have opted in.

#### **REID VAPOR PRESSURE:**

7.8 psi RVP gasoline is sold from May 1-October 1 in the following counties: Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar, Bosque, Bowie, Brazos, Burleson, Caldwell, Calhoun, Camp, Cass, Cherokee, Colorado, Comal, Cooke, Coryell, De Witt, Delta, Ellis, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Guadalupe, Harrison, Hays, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Johnson, Karnes, Kaufman, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nucese, Panola, Parker, Polk, Rains, Red River, Refugio, Robertson, Rockwall, Rusk, Sabine, San Jacinto, San Patricio, San Augustine, Shelby, Smith, Somervell, Titus, Travis, Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Williamson, Wilson, Wise and Wood. Retailers in Hardin, Jefferson and Orange counties are prohibited from selling gasoline with a maximum RVP exceeding 7.8 psi from June 1-September 15. El Paso County requires 7.0 psi gasoline from May 1-September 15.

#### **CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:**

Department of Weights and Measures, 512-463-7401

#### **STATE INCENTIVES:**

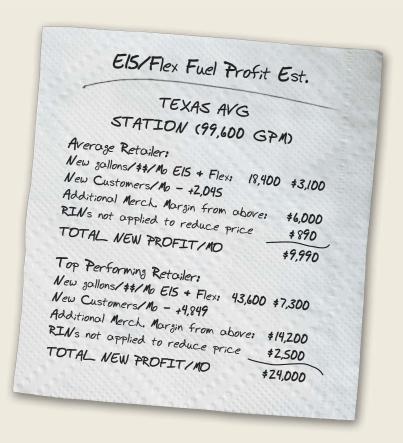
None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 2,995,919 (2015)
REGISTERED CARS & LIGHT TRUCKS: 2,071,677
ANNUAL GAS CONSUMPTION: 1.1 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 852

## MAXIMUM E85 USE: 146 MILLION GPY

FFVs IN USE: **219,807** 

E85 STATIONS:

FLEX STATION +87

# MAXIMUM E15 USE: 879 MILLION GPY

EPA APPROVED E15 VEHICLES 1,657,341

E15 STATION IMPLIED DEMAND +682

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Davis County and Salt Lake County require retailers to sell 7.8 psi RVP gasoline from June 1-September 15. All other areas sell 9.0 psi RVP gasoline in those months.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 801-538-7158

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 626,042 (2015)

REGISTERED CARS & LIGHT TRUCKS: 580,333

ANNUAL GAS CONSUMPTION: 313 MILLION GPY (2014)

TOTAL RETAIL STATIONS: 470

## MAXIMUM E85 USE: 32 MILLION GPY

FFVs IN USE: 47,954

E85 STATIONS:

FLEX STATION +

# MAXIMUM **E15** USE: **251 MILLION GPY**

EPA APPROVED E15 VEHICLES 464,266

E15 STATION IMPLIED DEMAND +376

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

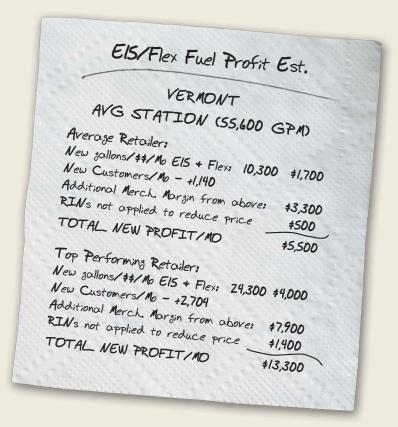
Conventional

#### **REID VAPOR PRESSURE:**

Retailers are required to sell 9.0 psi RVP gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Department of Weights and Measures, 802-828-2430



#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029). Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



POPULATION: 8,382,993 (2015) REGISTERED CARS & LIGHT TRUCKS: 6,932,660 ANNUAL GAS CONSUMPTION: 4 BILLION GPY (2014) TOTAL RETAIL STATIONS: 3,408

## MAXIMUM E85 USE: 469 MILLION GPY

FFVs IN USE: **649,867** 

E85 STATIONS:

FLEX STATION +299

# MAXIMUM E15 USE: 3.2 BILLION GPY

EPA APPROVED E15 VEHICLES 5,546,128

E15 STATION IMPLIED DEMAND +2.726

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

A group of counties have opted into the RFG program using Southern-grade RFG; Arlington, Charles City, Chesterfield, Fairfax, Hanover, Henrico, James City, Loudoun, Prince William, Stafford and York. The following cities are also participating in the RFG program: Alexandria, Chesapeake, Colonial Heights, Fairfax, Falls Church, Hampton, Hopewell, Manassas, Manassas Park, Newport News, Norfolk, Poquoson, Portsmouth, Richmond, Suffolk, Virginia Beach and Williamsburg.

#### **REID VAPOR PRESSURE:**

All counties that are not in the RFG program sell 9.0 psi RVP gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Office of Weights and Measures, 804-786-2476

#### **STATE INCENTIVES:**

None

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 7,170,351 (2015)
REGISTERED CARS & LIGHT TRUCKS: 6,154,266
ANNUAL GAS CONSUMPTION: 2.7 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,970

## MAXIMUM E85 USE: 258 MILLION GPY

FFVs IN USE: 464,029

E85 STATIONS:

FLEX STATION +128

# MAXIMUM E15 USE: 2.2 BILLION GPY

EPA APPROVED E15 VEHICLES 4,923,413

E15 STATION IMPLIED DEMAND +1.576

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers across the state use 9.0 psi RVP gasoline from June 1-September 15.

