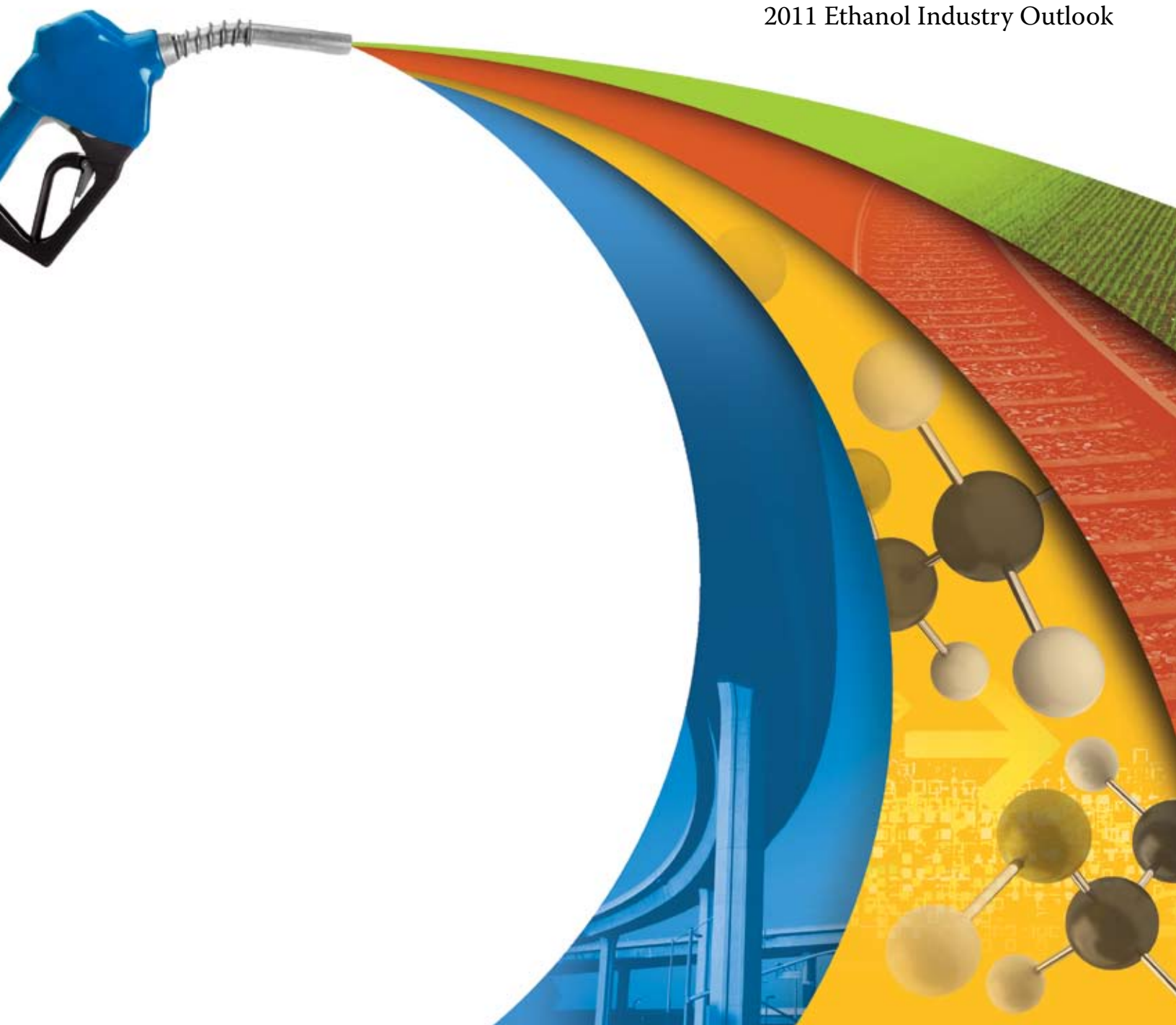


BUILDING BRIDGES to a **MORE SUSTAINABLE FUTURE**

2011 Ethanol Industry Outlook



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Siouxland Ethanol LLC  
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FEBRUARY 2011

America's ethanol industry is many things, but one thing it is not is stale. Ethanol producers continue to innovate, expand, and improve the process by which they now provide the nation with 10 percent of its gasoline demand. New technologies are on the cusp of commercialization, promising to dramatically expand this industry's ability to meet the nation's growing need for energy with a renewable alternative. **THE MOMENTUM IS ON OUR SIDE.**

Indeed, 2010 witnessed American ethanol production soar to 13 billion gallons, replacing the gasoline produced from some 445 million barrels of imported oil. Domestic ethanol production aided a struggling economy, especially in rural areas, by helping support more than 400,000 jobs across the country which cannot be outsourced.

Even in the face of manufactured angst over ethanol's growing role in the market, this industry came together to advocate for the extension of key tax policies that help ensure developing technologies like ethanol can compete with entrenched interests for America's energy future.

But, then again, this industry has never stood still. In 2011, **THE RENEWABLE FUELS ASSOCIATION CELEBRATES 30 YEARS OF ADVOCACY** on behalf of American ethanol producers, farmers, and consumers eager to embrace a domestic, cost-effective alternative to imported oil. In these 30 years, the RFA and its members have seen the industry grow from just 215 million gallons of annual production – today the equivalent of three average ethanol biofineries – to become the world's largest ethanol producer.

We have seen the industry battle back its critics time and again with the facts about ethanol's importance to the nation's economic, environmental and energy future. All of this institutional knowledge and understanding of how markets and Capitol Hill work will be invaluable in the year to come.

**MANY OF THE BATTLES WAGED IN 2010 ARE POISED TO REPEAT AGAIN IN 2011.** The industry must come together once more to present a unified vision for what ethanol policy should be in the 21st century. We must partner with our customers to install more ethanol blending infrastructure and incentivize the production of flex-fuel vehicles that allow us to fully realize the goals of the Renewable Fuel Standard. We must recognize the importance of emerging advanced and cellulosic ethanol technologies and work to ensure they are given every opportunity to succeed.

There is no shortage of work to be done. The decision to allow the use of E15 in 2001 and newer vehicles is a positive development, but does create regulatory and market hurdles as well. States like California continue to pursue policies that could limit ethanol access to that market, just as EPA has granted the use of more ethanol.

I have every confidence 2011 will be a success, just as every year before it, because this industry understands what it takes to be successful.

We will build bridges to those opponents of our industry willing to hear our side. We will reach out to those critics of our industry with the facts. We will support our champions in Congress and state capitals who share **OUR VISION OF AMERICA'S ENERGY FUTURE.**

Together, this industry will span the divide between success and failure. The future of this industry is very bright indeed.

Thanks for 30 years of support. **THE BEST YEARS ARE STILL AHEAD OF US!**

Sincerely,

A handwritten signature in black ink, appearing to read "Bob Dinneen", written in a cursive style.

Bob Dinneen, President & CEO

# Building a Broader Industry

Domestic ethanol production is truly an American success story. Built with the help of American farmers, ethanol production and use in the U.S. has gone from a mere blip on the national energy radar to nearly 10 percent of the nation's gasoline supply. With the growth of the industry and evolution in ethanol production technologies, 2010 has set the stage for incredible innovation and expansion in the years to come.

## 2010 Sets Another Record

From 1.6 billion gallons of production at the start of the decade, American ethanol producers provided an estimated 13 billion gallons of domestic renewable fuel in 2010 – an 800 percent increase and another annual production record. Year over year, ethanol production increased more than 20 percent. This increase was achieved through improvements in ethanol production technologies, increased awareness of the need for renewable alternatives to oil, and thoughtful public policy that seeks to level the playing field for renewable fuels in a market nearly monopolized by petroleum.

Mirroring the rise in production, America's use of ethanol also soared, driven by both the demands of the Renewable Fuel Standard (RFS) and the economic value of ethanol as a blending component in gasoline. Today, well over 90 percent of all gasoline sold in the U.S. is blended with ethanol. According to data estimated and calculated by the RFA, ethanol demand averaged 860,000 barrels per day in 2010, for a total of 13.1 billion gallons.

In addition to domestic demands, the U.S. was also on pace for record exports of ethanol as well. Based upon RFA projections using U.S. federal government trade data, the ethanol industry exported a record 350 million gallons of ethanol in 2010.



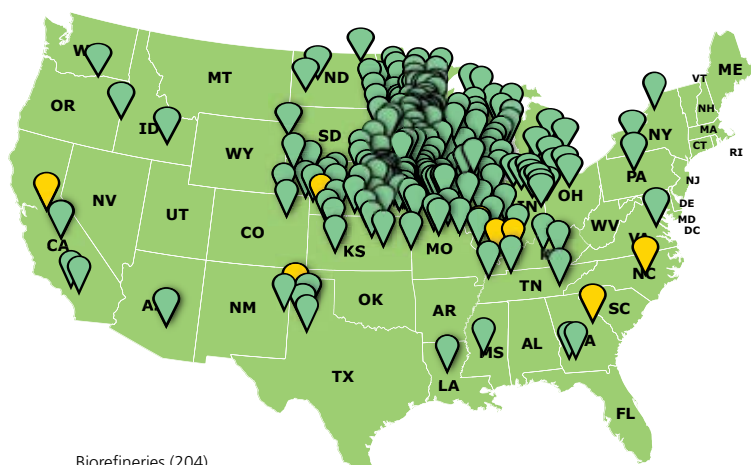
## U.S. ETHANOL PRODUCTION CAPACITY BY STATE

*In Millions of Gallons*

	Nameplate	Operating	Under Construction/ Expansion	Total
Iowa	3,595.0	3,595.0	0	3,595.0
Nebraska	1,864.0	1,839.0	113	1,977.0
Illinois	1,480.0	1,480.0	5	1,485.0
Minnesota	1,136.6	1,118.6	0	1,136.6
Indiana	998.0	906.0	113	1,111.0
South Dakota	1,016.0	1,016.0	33	1,049.0
Ohio	538.0	424.0	0	538.0
Kansas	491.5	436.5	20	511.5
Wisconsin	498.0	498.0	3	501.0
Texas	250.0	250.0	115	365.0
North Dakota	353.0	343.0	0	353.0
Michigan	265.0	265.0	0	265.0
Missouri	261.0	261.0	0	261.0
California	199.5	123.0	50	249.5
Tennessee	177.0	177.0	38	215.0
New York	164.0	164.0	0	164.0
Oregon	148.0	40.0	0	148.0
Colorado	125.0	125.0	0	125.0
Georgia	100.4	100.4	10	110.4
Pennsylvania	110.0	110.0	0	110.0
Virginia	65.0	0	0	65.0
North Carolina	0	0	60	60.0
Arizona	55.0	55.0	0	55.0
Idaho	54.0	54.0	0	54.0
Mississippi	54.0	54.0	0	54.0
Kentucky	35.4	35.4	0	35.4
New Mexico	30.0	30.0	0	30.0
Wyoming	6.5	6.5	0	6.5
Louisiana	1.5	1.5	0	1.5
<b>Total</b>	<b>14,071.4</b>	<b>13,507.9</b>	<b>560</b>	<b>14,631.4</b>



## U.S. ETHANOL BIOREFINERY LOCATIONS



Biorefineries (204)

Biorefineries under construction (9)

Source: Renewable Fuels Association,  
January 2011

Source: Renewable Fuels Association, January 2011



## RECENT ETHANOL INDUSTRY EXPANSIONS

	Jan 2000	Jan 2001	Jan 2002	Jan 2003	Jan 2004	Jan 2005	Jan 2006	Jan 2007	Jan 2008	Jan 2009	Jan 2010	Jan 2011
<b>Biorefineries Online</b>	54	56	61	68	72	81	95	110	139	170	189	204
<b>Capacity (mgy)</b>	1,748.7	1,921.9	2,347.3	2,706.8	3,100.8	3,643.7	4,336.4	5,493.4	7,888.4	10,569.4	11,877.4	13,507.9

\* This figure represents operating ethanol biorefineries as of January 2011. For a complete list visit [www.EthanolRFA.org](http://www.EthanolRFA.org).

## Industry Snapshot

At year's end, America's ethanol industry comprised 204 ethanol biorefineries in 29 states. Continuing a trend, ethanol production expanded beyond the Corn Belt with new biorefineries beginning production or finalizing construction in states like Virginia and North Carolina.

Importantly, ethanol production resumed at many of the plants that were forced to suspend operations in the aftermath of the economic collapse in the fall of 2008. Plants in Minnesota, Ohio, Nebraska, and the Dakotas, to name a few, were all purchased and are once again providing fuel and feed derived in part from corn grown and delivered by local farmers.

The industry has also seen new companies join traditional ethanol producers in expanding American ethanol production. Major oil refiners such as Valero, Flint Hills, Murphy Oil, and Sunoco have made large investments in ethanol production, joining Marathon Oil Company, which currently operates ethanol facilities with The Andersons, Inc.

Traditional ethanol producers like Abengoa Bioenergy, Archer Daniels Midland and Aventine Renewable Energy, Inc. brought new facilities online in 2010, while a group of farmer-owned plants purchased previously idled ethanol plants and brought them back into production.

Likewise, new companies and technologies utilizing grasses, woody biomass, garbage, algae and other feedstocks continue to make strides toward commercialization. Though hampered by a lack of available capital and federal loan guarantee programs wrapped in the proverbial red tape, these companies continue to refine their processes and are poised for rapid deployment when capital challenges are resolved.

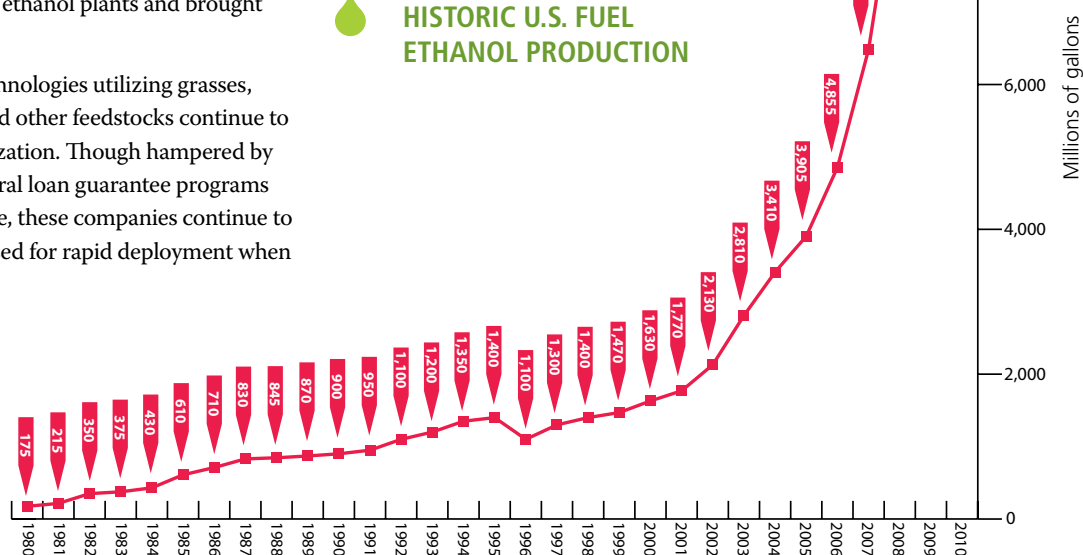
## Bridging the Present with the Future

The future of American ethanol is diverse. Corn will continue to be the basis upon which the industry grows. 2011 predictions for starch-based ethanol production approach and very possibly surpass 13.5 billion gallons as processes to convert grain into fuel and feed improve. New demand from higher level ethanol blends like E15, E20, and E85 as well as the potential for continued export opportunities show promise for starch-based ethanol use to exceed the 2011 RFS "renewable biofuel" requirement of 12.6 billion gallons.