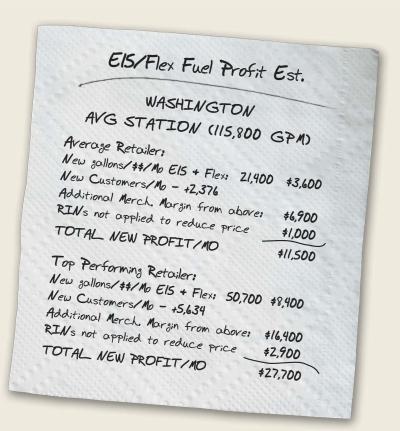
## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Office of Weights and Measures, 360-902-1856

#### STATE INCENTIVES

#### **BIOFUEL BLEND DISPENSER LABELING REQUIREMENT**

Pumps dispensing ethanol must label the percentage of ethanol present in the fuel. Ethanol pumps distributing between 1% and 10% must include a label stating that the fuel "contains up to 10% ethanol" and those distributing blends greater than 10% must be labeled with the capital letter E, followed by the numerical value volume of ethanol and the word "ethanol." (Code of Washington 19.112.020, and Washington Administrative Code 16-662-115)



#### **BIOFUEL QUALITY PROGRAM**

The Washington State Department of Agriculture (WSDA) Biofuels Quality Program tests and assesses biofuel quality and quantity to resolve any quality issues before the product reaches the consumer. WSDA samples biofuel throughout the state, monitors and tracks the quality of biofuel, and works with producers and manufacturers to help supply the highest biofuel quality fuel available to consumers. The goal of the program is to create equity in the biofuel marketplace for refiners, suppliers, distributors, and retailers, and protect consumers. For more information, see the WSDA Biofuels Quality Program website. (Revised Code of Washington 19.112.005 to 119.112.080)

#### **ALTERNATIVE FUEL USE REQUIREMENT**

All state agencies must, to the extent practicable, use 100% biofuels or electricity to operate all publicly owned vehicles. Agencies may substitute natural gas or propane for electricity or biofuel if the Washington State Department of Commerce determines that electricity and biofuel are not reasonably available. Transit agencies using compressed natural gas (CNG) and engine retrofits that would void vehicle warranties are exempt from this requirement. To allow the motor vehicle fuel needs of state and local government to be satisfied by Washington-produced biofuels, the Washington Department of Enterprise Services and local governments may contract in advance and execute contracts with public or private producers and suppliers for the purchase of appropriate biofuels.

(Washington Administrative Code 194-28 and Revised Code of Washington 43.19.647 and 43.19.648)

#### RENEWABLE FUEL STANDARD

At least 2% of the total gasoline sold in the state must be denatured ethanol. The ethanol requirement increases if the Washington Department of Ecology determines that this increase will not jeopardize continued attainment of federal Clean Air Act standards, and WSDA determines that the state can economically support the production of higher ethanol blends. (Revised Code of Washington 19.112.010 and 19.112.110 through 19.112.180)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**



POPULATION: 1,844,128 (2015)
REGISTERED CARS & LIGHT TRUCKS: 1,492,487
ANNUAL GAS CONSUMPTION: 815 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 1,014

## MAXIMUM E85 USE:

FFVs IN USE: 191,711

E85 STATIONS:

FLEX STATION +1

# MAXIMUM E15 USE: 652 MILLION GPY

EPA APPROVED E15 VEHICLES 1,193,989

E15 STATION IMPLIED DEMAND +811

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers across the state sell 9.0 psi RVP gasoline from June 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Office of Weights and Measures, 304-722-0602

#### **STATE INCENTIVES:**

## PROVISION FOR ESTABLISHMENT OF ALTERNATIVE FUEL VEHICLE (AFV) ACQUISITION REQUIREMENTS

The West Virginia Department of Administration may require that up to 75% of a state agency's fleet consist of AFVs (includes ethanol flex fuel). To meet these requirements, agencies may purchase or lease AFVs or convert existing vehicles to operate using alternative fuels. The Department may waive this requirement if an agency's vehicles are operating in an area where the agency cannot reasonably establish a central alternative fueling station or the lifetime cost of the vehicle or fueling infrastructure is significantly higher as compared to conventional vehicles or fuels. This requirement does not apply to law enforcement, emergency, public transit authority, state rail authority, non-road vehicles, or school buses. (West Virginia Code 5A-2A-1 and 5A-2A-2)

#### **ALTERNATIVE FUEL USE REQUIREMENT**

West Virginia higher education governing boards must use alternative fuels to the maximum extent feasible. (West Virginia Code 18B-5-9)

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

(Originally expired 12/31/13 - retroactively extended through 12/31/16, by H.R. 2029) Fueling equipment for E85 installed between January 1, 2014, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Station owners with multiple locations can use the credit towards each site. For more information about claiming the credit, see IRS Form 8911.

#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**





POPULATION: 5,771,337 (2015)
REGISTERED CARS & LIGHT TRUCKS: 5,045,967
ANNUAL GAS CONSUMPTION: 2.6 BILLION GPY (2014)
TOTAL RETAIL STATIONS: 2,528

## MAXIMUM E85 USE: 466 MILLION GPY

FFVs IN USE: **722,821** 

E85 STATIONS:

FLEX STATION +201

# MAXIMUM E15 USE: 2.1 BILLION GPY

EPA APPROVED E E15 VEHICLES 1 4,036,773

E15 STATION IMPLIED DEMAND +2,022

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Retailers are required to sell Northern-grade RFG in Kenosha, Milwaukee, Ozaukee, Racine, Washington and Waukesha.

#### **REID VAPOR PRESSURE:**

Retailers match the RFG requirements in counties where RFG is required.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Bureau of Weights and Measures, 608-224-4942

#### **STATE INCENTIVES**

#### RENEWABLE FUEL INFRASTRUCTURE TAX CREDIT

A tax credit is available for 25% of the cost to install or retrofit fueling stations in Wisconsin that dispense motor vehicle fuel blends of at least 85% ethanol or at least 20% biodiesel fuel, or that mix fuels from separate storage tanks and allow the user to select the percentage of renewable fuel. The maximum credit is \$5,000 per taxable year for each fueling station that has installed or retrofitted a pump. Motor vehicle fuel means gasoline or diesel fuel.



#### **ALTERNATIVE FUEL TAX EXEMPTION**

No county, city, village, town, or other political subdivision may levy or collect any excise, license, privilege, or occupational tax on motor vehicle fuel or alternative fuels, or on the purchase, sale, handling, or consumption of motor vehicle fuel or alternative fuels. For more information see the Wisconsin State Energy Office Wisconsin Opportunities website. (Wisconsin Statutes 78.82)

## ALTERNATIVE FUEL VEHICLE ACQUISITION AND ALTERNATIVE FUEL USE REQUIREMENTS

The Wisconsin Department of Administration (DOA) encourages state employees operating state-owned or leased motor vehicles to use hybrid electric vehicles or vehicles that operate on gasohol (a motor fuel containing at least 10% alcohol) or alternative fuels whenever feasible and cost effective. DOA must place a list of gasohol and alternative fueling station locations in each state-owned or state-leased motor vehicle for driver reference. DOA also encourages Wisconsin residents and state employees who use personal motor vehicles on state business to use gasohol and alternative fuels. (Wisconsin Statutes 16.045 and Executive Order(PDF) 141, 2006)

#### **ALTERNATIVE FUELING INFRASTRUCTURE DEVELOPMENT**

The Wisconsin Department of Agriculture, Trade and Consumer Protection must pursue the establishment and maintenance of sufficient alternative fueling infrastructure at public retail outlets to meet the public's traveling needs. (Wisconsin Statutes 93.07(26))

#### **ALTERNATIVE FUEL LICENSE**

Any person acting as an alternative fuels dealer must hold a valid alternative fuel license and certificate from the Wisconsin Department of Administration. Except for alternative fuels that a dealer delivers into a fuel supply tank of any motor vehicle in the state, no person may use alternative fuels in the state unless the person holds a valid alternative fuel license or an authorized supplier has delivered the alternative fuel. For more information, see the State of Wisconsin License, Permit and Registration Services website. (Wisconsin Statutes 78.47)

#### **RENEWABLE FUEL SALES VOLUME GOALS**

The Wisconsin Legislature sets goals for minimum annual renewable fuel sales volumes based on annual renewable fuel volumes required under the federal Renewable Fuel Standard. On an annual basis, the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP), in cooperation with the Department of Commerce, the Department of Revenue, and the Energy Office, must determine whether the annual goals for the previous year were met. If the goals were not met, DATCP must issue a report assessing the causes. If DATCP determines that the goals are likely to be met, it must

#### **WISCONSIN - CONTINUED...**

establish requirements that may include: reporting, recordkeeping, or testing requirements; annual requirements for renewable fuel sales; quarterly or monthly requirements for renewable fuel sales if necessary to maintain fuel availability and smooth fluctuation in demand; a system for trading credits; procedures to temporarily suspend a sales requirement; and fees for administration and enforcement. (Wisconsin Statutes 100.60)

#### **FEDERAL INCENTIVE**

#### ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

Current ACE members that offer E85/direct ethanol sales in this state include:

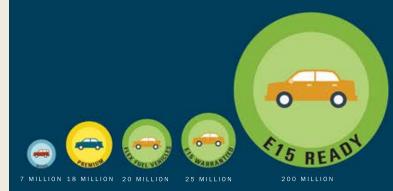
- ACE ETHANOL, LLC (STANLEY) Neal Kemmet, Phone: 715-644-2909
- BADGER STATE ETHANOL, LLC (MONROE)
   Erik Huschitt, Phone: 608-329-3900
- DIDION ETHANOL, LLC (RANDOLPH)

  Dale Drachenberg, Phone: 920-348-6816
- FOX RIVER VALLEY ETHANOL (OSHKOSH)
  Neal Kemmet. Phone: 715-644-2909
- UNITED WISCONSIN GRAIN PRODUCERS (FRIESLAND)

  Dan Wegner, Phone: 920-348-5571

For a complete list of domestic ethanol producers and sales contacts for E85/direct ethanol sales, please see pages 69-77.

## RISE AND SHINE, SLEEPING GIANT.



What's the real future for a profitable fuel slate? It's hiding in plain sight. Of the 250 million cars and light duty trucks on American roads today, 200 million are ready for E15.

That's 80% of the marketplace. Right now. Looking for choices. Better still, every year nearly every new car that hits the road is warrantied by its manufacturer to run on E15.

That's a fuel 80% of the market can use for a few cents less per gallon than regular.

GET THE NUMBERS. GET AHEAD.



FLEXFUELFORWARD.COM



### WYOMING

POPULATION: 586,107 (2015)
REGISTERED CARS & LIGHT TRUCKS: 787,805
ANNUAL GAS CONSUMPTION: 351 MILLION GPY (2014)
TOTAL RETAIL STATIONS: 347

MAXIMUM E85 USE: 52 MILLION GPY

FFVs IN USE: **94,057** 

E85 STATIONS:

FLEX STATION +

MAXIMUM E15 USE: 281 MILLION GPY

EPA APPROVED E15 VEHICLES 630,244

E15 STATION IMPLIED DEMAND +278

#### **FUEL SPECIFICATIONS:**

#### **GASOLINE:**

Conventional

#### **REID VAPOR PRESSURE:**

Retailers across the state use 9.0 psi RVP gasoline from May 1-September 15.