Additionally, efforts to accelerate the commercialization of cellulosic and advanced ethanol are seeing greater support than ever before. Specifically, the newly minted Renewable Fuels Association's Advanced and Cellulosic Ethanol Council is dedicated to establishing advanced and cellulosic ethanol production and ensuring the goals of the RFS are met.



## HISTORIC U.S. FUEL ETHANOL PRODUCTION



Source: Renewable Fuels Association, January 2011

\*Estimated

# Bridging the Economic Abyss

2010 was not the economic calamity of 2008 and 2009, but it still proved challenging for the nation as a whole. Unemployment remained near 10 percent while underemployment numbers were higher still. One bright spot, particularly for hundreds of often overlooked rural communities, was the continued growth of domestic ethanol production.

## It's All About Jobs

The political focus of 2010 was squarely on job creation. America's ethanol industry certainly did its part. According to an economic analysis by respected renewable fuel economist John Urbanchuk, the production and use of an estimated 13 billion gallons of fuel ethanol in 2010 helped employ 400,677 Americans. Of these, nearly 70,400 jobs were directly involved in the production of ethanol and the delivery of goods and services to ethanol producers. The remaining jobs were indirect and induced, encompassing jobs on Main Streets that support those who directly supply goods and services to ethanol producers.

All of these jobs are good paying jobs. For example, a 2010 *Ethanol Producer Magazine* survey of the industry found that 83 percent of employees earned wages in excess of \$40,000 and 99 percent reported receiving health care and other benefits.

In addition to jobs, the ethanol industry added \$36 billion to household income and contributed \$53.6 billion to the Gross Domestic Product (GDP), a measure of U.S. economic activity in 2010.



## Who works at an American ethanol plant?

Making America's ethanol industry go takes the cooperative work of a variety of professionals. From PhDs and MBA graduates to hard-working blue collar men and women, the more than 200 American ethanol bio-refineries and the companies that service them employ a broad section of Americans, paying a good wage and providing desirable benefits.

*I would tell someone who knows very little about our industry that we are an essential answer to high priced petroleum from foreign sources that are too often hostile to the U.S. We are better for the U.S. economy, better for the environment, better for the rural economy, and when all costs are on the table, the lowest cost for the consumer.*

In Their  
WORDS

Mick Henderson, General Manager,  
Commonwealth Agri-Energy and RFA Board Member

## Paying As You Go

The past year was also defined by the debate over tax incentives for ethanol use. In 2010, the ethanol industry contributed \$7 billion in tax revenue to the federal Treasury and an additional \$4 billion to the coffers of state and local governments. The \$11 billion in tax revenue contributions far outpace the cost of federal tax incentives for ethanol in 2010, estimated at \$6 billion.

## Taking on OPEC

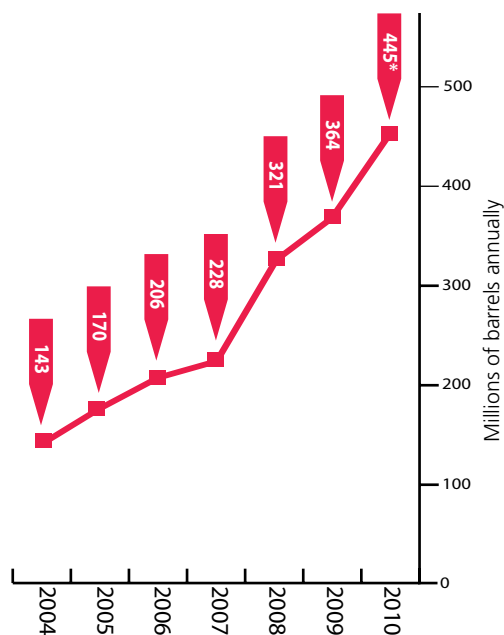
Harder to fully appreciate but no less important, the growth of ethanol production and use in the U.S. directly translates to reductions in the amount of oil the nation needs to import. The 13 billion gallons of estimated ethanol production in 2010 displaced the gasoline refined from 445 million barrels of crude oil – 55 million barrels more than the total estimated crude oil imports from Saudi Arabia last year. This reduction in oil imports saved the U.S. economy \$34 billion dollars.

Here are some of the key facts from the 2010 U.S. Ethanol Industry Salary Survey:

- 73 percent of ethanol industry employees have either a 2 or 4 year college degree.
- 83 percent of respondents report earning an average salary of at least \$40,000 per year.
- On top of better than average pay, 99 percent report receiving benefits from their employer, including health care and retirement plans. That is well above the national average of 71 percent.



## HISTORIC OIL IMPORT DISPLACEMENT BY ETHANOL



Source: Cardno ENTRIX

\*Estimated



# Building Value in Rural Markets

Demand for corn and other grains has helped add value to the commodities produced by American farmers and provides them a better return from the market and not the government. In addition to fuel, American ethanol producers are increasingly feeding domestic livestock flocks and herds while opening up new markets overseas.

## Fuel and Feed to Meet Growing World Demand

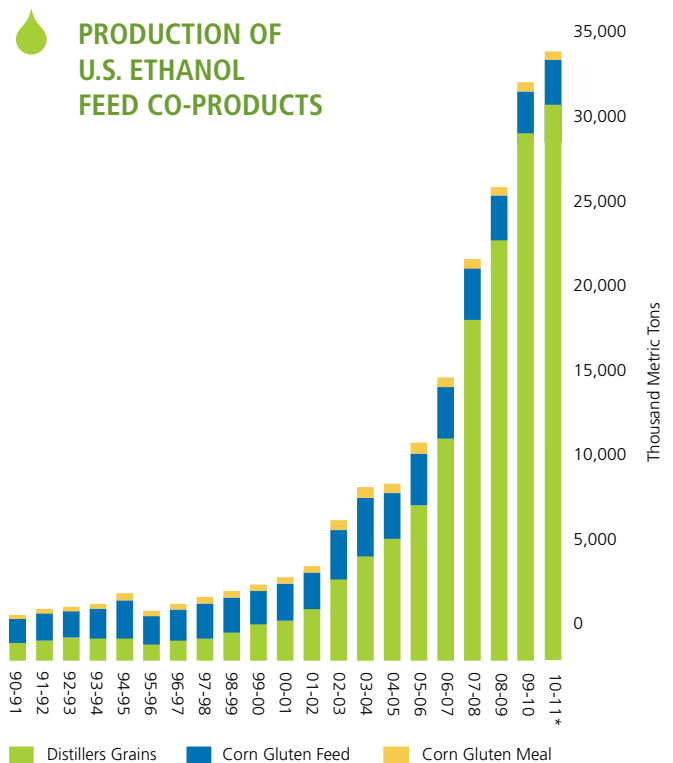
The ethanol industry's role as a major producer of fuel and feed was on display again in 2010, as producers converted 4.65 billion bushels of corn into 13 billion gallons of fuel and nearly 32.5 million metric tons of high-value feed. The distillers grains, corn gluten feed and corn gluten meal that U.S. ethanol plants produced in 2010 nourished everything from the cattle at the feedlot next door to poultry in Southeast Asia and hogs in Canada. In fact, distillers grains were exported to more than 50 countries in 2010, demonstrating the global appeal of this nutrient-dense feed ingredient. Distillers grains exports were worth an estimated \$1.6 billion in 2010, highlighting the importance of co-products to the ethanol producer's bottom line.