## CONTACT INFORMATION FOR KEY STATE REGULATORY AGENCIES:

Weights and Measures, 307-777-7556

#### STATE INCENTIVES

#### **ALTERNATIVE FUEL LICENSE FEE**

Effective July 1, 2015, each alternative fuel supplier, refiner, distributor, terminal operator, importer or exporter of alternative fuel used in motor vehicles must obtain an annual license from the Wyoming Department of Transportation to conduct business in the state. The fee for each type of license is \$25. (Wyoming Statute 39-17-306)



#### **ALTERNATIVE FUEL EXPORT TAX EXEMPTION**

Effective July 1, 2015, alternative fuel sold for use in motor vehicles and intended for export from the state by a licensed alternative fuel exporter is exempt from the alternative fuel license tax. (House Bill 0009, 2015, and Wyoming Statutes 39-17-301 and 39-17-305)

#### **ALTERNATIVE FUEL TAX REFUND**

Effective July 1, 2015, any person exporting alternative fuel for which the license tax has been paid is eligible for a refund of the license tax paid. The exporter must submit the refund request within one year of the date of fuel purchase. (House Bill 0009, 2015, and Wyoming Statutes 39-17-309(c))

#### **FEDERAL INCENTIVE**

#### **ALTERNATIVE FUEL INFRASTRUCTURE TAX CREDIT**

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#### **ETHANOL PLANT DIRECT E85/ETHANOL SALES:**

CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

Producer	City	Contact Name & Number
ARIZONA		
Pinal Energy, LLC	Maricopa	Keith Kor; Phone: 520-483-1780
CALIFORNIA		
Aemetis	Keyes	
Pacific Ethanol	Madera	Neil Koehler; Phone: 916-403-2126
Pacific Ethanol	Madera	Neil Koehler; Phone: 916-403-2126
Calgren Renewable Fuels, LLC	Pixley	
Parallel Products	Rancho Cucamonga	
Pacific Ethanol	Stockton	Neil Koehler; Phone: 916-403-2126
COLORADO		
Merrick & Company	Golden	
Sterling Ethanol, LLC	Sterling	Craig Palmer; Phone: 316-303-3835
Front Range Energy	Winsor	Dan Sanders, Jr.; Phone: 970-674-2910
Yuma Ethanol, LLC	Yuma	Craig Palmer; Phone: 316-303-3835
GEORGIA		
Flint Hills Resources LP	Camilla	
IOWA		
Valero Renewables Albert City	Albert City	E85: Brian Bartlett Email: brian.bartlett@valero.com; Phone: 210-345-2272
		Denatured Ethanol: Brian Hutchens Email: brian.hutchens@valero.com; Phone: 210-345-2083
Flint Hills Resources	Arthur	
POET Biorefining-Ashton	Ashton	Craig Palmer, Phone: 316-303-3835
Archer Daniels Midland	Cedar Rapids	
Ingredion, Inc.	Cedar Rapids	
Valero Renewables Charles City	Charles City	E85: Brian Bartlett Email: brian.bartlett@valero.com; Phone: 210-345-2272
		Denatured Ethanol: Brian Hutchens Email: brian.hutchens@valero.com; Phone: 210-345-2083
Archer Daniels Midland	Clinton	
POET Biorefining-Coon Rapids	Coon Rapids	Craig Palmer; Phone: 316-303-3835
POET Biorefining-Corning	Corning	Craig Palmer; Phone: 316-303-3835
Southwest Iowa Renewable Energy (SIRE)	Council Bluffs	

CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

#### IOWA, CONTINUED...

m	D .	7.1. DOZ
The Andersons Denison, LLC	Denison	John DiMartini; Phone: 419-891-6491
Big River United Energy, LLC	Dyersville	
Cargill	Eddyville	
POET Biorefining-Emmetsburg	Emmetsburg	Craig Palmer; Phone: 316-303-3835
Flint Hills Resources	Fairbank	
Cargill	Fort Dodge	
Valero Renewables Fort Dodge	Fort Dodge	E85: Brian Bartlett Email: brian.bartlett@valero.com; Phone: 210-345-2272  Denatured Ethanol: Brian Hutchens Email: brian.hutchens@valero.com; Phone: 210-345-2083
Quad County Corn Processors	Galva	Matt Carter; Phone: 615-786-0404
Corn, LP	Goldfield	Matt Carter; Phone: 615-786-0404
POET Biorefining-Gowrie	Gowrie	Craig Palmer; Phone: 316-303-3835
Louis Dreyfus Commodities	Grand Junction	
POET Biorefining-Hanlontown	Hanlontown	Craig Palmer; Phone: 316-303-3835
Valero Renewables Hartley	Hartley	E85:
		Brian Bartlett Email: brian.bartlett@valero.com; Phone: 210-345-2272  Denatured Ethanol:
		Brian Hutchens Email: brian.hutchens@valero.com; Phone: 210-345-2083
Flint Hills Resources	Iowa Falls	
POET Biorefining-Jewell	Jewell	Craig Palmer; Phone: 316-303-3835
Green Plains Inc. (Lakota)	Lakota	Steve Bleyl; Phone: 402-884-8700
Homeland Energy Solutions	Lawler	Denatured Ethanol: Todd Kruggel, Renewable Products Marketing Group (RPMG) Email: toddk@rpmgllc.com, Phone: 952-465-3227 Patrick Griffin Boyle, RPMG
Timb Ci C D	2.6	Email: phoyle@rpmgllc.com, Phone: 952-465-3234
Little Sioux Corn Processors	Marcus	E85: Emily Black, RPMG Email: eblack@rpmgllc.com; Phone: 952-465-3239
		Denatured Ethanol: Todd Kruggel, RPMG Email: toddk@rpmgllc.com, Phone: 952-465-3227 Patrick Griffin Boyle, RPMG
		Email: pboyle@rpmgllc.com, Phone: 952-465-3234
Golden Grain Energy	Mason City	Denatured Ethanol: Todd Kruggel, RPMG Email: toddk@rpmgllc.com, Phone: 952-465-3227 Patrick Griffin Boyle, RPMG
		Email: pboyle@rpmgllc.com, Phone: 952-465-3234

CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

#### IOWA CONTINUED

IOWA, CONTINUED		
Flint Hills Resources	Menlo	
Plymouth Energy	Merrrill	
Grain Processing Corp.	Muscatine	
DuPont	Nevada	
Lincolnway Energy	Nevada	Matt Carter; Phone: 615-786-0404
Flint Hills Resources	Shell Rock	
Green Plains Inc. (Shenandoah)	Shenandoah	Steve Bleyl; Phone: 402-884-8700
Siouxland Energy Cooperative	Sioux Center	Matt Carter; Phone: 615-786-0404
Absolute Energy	St. Ansgar	E85: Emily Black, RPMG Email: eblack@rpmgllc.com; Phone: 952-465-3239
		Denatured Ethanol: Todd Kruggel, RPMG Email: toddk@rpmgllc.com, Phone: 952-465-3227
		Patrick Griffin Boyle, RPMG Email: pboyle@rpmgllc.com, Phone: 952-465-3234
Pine Lake Corn Processors	Steamboat Rock	
Green Plains Inc. (Superior)	Superior	Steve Bleyl; Phone: 402-884-8700
Big River Resources, LLC	West Burlington	
ІДАНО		
Pacific Ethanol	Burley	Neil Koehler; Phone: 916-403-2126
ILLINOIS		
CHS Annawan	Annawan	
Pacific Ethanol	Canton	Neil Koehler; Phone: 916-403-2126
Archer Daniels Midland	Decatur	
Big River Resources, LLC	Galva	
One Earth Energy, LLC	Gibson City	
M : D II.O	**	m 34 . Di

Adkins Energy, LLC	Lena
Abengoa Bioenergy of Illinois	Madison

Marquis Energy, LLC

Lincolnland Agri-Energy Palestine Eric Mosbey; Phone: 618-586-2321 Pacific Ethanol Pekin Neil Koehler; Phone: 916-403-2126

Hennepin

Archer Daniels Midland Peoria

CHS Rochelle Rochelle Steve Truckenbroad; Phone: 815-561-3590

Center Ethanol Sauget Tom Marquis; Phone: 815-925-7300

Eric Lockart; Phone: 815-494-7990

CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

#### **INDIANA**

POET Biorefining-Alexandria	Alexandria	Craig Palmer; Phone: 316-303-3835
Green Plains Inc. (Bluffton)	Bluffton	Steve Bleyl; Phone: 402-884-8700
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		Denatured Ethanol: Brian Hutchens Email: brian.hutchens@valero.com; Phone: 210-345-2083
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Cardinal Ethanol	Union City	
Grain Processing Corp.	Washington	
KANSAS		
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Reeve Agri-Energy	Garden City	
East Kansas Agri-Energy	Garnett	
ESE Alcohol Inc	Leoti	
Arkalon Energy, LLC	Liberal	

Bonanza Bioenergy, LLC	Garden City	
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CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

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Heron Lake BioEnergy	Heron Lake	Matt Carter; Phone: 615-786-0404
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Archer Daniels Midland	Marshall	
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#### **MISSOURI**

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ICM Biofuels	St. Joseph	Denatured Ethanol: Todd Kruggel, RPMG Email: toddk@rpmgllc.com, Phone: 952-465-3227 Patrick Griffin Boyle, RPMG Email: pboyle@rpmgllc.com, Phone: 952-465-3234

#### **MISSISSIPPI**

Ergon BioFuels	Vicksburg		
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#### **NORTH CAROLINA**

#### **NORTH DAKOTA**

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CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

#### **NORTH DAKOTA, CONTINUED**

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Blue Flint Ethanol	Underwood	Lana Erasmus; Phone: 701-442-7575
NEBRASKA		
E Energy Adams	Adams	Andrew Johansen 402-988-2500
Valero Renewables Albion	Albion	E85: Brian Bartlett Email: brian.bartlett@valero.com; Phone: 210-345-2272
		Denatured Ethanol: Brian Hutchens
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Pacific Ethanol	Aurora	Neil Koehler; Phone: 916-403-2126
Cargill	Blair	
Bridgeport Ethanol, LLC	Bridgeport	Craig Palmer; Phone: 316-303-3835
Nebraska Corn Processing	Cambridge	Jose Jimenez; Phone: 616-879-1785
Green Plains Inc. (Central City)	Central City	Steve Bleyl; Phone: 402-884-8700
Archer Daniels Midland	Columbus	
Flint Hills Resources	Fairmont	
Chief Ethanol Fuels, Inc.	Hastings	
Siouxland Ethanol	Jackson	Nick Bowdish; Phone: 402-632-2676
Chief Ethanol Fuels, Inc.	Lexington	
Mid America Agri Products/Wheatland, LL	C Madrid	
Standard Ethanol	Madrid	
KAAPA Ethanol, LLC	Minden	Denatured Ethanol: Todd Kruggel, RPMG Email: toddk@rpmgllc.com, Phone: 952-465-3227
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Elkhorn Valley Ethanol	Norfolk	
Green Plains Inc. (Ord)	Ord	Steve Bleyl; Phone: 402-884-8700
Husker Ag Processing LLC	Plainview	
Abengoa Bioenergy CompanyRavenna	Ravenna	
Midwest Renewable Energy, LLC	Sutherland	
Trenton Agri-Products	Trenton	Craig Palmer; Phone: 316-303-3835
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CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