International markets became particularly important to the U.S. industry in 2010, as domestic co-product markets inched closer to saturation. While the industry fought to break through the "blend wall" for ethanol in 2010, it avoided hitting a "feed wall" by exporting record quantities of feed co-products and opening new international markets. Distillers grains exports topped 8 million metric tons in 2010, up more than 40 percent from 2009 and nearly double the amount exported in 2008. Thanks to a voracious appetite for protein and energy feeds, China emerged as the top destination of U.S. distillers grains in 2010. One out of every four tons of distillers grains exports was bound for China in 2010, with Mexico and Canada following as other top destinations.

Fostering new export relationships and broadening co-product utilization rates will continue to be critical to the future of the ethanol industry. Despite rapid growth in co-product use both domestically and internationally, there is still room to grow. RFA is working diligently to open new markets and expand existing opportunities. In 2010, the RFA joined with the U.S. Grains Council to co-sponsor the Export Exchange, a forum attended by more than 500 producers, exporters, and buyers of ethanol co-products and coarse grains from 25 countries.

## A Partnership with American Farmers

Continuing to produce record amounts of ethanol and livestock feed would not be possible without the increasing productivity of American farmers. In 2010, despite truly challenging growing and harvesting conditions, farmers produced the third-largest corn crop in history. Farmers battled unfavorable weather conditions to produce 12.45 billion bushels based on 152.8 bushels per acre, the fourth-highest average yield on the books. The 2010 crop was the fourth in a row and the fourth in history larger than 12 billion bushels. Further, the 2010 crop was produced on virtually the same amount of acres used in the mid-1970s to produce crops half the size, attesting to the tremendous growth in productivity being harnessed on American farms.

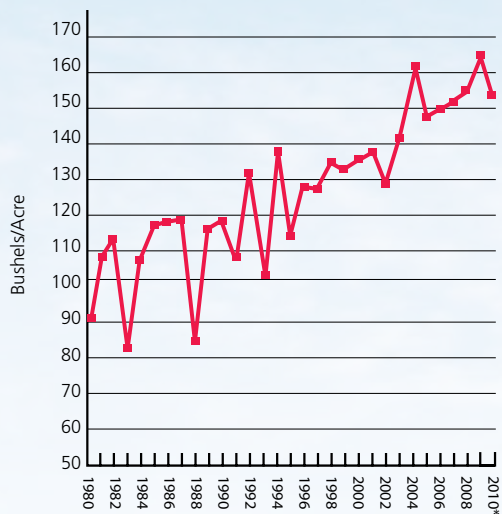


Source: RFA

\*Estimated



### U.S. AVERAGE CORN YIELD, 1980-2010



Source: USDA

\*Estimated



### DISTILLERS GRAINS EXPORTS

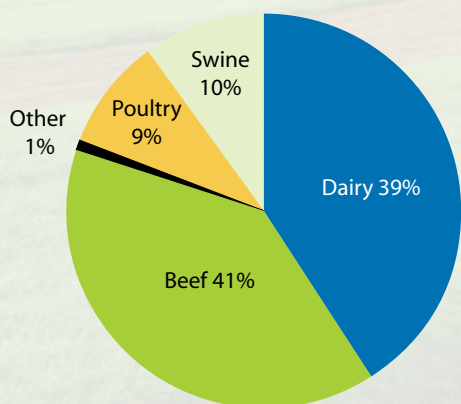


Source: USDA-FAS

\*Estimated



### DISTILLERS GRAINS CONSUMPTION BY SPECIES, 2010\*

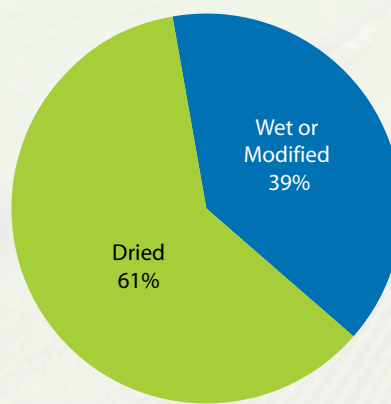


Source: CHS and RFA

\*Estimated



### DISTILLERS GRAINS CONSUMPTION BY TYPE, 2010\*



Source: RFA

\*Estimated

# Commercializing the Next Gen

The American ethanol industry is one of the most dynamic energy industries anywhere in the world. Breakthroughs in process technologies are harnessing the potential of a wide variety of feedstocks from which ethanol can be made. Likewise, advancements in the cultivation of energy-specific feedstocks, such as fast growing trees, perennial grasses, and algae will ensure adequate volumes of feedstocks are available to meet America's growing need for renewable, biodegradable fuel sources.

## Proving New Technologies

Today, more than 20 demonstration and pilot-scale operations utilize a wide array of technologies to turn woody biomass, algae, grasses, corn cobs, sugar waste, and even garbage into ethanol.

Operating in at least 17 states, these facilities are the proving ground for advanced and cellulosic ethanol technologies. They will provide the necessary data, feedback, and experience for companies to take these technologies from demonstration scale to the commercial level. Despite having proven technologies, many companies are facing a lack of availability in investment capital to begin construction on commercial-scale, multi-million gallon per year biorefineries.



## Why Advanced and Cellulosic Ethanol Must Be Successful

The success of new ethanol technologies is not simply important to the future of the domestic ethanol industry. It is a key component of the nation's long term strategy to reduce our dependence on foreign oil. The largest component of the Renewable Fuel Standard (RFS) is the advanced and cellulosic biofuels requirement, which by 2022 mandates that 21 billion gallons of the required 36 billion gallons of renewable fuel use be from non-corn starch feedstocks.

Analyses have suggested that if America could harness the waste streams from American agriculture such as corn stalks, cobs and wheat straw, the nation could produce enough ethanol to eliminate the need for oil imports from the Persian Gulf. Additionally, because many of the feedstocks being developed for ethanol production require little or no cultivation because they are waste products, the initial fossil fuel requirements to produce the feedstocks are dramatically reduced. The U.S. Department of Energy's Argonne National Laboratory suggests that production of cellulosic ethanol could reduce fossil fuel input needs compared to gasoline by 70 percent.

## Renewable Fuels Association's Advanced and Cellulosic Ethanol Council

The Renewable Fuels Association's Advanced and Cellulosic Ethanol Council is the leading voice promoting and advocating policies that will accelerate the commercialization of advanced and cellulosic ethanol technologies. Technologies exist today to effectively and efficiently convert a wide range of biomass feedstocks – including woody biomass, corn cobs, grasses, algae, municipal solid waste, and agriculture waste – into renewable fuels like ethanol.

# eration



The future of American ethanol production will also include non-conventional feedstocks like algae. The Department of Energy estimates that biofuel production from algae could yield between 4,000 – 6,000 gallons per acre. In the very near future, estimates suggest production could reach 10,000 gallons per acre, substantially increasing America's ability to provide a steady and abundant supply of renewable, biodegradable, cleaner burning ethanol.

## Reaching Full Potential

Like countless other industries that are successful commercial enterprises today, the development of cellulosic and advanced ethanol production will require a partnership with the federal government. Current policies, such as the RFS, are designed to ensure a market exists for these fuels. However, due to economic challenges that have hamstrung early efforts to develop commercial-scale biorefineries, the requirements for cellulosic ethanol use have been repeatedly reduced by the U.S. Environmental Protection Agency (EPA). While EPA has rightfully recognized production is well below required demands and subsequently lowered the RFS requirements, EPA must also be careful not to be overly pessimistic about the chances for these technologies and ensure the advanced and cellulosic mandates remain ambitious.