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#### **OREGON**

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#### **PENNSYLVANIA**

POET Biorefining-Leipsic

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POET Biorefining-Chancellor	Chancellor	Craig Palmer; Phone: 316-303-3835
POET Biorefining-Groton	Groton	Craig Palmer; Phone: 316-303-3835
POET Biorefining-Hudson	Hudson	Craig Palmer; Phone: 316-303-3835
JPJ Enterprises	Humboldt	
ABE South Dakota, LLC	Huron	
NuGen Energy, LLC	Marion	Doug Coyne; Phone: 605-648-2145

CONTACT INFORMATION PROVIDED FOR PRODUCERS OFFERING E85 AND/OR DENATURED ETHANOL FOR DIRECT SALE TO RETAILERS

#### **SOUTH DAKOTA, CONTINUED...**

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Redfield Energy, LLC	Redfield	Matt Carter; Phone: 615-786-0404
Red River Energy	Rosholt	
POET Biorefining-POET Research Center	Scotland	Craig Palmer; Phone: 316-303-3835
Glacial Lakes Energy	Watertown	Brad Brunner; Phone: 605-882-8480
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#### **TENNESSEE**

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TEXAS			
Green Plains Inc. (Hereford)	Hereford	Steve Bleyl; Phone: 402-884-8700	
White Energy	Hereford		
Diamond Ethanol	Levelland		
White Energy	Plainview		

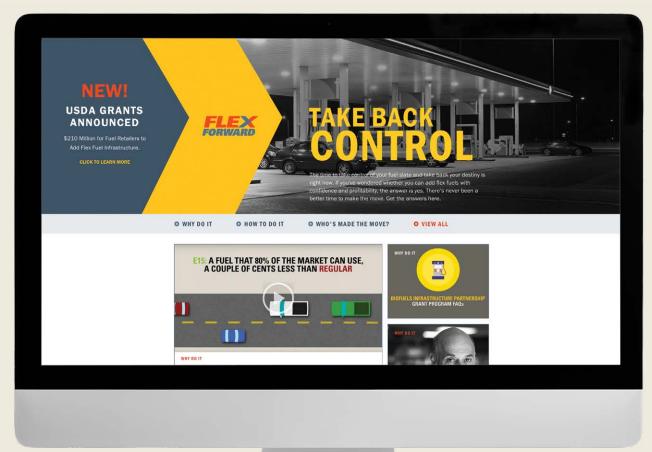
#### **VIRGINIA**

Green Plains Inc.	Hopewell	Steve Bleyl; Phone: 402-884-8700	
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#### **WISCONSIN**

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United Wisconsin Grain Producers	Friesland	Dan Wegner; Phone: 920-348-5571	
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United Ethanol	Milton		
Badger State Ethanol, LLC	Monroe	Erik Huschitt; Phone: 608-329-3900	
Marquis Energy-Wisconsin, LLC	Necedah	Tom Marquis; Phone: 815-925-7300	
Fox River Valley Ethanol	Oshkosh	Neal Kemmet; Phone: 715-644-2909	
Didion Ethanol, LLC	Randolph	Dale Drachenberg; Phone: 920-348-6816	
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## FLEXFUELFORWARD.COM





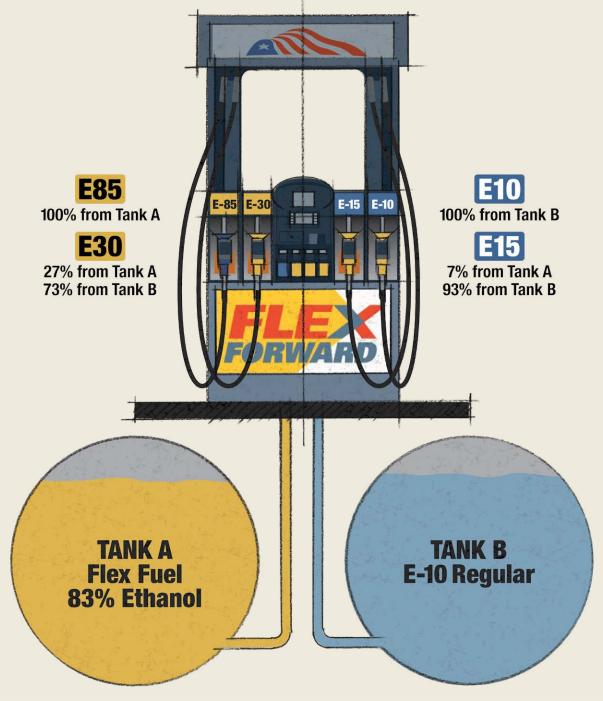
## **BLENDING BETTER FUEL CHOICES**

## **HOW A "BLENDER PUMP" WORKS**

Blending dispensers aren't new to petroleum marketers. The industry has been using them for decades to offer customers multiple grades of gasoline by blending fuel from two storage tanks. Dispensers can generally blend any combination of the fuels, in increments of 1%.

GASOLINE AND FLEX FUELS CANNOT BE SOLD FROM THE SAME HOSE.

Recently, marketers have used the dispensers to offer different flex fuel blends by pulling fuel from a tank containing gasoline or regular E10, and another containing ethanol or an ethanol blend. (NOTE: Fire codes may have restrictions or additional requirements when storing E98 ethanol.) The illustration below shows a common configuration used at stations offering E10 and flex fuels, with one tank containing E10, and the other containing E85. There are many, many configurations available from all major pump manufacturers, check with your equipment provider for the options available to you.



## E15 HOSE CONFIGURATION/LABELING

After E15 was approved for use in all cars and light duty trucks model year 2001 and newer, rules were developed to prevent E15 misfueling, which was primarily addressed through labeling regulations (see pages 80-81). Later in the process, a concern was expressed over residual fuel in the hose, the theory being that if someone bought E10 after another customer bought E15, the leftover E15 in the hose would bump the E10 up to a level not allowed in cars and small engines.

As a practical matter, if someone bought one gallon of E10, right after another driver purchased E15, that gallon of fuel could actually be E11. And while it might seem that scenario is extremely unlikely, EPA has approved 3 hose configurations to address that possibility:

- 1. E15 can be sold from a dedicated hose
- E15 can be sold on the same hose with gasoline (E0 to E10) using this configuration:
   Require a minimum purchase of four gallons and apply a label stating "Minimum Fueling Volume 4 Gallons. Dispensing Less May Violate Federal Law."
- 3. E15 can also be sold on the same hose with gasoline (E0 to E10) using this configuration: Provide one fueling position selling E10 or less, and provide signage indicating its availability. Fueling positions offering E15 must be labeled "Passenger Vehicles Only. Use in other vehicle engines and equipment may violate federal law."

FOR THESE AND ADDITIONAL LABEL EXAMPLES, VISIT THE BLEND YOUR OWN (BYO) ETHANOL CAMPAIGN WEBSITE AT: WWW.BYOETHANOL.COM/DISPENSER-LABELS-AVAILABLE.HTML

## Minimum Fueling Volume 4 Gallons;

## Dispensing Less May Violate Federal Law

# Passenger Vehicles Only.

Use in Other Vehicle Engines & Equipment May Violate Federal Law.

Position for Gasoline with up to 10% Ethanol

## **DISPENSER LABELS**

ETHANOL CONTENT:	FINAL RULE EFFECT:	EXAMPLE LABEL WORDING:
11% to 15% Ethanol	EPA E15 label required. No AKI octane rating labeling is required.	See figure A below
16% to 50% Ethanol	May post the exact % ethanol or ethanol content rounded to the nearest increment of 10.  Does not require octane (AKI) posting.  Developed certification and recordkeeping requirements.	See figure B below
51% to 83% Ethanol	Added term Ethanol Flex Fuel.  May post the exact % ethanol or ethanol content rounded to the nearest increment of 10, or indicate the fuel contains "51-83% Ethanol."  Eliminated previous label "E85, Minimum 70% Ethanol."  Maintained certification and recordkeeping requirements.	

FIGURE A



### Use only in

- 2001 and newer passenger vehicles
- · Flex-fuel vehicles

Don't use in other vehicles, boats or gasoline-powered equipment. It may cause damage and is *prohibited* by Federal law.

FIGURE B

**40% ETHANOL** 

USE **ONLY** IN FLEX-FUEL VEHICLES

**MAY HARM OTHER ENGINES** 

FIGURE C

51% - 83% **ETHANOL** 

USE **ONLY** IN FLEX-FUEL VEHICLES

**MAY HARM OTHER ENGINES** 

Table content and label drafts courtesy of KMoore Consulting, LLC

## **EPA NEW PRODUCT GUIDELINES**

Under new EPA guidelines, E15 and flex fuel retailers are required to demonstrate compatibility of the UST system (including the tank, piping, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill equipment) before taking delivery of the new fuel.

**IMPORTANT NOTE:** E15 and flex fuel compatibility requirements are **NOT THE SAME**. E85 and flex fuel requirements are much stricter (and more expensive) than E15 requirements.

Many "experts" in the petroleum industry have offered E85/flex fuel costs and requirements when asked what is required to sell E15. Underwriters Laboratories has (UL) three levels of ethanol compatibility: E10, E25, and E85. In dispensers, E25 compatibility (which most states require to sell E15) usually adds only a few hundred dollars to the cost of a new dispenser. E85 compatibility usually adds \$8000 to \$9000 to the cost of a dispenser. In either case, EPA regulations say proof of compatibility can be accomplished using **ONE** of the following options:

 (i) Certification or listing of UST system equipment or components by a nationally recognized, independent testing laboratory, for use with the regulated substance stored;



**TRANSLATION:** UL listing of UST system and parts.

There are other independent testing labs, but manufacturers rarely use them. UL has an online compatibility index you can

http://database.ul.com/cgi-bin/XYV/template/ LISEXT/1FRAME/index.html

— OR -

(ii) Equipment or component manufacturer approval. The manufacturer's approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer;



**TRANSLATION:** Pretty much what it says... "XYZ Co. widgets are approved for use with blends of gasoline and ethanol from 0 to 85% ethanol" is an affirmative statement. "XYZ Co. widgets have no history of failure using biofuel blends" is not. Most manufacturers biofuel compatibility statements can be found at this PEI site:

http://www.pei.org/ust-component-compatibility-library

(iii) Use another option determined by the implementing agency to be no less protective of human health and the environment than the options listed in paragraph (b)(1) of this section



**TRANSLATION:** If you've got a better way to prove compatibility, bring it. Just keep in mind the decision on whether your method is better than EPA's will be decided by EPA (so you should probably use one of the first two methods).