Equally important are federal government efforts to assist ethanol producers in building the first generation of advanced and cellulosic ethanol biorefineries. The U.S. Department of Agriculture (USDA) has awarded three loan guarantees to advanced and cellulosic ethanol producers to begin construction on commercial facilities in Florida, Alabama, and Mississippi.

Unfortunately, far too few producers have been able to successfully navigate the federal bureaucracy and obtain grants and loan guarantees, especially from the Department of Energy (DOE). Access to these programs has been limited due to discriminatory requirements that skew more toward electric generation than liquid transportation fuel production. The continued work of USDA to provide these important guarantees and reform of similar programs at DOE is vital to help build the first commercial-scale facilities and commercialize these very promising technologies.

### What is advanced and cellulosic ethanol?

Cellulose refers to the material comprising the cell walls of any green plant and is the most common organic compound found on Earth. Cellulosic ethanol is ethanol produced by turning the sugars in cellulose into alcohol fuel. Advanced ethanol, by comparison, is sourced from feedstocks that are not cellulose and are not starch found in grains such as corn. All sources for ethanol will be required to provide the nation with the kind of energy choices we need.



The Council will work to foster commercialization of advanced technologies, develop proactive federal and state policies, ensure proper accounting of greenhouse gas emissions and other environmental concerns, and expand the market for all ethanol sources.



# Building New Markets

The combination of thoughtful public policy and diligent attention to state regulation by the industry has helped open up every corner of the nation to ethanol use. Today, ethanol is blended in well over 90 percent of the nation's gasoline supply. The success of tax incentives, the Renewable Fuel Standard (RFS), and efforts to adjust state fuel regulation has been so dramatic that the industry is finding it difficult to identify new domestic markets.

Solutions to these demand pressures are numerous – but none are simple. One solution is the use of ethanol blends higher than 10 percent. Blends such as E15 (15 percent ethanol/85 percent gasoline) hold promise to help expand the market. Ultimately, we will need a variety of blend levels – 20 percent, 30 percent, 50 percent, 85 percent, and so on – to not only achieve the goals laid forth in the RFS but to ensure markets for ethanol production from cellulose and other feedstocks.

## Finding Every Gallon

Currently, the standard blend for ethanol is E10, which is a safe and effective fuel for all engine platforms. As the maps on the following page demonstrate, market saturation of E10 has progressed significantly as ethanol producers provide greater volumes of fuel and state regulations are adjusted to incorporate the unique properties of ethanol fuel.

In 2011, the RFS requirement of 12.6 billion gallons of “renewable biofuel” used together with continued favorable blending economics will likely see the market for E10 blends become saturated. The remaining markets likely to convert to E10 will see that conversion occur in 2011.

## Bridging Today's Markets with Tomorrow's Opportunities

Ethanol as a blending component in gasoline, such as E10 blends, is a safe and widely adopted use of the fuel. Technologies are rapidly becoming available that allow ethanol to replace even larger volumes of oil in domestic gasoline. Ethanol blends, such as E20, E30, and even E50 (known as mid-level ethanol blends or MLEBs) are gaining in popularity as consumers seek affordable alternatives to imported oil. Blends such as E85, which have been the focus of infrastructure discussions for the past decade, offer an opportunity to provide ethanol as a truer replacement fuel to gasoline.

Consumers have shown a willingness to migrate toward these blends, but the confines of vehicle technologies and fuel dispensing infrastructure have hampered sales of these blends. To use MLEBs and higher level ethanol blends, a vehicle must be fitted with flexible fuel vehicle (FFV) technology. Today, nearly 9 million FFVs are on the road, representing approximately 3 percent of the total light duty vehicle fleet.

Likewise, fuel pumps must be equipped with the technology to offer higher concentrations of ethanol. Technologies such as blender pumps offer the ability to dispense a variety of ethanol blends from E10 for use in all vehicles up to E85 for use in FFVs. E85-specific pumps offer a choice for drivers of FFVs. Today, more than 2,600 stations offer E85-specific pumps and an additional 900 stations have installed blender pumps. Approximately 300 of those 900 stations offer MLEBs. Comparatively, there are approximately 160,000 gas stations in America.

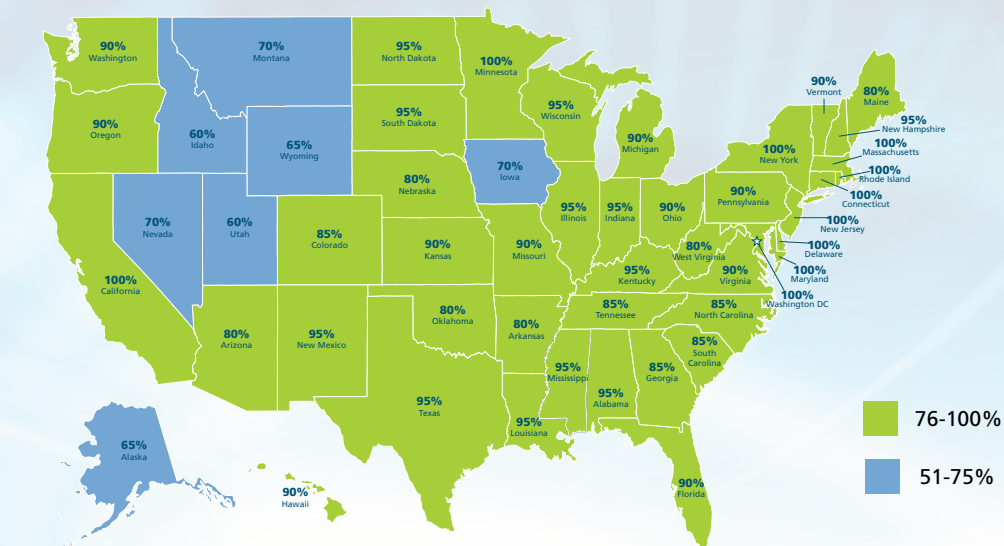
## 2011: The Year of MLEBs?

Given the size of the nation's convenience store and gasoline station industry, deploying sufficient numbers of blender pumps will be a challenge that will not be met overnight. It will take a committed effort to educate, and in some cases incentivize, fuel retailers on the merits of these technologies. Efforts like the Blend Your Own (BYO) Ethanol campaign from the RFA, the American Coalition for Ethanol, the National Corn Growers Association, and state corn grower associations as well as pledges from the U.S. Department of Agriculture (USDA) to provide some funding for blender pumps are important first steps to establishing a MLEBs beachhead in today's fuel market.