Another excellent resource is the California Air Resources Board which has a searchable online database at:

http://www.waterboards.ca.gov/water\_issues/programs/ust/alt\_comp\_opt/soc.shtml

Some station owners and operators have indicated they aren't sure what brand(s) of underground equipment they have. NREL publishes the *Handbook for Handling, Storing, and Dispensing E85 and Other Ethanol-Gasoline Blends*, and updates it every few years. The latest version was published in February of 2016, and among the other excellent information the guide provides, the back of the book has several Tables that can help marketers find out where their equipment came from and if it is compatible. That publication can be found online at <a href="http://www.nrel.gov/docs/fy16osti/65744.pdf">http://www.nrel.gov/docs/fy16osti/65744.pdf</a>

#### **TWO FINAL IMPORTANT POINTS:**

FIRST, DON'T GUESS. Contact the petroleum equipment company that services the brand of dispensers used at your station. Chances are that company also did the UST work and may have records of what was installed. If you don't know, don't do it.

## FINALLY, EPA'S COMPATIBILITY GUIDELINES GO ON TO SAY THIS:

"The use of any equipment to offer E15 that does not satisfy these requirements, even if that equipment is technically compatible with E15, would pose potential liability for the retailer, including concerns related to liability for equipment damage."



**TRANSLATION:** Get all of this information **IN WRITING** and put it somewhere safe. Even if your equipment is 100% compatible, it's not compatible until you've got paperwork that says it's compatible.

- OR -

### RETAIL DECISION CHECKLIST

HOW MUCH? CAN I GET A LITTLE HELP? The first question If you've come this far, and have determined E15 and/or flex fuels are an opportunity to explore further, there are a few final questions is definitely your equipment installer's task, but if the numbers seem you'll want to have answered. And as mentioned elsewhere in the "off" to you, contact us. Some installers are not aware of rebate or Roadmap, if you don't know, don't guess! Contact a petroleum discount programs manufacturers are offering, and some are aware, equipment installer (if you haven't already) and put them to work. but will hang on to the extra profit until they know you're aware of Several of the items below are topics they can cover for you. those rebates and discounts. State and Federal assistance programs in this Roadmap were in effect when the publication was sent to the DO THE MATH. CHECK YOUR WORK. If you've looked at the printer. Check for updates on flexfuelforward.com, or state pages and determined there are a large number of flex fuel byoethanol.com or contact us for the most up-to-date information, and E15 compatible vehicles, and not very many stations, you may including non-governmental funding opportunities. have an opportunity. The "back of the napkin" calculations on the HOW'S THAT WORKING OUT FOR YOU? If you're still not sure state pages were based on state volume averages, convenience store industry averages, and historical retailer results. Actual retailer what you want to do, ask another retailer who is already selling results will vary. If you need more information on current retailer E15 and/or flex fuels. You can find some of their stories on results, feel free to contact us via the information at the bottom of flexfuelforward.com, and we will be happy to put you in touch with this checklist. other marketers who have already done some of the things you're thinking about doing. They can tell you what was easy, what was CHECKLIST Item one on this checklist is: Get a good checklist. challenging, what still causes problems, and what problems they This is not one. You're going to want to have a checklist that you can expected but never had. hang on to after the conversion is complete, to make sure everyone **THE BOTTOM LINE** The most successful E15 and flex fuel retailers got their work done, record all the details of your conversion or are the ones who learned everything they could about the products installation, and minimize the time you'll have to spend with various authorities when they come to check up on you. NREL's Handbook and were excited to offer them to their customers. We prefer to work for Handling, Storing, and Dispensing E85 and Other Ethanolwith marketers who understand the benefits and potential pitfalls and Gasoline Blends has excellent checklists, and RFA's E15 Retailer are committed to educating their employees and customers about new fuels that have become available. Those retailers sell more ethanol, Handbook has a good E15 checklist. gain more customers, and make more money. That's a big win/win for **CAN I?** That's an equipment question. It is possible you already everyone. have some (or all) of the equipment you would need to store and FOR MORE INFORMATION dispense E15 and/or flex fuels. If you don't, you'll want to find out Ron Lamberty what else you would need to get into the higher blends business. Senior Vice President Contrary to what you've probably heard, a large percentage of American Coalition for Ethanol underground storage tanks and lines ARE compatible with blends 605-334-3381 of ethanol higher than ten percent. Above-ground equipment is rlamberty@ethanol.org less likely to be compatible with higher blends. NREL's Handbook (mentioned above) has excellent Tables and graphics that explain which parts and brands are compatible with which fuels, and has **AMERICAN COALITION FOR ETHANOL** hints to help you find the makes, models, and installation dates www.ethanol.org ethanol. of your existing equipment. That's great if you've got time on your hands, but we recommend you have your equipment installer do the equipment review for you, since that is information they should have FLEX **FLEX FUEL FORWARD** on hand or will be able to find more quickly than you. www.flexfuelforward.com MAY I? There are a LOT of people to ask "May I?" when you're adding E15 or flex fuels. If your location is branded, what will the brand allow? What does your insurance company cover? - Those are **BLEND YOUR OWN (BYO) ETHANOL** probably questions you'll have to get answered by yourself. Others Is www.byoethanol.com there a state Underground Storage Tank (UST) program, and what do they require with E15 or flex fuels? Do building codes and fire codes allow it? should be covered by your petro equipment company. **ALTERNATIVE FUELS DATA CENTER** Things like: There is also a registration process for E15, requiring www.afdc.energy.gov/fuels/ethanol.html

**NATIONAL RENEWABLE ENERGY LAB** 

www.nrel.gov

a letter to EPA, adoption of a misfueling mitigation plan, and registration for a fuel quality survey at www.rfgsa.org. Contact us for

templates you can use to register with EPA.