## E10 MARKET ESTIMATION, 2010



Source: RFA



## FFV MARKET CONCENTRATION



Source: R.L. Polk & Company  
Vehicles in Operation  
Database, July 1, 2009

# U.S. Fuel Ethanol Industry Biorefineries and Capacity

Company	Location	Feedstock	Nameplate Capacity (mg/y)	Operating Production (mg/y)	Under Construction/ Expansion Capacity (mg/y)
Abengoa Bioenergy Corp. (Total)			378	378	
	Colwich, KS	corn/milo			
	Mt. Vernon, IN	corn			
	Madison, IL	corn			
	Ravenna, NE	corn			
	York, NE	corn			
	Portales, NM	corn			
Absolute Energy*	St. Ansgar, IA	corn	110	110	
ACE Ethanol, LLC	Stanley, WI	corn	41	41	
Adkins Energy, LLC*	Lena, IL	corn	40	40	
Advanced BioEnergy, LLC (Total)			198	198	
	Fairmont, NE	corn			
	Aberdeen, SD	corn			
	Huron, SD	corn			
AE Biofuels/Cilion	Keyes, CA	corn			50
Ag Energy Resources, Inc.	Benton, IL	corn			5
AGP*	Hastings, NE	corn	52	52	
AI-Corn Clean Fuel*	Claremont, MN	corn	42	42	
Alchem Ltd. LLP	Grafton, ND	corn	10	0	
AltraBiofuels Coshocton Ethanol, LLC	Coshocton, OH	corn	60	0	
AltraBiofuels Phoenix Bio Industries, LLC	Goshen, CA	corn	31.5	0	
Amaizing Energy, LLC*	Denison, IA	corn	55	55	
Appomattox Bio Energy	Hopewell, VA	corn	65	0	
Archer Daniels Midland (Total)			1,750	1,750	
	Cedar Rapids, IA	corn			
	Clinton, IA	corn			
	Decatur, IL	corn			
	Peoria, IL	corn			
	Marshall, MN	corn			
	Wallhalla, ND	corn/barley			
	Columbus, NE	corn			
Arkalon Energy, LLC	Liberal, KS		110	110	
Aventine Renewable Energy, LLC			244	244	226
	Pekin, IL	corn			
	Canton, IL	corn			
	Aurora, NE	corn			
	Mt. Vernon, IN	corn			
Badger State Ethanol, LLC*	Monroe, WI	corn	48	48	
Big River Resources Galva, LLC	Galva, IL	corn	100	100	
Big River Resources West Burlington, LLC*	West Burlington, IA	corn	100	100	
Big River United Energy	Dyersville, IA	corn	110	110	
BioFuel Energy - Buffalo Lake Energy, LLC	Fairmont, MN	corn	115	115	
BioFuel Energy - Pioneer Trail Energy, LLC	Wood River, NE	corn	115	115	
Bional Clearfield	Clearfield, PA	corn	110	110	
Blue Flint Ethanol	Underwood, ND	corn	50	50	
Bonanza Energy, LLC	Garden City, KS	corn/milo	55	55	
BP Biofuels North America	Jennings, LA	sugar cane bagasse	1.5	1.5	
Bridgeport Ethanol	Bridgeport, NE	corn	54	54	
Bunge-Ergon Vicksburg	Vicksburg, MS	corn	54	54	
Bushmills Ethanol, Inc.*	Atwater, MN	corn	50	50	
Calgren Renewable Fuels, LLC	Pixley, CA	corn	60	60	
Carbon Green Bioenergy	Lake Odessa, MI	corn	50	50	

Cardinal Ethanol	Union City, IN	corn	100	100	
Cargill, Inc.	Eddyville, IA	corn	35	35	
Cargill, Inc.	Blair, NE	corn	85	85	
Cascade Grain	Clatskanie, OR	corn	108	0	
Center Ethanol Company, LLC	Sauget, IL	corn	54	54	
Central Indiana Ethanol, LLC	Marion, IN	corn	40	40	
Central MN Ethanol Coop	Little Falls, MN	corn	21.5	21.5	
Chief Ethanol	Hastings, NE	corn	62	62	
Chippewa Valley Ethanol Co.*	Benson, MN	corn	45	45	
Clean Burn Fuels, LLC	Raeford, NC	corn			60
Commonwealth Agri-Energy, LLC*	Hopkinsville, KY	corn	33	33	
Corn Plus, LLP*	Winnebago, MN	corn	44	44	
Corn, LP	Goldfield, IA	corn	60	60	
Cornhusker Energy Lexington, LLC	Lexington, NE	corn	40	40	
Dakota Ethanol, LLC*	Wentworth, SD	corn	50	50	
DENCO, LLC	Morris, MN	corn	24	24	
Didion Ethanol	Cambria, WI	corn	40	40	
Dubay Biofuels Greenwood	Greenwood, WI	cheese whey			3
E Caruso (Goodland Energy Center)	Goodland, KS	corn			20
E Energy Adams, LLC	Adams, NE	corn	50	50	
East Kansas Agri-Energy, LLC*	Garnett, KS	corn	35	35	
ESE Alcohol Inc.	Leoti, KS	seed corn	1.5	1.5	
Flint Hills Resources	Menlo, IA	corn	110	110	
Flint Hills Resources	Shell Rock, IA	corn	110	110	
Flint Hills Resources	Fairbank, IA	corn	110	110	
Flint Hills Resources	Iowa Falls, IA	corn	90	90	
Front Range Energy, LLC	Windsor, CO	corn	40	40	
Gateway Ethanol	Pratt, KS	corn	55	0	
Gevo	Luverne, MN	corn	21	21	
Glacial Lakes Energy, LLC - Mina	Mina, SD	corn	107	107	
Glacial Lakes Energy, LLC - Watertown*	Watertown, SD	corn	100	100	
Golden Cheese Company of California*	Corona, CA	cheese whey	5	0	
Golden Grain Energy, LLC*	Mason City, IA	corn	115	115	
Golden Triangle Energy, LLC*	Craig, MO	corn	20	20	
Grain Processing Corp.	Muscatine, IA	corn	20	20	
Granite Falls Energy, LLC*	Granite Falls, MN	corn	52	52	
Greater Ohio Ethanol, LLC	Lima, OH	corn	54	0	
Green Plains Renewable Energy	Lakota, IA	corn	100	100	
Green Plains Renewable Energy	Riga, IA	corn	57	57	
Green Plains Renewable Energy	Shenandoah, IA	corn	65	65	
Green Plains Renewable Energy	Obion, TN	corn	115	115	
Green Plains Renewable Energy	Bluffton, IN	corn	115	115	
Green Plains Renewable Energy	Superior, IA	corn	55	55	
Green Plains Renewable Energy	Central City, NE	corn	100	100	
Green Plains Renewable Energy	Ord, NE	corn	50	50	
Guardian Energy	Janesville, MN	corn	110	110	
Hankinson Renewable Energy, LLC	Hankinson, ND	corn	110	110	
Heartland Corn Products*	Winthrop, MN	corn	100	100	
Heron Lake BioEnergy, LLC	Heron Lake, MN	corn	50	50	
Highwater Ethanol, LLC	Lamberton, MN	corn	55	55	
Homeland Energy Solutions	New Hampton, IA	corn	100	100	
Husker Ag, LLC*	Plainview, NE	corn	75	75	
Idaho Ethanol Processing, LLC	Caldwell, ID	potato waste	4	4	
Illinois River Energy, LLC	Rochelle, IL	corn	100	100	
Iroquois Bio-Energy Company, LLC	Rensselaer, IN	corn	40	40	
KAAPA Ethanol, LLC*	Minden, NE	corn	60	60	

Kansas Ethanol, LLC	Lyons, KS	corn	55	55	
KL Process Design Group	Upton, WY	wood waste	1.5	1.5	
Land O' Lakes *	Melrose, MN	cheese whey	2.6	2.6	
Levelland/Hockley County Ethanol, LLC	Levelland, TX	corn	40	40	
Lifeline Foods, LLC	St. Joseph, MO	corn	40	40	
Lincolnland Agri-Energy, LLC*	Palestine, IL	corn	48	48	
Lincolnway Energy, LLC*	Nevada, IA	corn	55	55	
Little Sioux Corn Processors, LLC*	Marcus, IA	corn	92	92	
Louis Dreyfus Commodities	Grand Junction, IA	corn	100	100	
Louis Dreyfus Commodities	Norfolk, NE	corn	45	45	
Marquis Energy, LLC	Hennepin, IL	corn	100	100	
Marquis Energy - Wisconsin, LLC	Necedah, WI	corn	50	50	
Marysville Ethanol, LLC	Marysville, MI	corn	50	50	
Merrick & Company	Aurora, CO	waste beer	3	3	
Mid America BioEnergy & Commodities	Madrid, NE	corn	44	44	
Mid-Missouri Energy, Inc. *	Malta Bend, MO	corn	50	50	
Midwest Renewable Energy, LLC	Sutherland, NE	corn	25	25	
Minnesota Energy*	Buffalo Lake, MN	corn	18	0	
Nebraska Corn Processing, LLC	Cambridge, NE	corn	45	45	
NEDAK Ethanol	Atkinson, NE	corn	44	44	
Nesika Energy, LLC	Scandia, KS	corn	10	10	
New Energy Corp.	South Bend, IN	corn	102	102	
North Country Ethanol, LLC*	Rosholt, SD	corn	20	20	
NuGen Energy	Marion, SD	corn	110	110	
One Earth Energy	Gibson City, IL	corn	100	100	
Otter Tail Ag Enterprises	Fergus Falls, MN	corn	57.5	57.5	
Pacific Ethanol, Inc.	Madera, CA	corn	40	0	
Pacific Ethanol, Inc.	Stockton, CA	corn	60	60	
Pacific Ethanol, Inc.	Burley, ID	corn	50	50	
Pacific Ethanol, Inc.	Boardman, OR	corn	40	40	
Panda Ethanol	Hereford, TX	corn/milo			115
Parallel Products	Rancho Cucamonga, CA	beverage waste			
Parallel Products	Louisville, KY	beverage waste	5.4	5.4	
Patriot Renewable Fuels, LLC	Annawan, IL	corn	100	100	
Penford Products	Cedar Rapids, IA	corn	45	45	
Pinal Energy, LLC	Maricopa, AZ	corn	55	55	
Pine Lake Corn Processors, LLC	Steamboat Rock, IA	corn	31	31	
Platinum Ethanol, LLC*	Arthur, IA	corn	110	110	
Plymouth Ethanol, LLC*	Merrill, IA	corn	50	50	
POET Biorefining - Alexandria	Alexandria, IN	corn	68	68	
POET Biorefining - Ashton	Ashton, IA	corn	56	56	
POET Biorefining - Big Stone	Big Stone City, SD	corn	79	79	
POET Biorefining - Bingham Lake	Bingham Lake, MN	corn	35	35	
POET Biorefining - Caro	Caro, MI	corn	53	53	
POET Biorefining - Chancellor	Chancellor, SD	corn	110	110	
POET Biorefining - Cloverdale	Cloverdale, IN	corn	92	0	
POET Biorefining - Coon Rapids	Coon Rapids, IA	corn	54	54	
POET Biorefining - Corning	Corning, IA	corn	65	65	
POET Biorefining - Emmetsburg	Emmetsburg, IA	corn	55	55	
POET Biorefining - Fostoria	Fostoria, OH	corn	68	68	
POET Biorefining - Glenville	Albert Lea, MN	corn	42	42	
POET Biorefining - Gowrie	Gowrie, IA	corn	69	69	
POET Biorefining - Hanlontown	Hanlontown, IA	corn	56	56	
POET Biorefining - Hudson	Hudson, SD	corn	56	56	
POET Biorefining - Jewell	Jewell, IA	corn	69	69	
POET Biorefining - Laddonia	Laddonia, MO	corn	50	50	

POET Biorefining - Lake Crystal	Lake Crystal, MN	corn	56	56	
POET Biorefining - Leipsic	Leipsic, OH	corn	68	68	
POET Biorefining - Macon	Macon, MO	corn	46	46	
POET Biorefining - Marion	Marion, OH	corn	68	68	
POET Biorefining - Mitchell	Mitchell, SD	corn	68	68	
POET Biorefining - North Manchester	North Manchester, IN	corn	68	68	
POET Biorefining - Portland	Portland, IN	corn	68	68	
POET Biorefining - Preston	Preston, MN	corn	46	46	
POET Biorefining - Scotland	Scotland, SD	corn	11	11	
POET Biorefining - Groton	Groton, SD	corn	53	53	
Prairie Horizon Agri-Energy, LLC	Phillipsburg, KS	corn	40	40	
Quad-County Corn Processors*	Galva, IA	corn	30	30	
Range Fuels	Soperton, GA	woody biomass			10
Red Trail Energy, LLC	Richardton, ND	corn	50	50	
Redfield Energy, LLC*	Redfield, SD	corn	50	50	
Reeve Agri-Energy	Garden City, KS	corn/milo	12	12	
Renova Energy	Torrington, WY	corn	5	5	
Show Me Ethanol	Carrollton, MO	corn	55	55	
Siouxland Energy & Livestock Coop*	Sioux Center, IA	corn	60	60	
Siouxland Ethanol, LLC	Jackson, NE	corn	50	50	
Southwest Georgia Ethanol, LLC	Camilla, GA	corn	100	100	
Southwest Iowa Renewable Energy, LLC*	Council Bluffs, IA	corn	110	110	
Spectrum Business Ventures, Inc.	Mead, NE	corn	25	0	
Sterling Ethanol, LLC	Sterling, CO	corn	42	42	
Sunoco	Volney, NY	corn	114	114	
Tate & Lyle	Loudon, TN	corn	67	67	38
Tharaldson Ethanol	Casselton, ND	corn/milo	110	110	
The Andersons Albion Ethanol, LLC	Albion, MI	corn	55	55	
The Andersons Clymers Ethanol, LLC	Clymers, IN	corn	110	110	
The Andersons Marathon Ethanol, LLC	Greenville, OH	corn	110	110	
Trenton Agri Products, LLC	Trenton, NE	corn	40	40	
United Ethanol, LLC	Milton, WI	corn	52	52	
United WI Grain Producers, LLC*	Friesland, WI	corn	49	49	
Utica Energy, LLC	Oshkosh, WI	corn	48	48	
Valero Renewable Fuels	Albert City, IA	corn	110	110	
Valero Renewable Fuels	Fort Dodge, IA	corn	110	110	
Valero Renewable Fuels	Albion, NE	corn	110	110	
Valero Renewable Fuels	Aurora, SD	corn	120	120	
Valero Renewable Fuels	Charles City, IA	corn	110	110	
Valero Renewable Fuels	Welcome, MN	corn	110	110	
Valero Renewable Fuels	Hartley, IA	corn	110	110	
Valero Renewable Fuels	North Linden, IN	corn	110	110	
Valero Renewable Fuels	Bloomington, OH	corn	110	110	
Valero Renewable Fuels	Jefferson Junction, WI	corn	110	130	
Western New York Energy, LLC	Shelby, NY	corn	50	50	
Western Plains Energy, LLC*	Campus, KS	corn	45	45	
Western Wisconsin Renewable Energy, LLC*	Boyceville, WI	corn	40	40	
White Energy	Russell, KS	milo/wheat starch	48	48	
White Energy	Hereford, TX	corn/milo	100	100	
White Energy	Plainview, TX	corn	110	110	
Wind Gap Farms	Baconton, GA	brewery waste	0.4	0.4	
Yuma Ethanol	Yuma, CO	corn	40	40	
U.S. CAPACITY TOTALS			14,071.4	13,507.9	560

\* locally owned

Updated: January 2011

# Opening the Door to the 112th

The results of the November election have brought more than 100 new members of both the House and the Senate to Washington. These new members will bring with them new ideas and new priorities. Some will be intimately familiar with issues important to the ethanol industry. Others will not be as familiar. Nevertheless, the RFA will do what it has done for the past 15 Congresses and work with our member companies to educate new and veteran lawmakers alike on the importance of a domestic ethanol industry and the potential of ethanol technologies to come.

## New Faces in Places of Power

The results of the election have put Republicans in control of the House of Representatives and narrowed the majority of the Democrats in the Senate. The result of parties changing power in Congress is the minting of new chairmen of committees with jurisdiction over important ethanol policies.

The most prominent change resulting from the power switch is the election of Representative John Boehner (R-OH) as Speaker of the House. Joining Speaker Boehner are Representative Fred Upton (R-MI) as the new chairman of the House Energy and Commerce Committee; Representative Dave Camp (R-MI) as the

new chairman of the House Ways and Means Committee; and Representative Frank Lucas (R-OK) as chairman of the House Agriculture Committee.

While the Senate did not change hands, retirements and defeats have led to a smaller Democratic majority and altered the make-up of key committees. Notably, Senator Debbie Stabenow (D-MI) is the new chair of the Senate Agriculture, Nutrition and Forestry Committee, which will begin work on a new farm bill in the 112th Congress.

## “It’s the Economy, Stupid”

As leaders of both political parties have stated, job creation and the economy will be a major focus for Congress. Such a focus provides American ethanol producers the opportunity to educate lawmakers and the public on the hundreds of thousands of jobs that are supported by ethanol production and to highlight the fact that these jobs cannot be sent to Arabian oil fields. A focus on jobs and the economy also presents a forum to enumerate the billions of dollars in new economic activities that come to communities with ethanol production facilities.



## 2011 Ethanol Agenda

2011 will be a busy year for America’s ethanol industry. A host of issues will be addressed, including:

- Tax policy
- Commercialization of new technologies
- Expansion of infrastructure
- A new farm bill
- Greenhouse gas regulation
- Market expansion

# Congress

## A Look into the Obama Administration

Many are predicting that President Obama will make changes in his Cabinet as we begin the third year of his Administration. Even so, the consensus is this Administration's support for domestic ethanol production and use will remain steadfast.

The RFA and the entire ethanol industry must and will remain engaged with the White House, the Department of Energy, the Environmental Protection Agency, and the Department of Agriculture to help inform policy decisions and regulatory implementation. Issues such as the Renewable Fuel Standard, greenhouse gas emission regulation, loan guarantees for advanced and cellulosic ethanol technologies, and expanding the use of ethanol beyond current 10 percent limits will all be in play in the coming year.

## 2011 – Ethanol's Eye on Washington

Both on Capitol Hill and off, in Washington and state capitals around the country, the upcoming year promises to be very active from the ethanol industry's point of view. A bevy of issues will be debated and addressed. It will be incumbent upon the industry to invest the shoe leather needed to educate each and every member of Congress on important issues. The same holds true with regards to the Obama Administration where implementation of existing and new regulations will directly impact the bottom line for many ethanol producers.



### CONGRESSIONAL MAKEUP BY PARTY

#### House

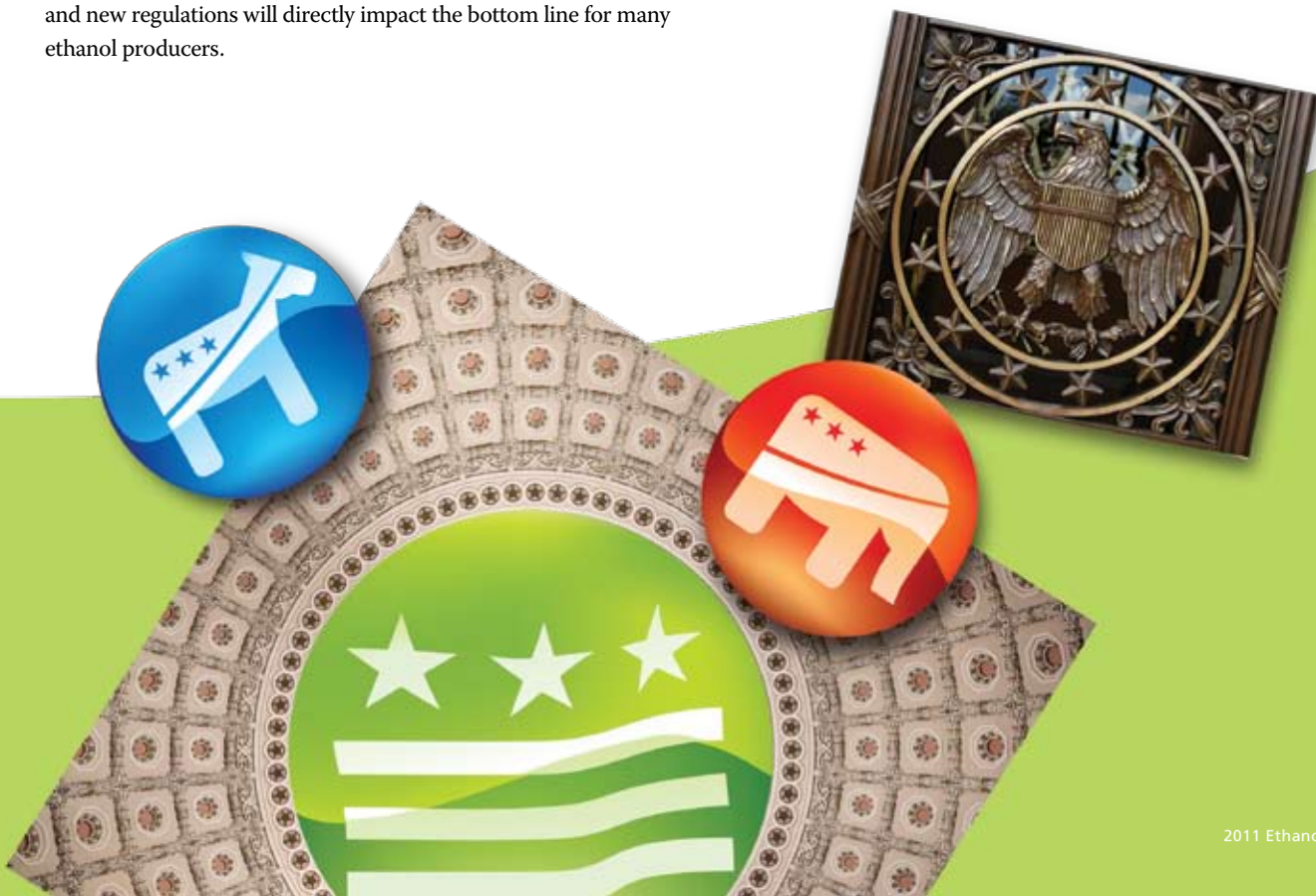


GOP +64  
Net Change

#### Senate



GOP +6  
Net Change



# Tying Together Fiscal Concerns

The defining issue in 2010 was extension of the critical tax incentives that have helped level the playing field for ethanol in a market nearly monopolized by petroleum. Specifically, the Volumetric Ethanol Excise Tax Credit (VEETC), which provides blenders of ethanol with a \$0.45 per gallon excise tax credit for each gallon of ethanol used, was extended for one more year. While this extension was critical, it sets the stage for yet another energy tax policy debate in 2011. The future success of both grain-based and cellulosic and advanced ethanol production will hinge in no small measure on whether thoughtful, responsible, and realistic policies that truly promote market access and technology commercialization – in good markets and bad – can be put into place.

## 21st Century Policy for a 21st Century Industry

Ensuring that America's ethanol industry – both current and developing technologies – remains the dynamic and innovative force it has been over the past decade is dependent upon responsible reforms of all energy tax policy. Every energy industry in the U.S. is supported in some part by preferential tax treatment and incentives from the federal government. True reform of ethanol tax policies can only come in the context of wide-ranging discussions of all forms of support for fossil fuel and renewable energies alike.

## Ethanol Debate Requires Context

Existing ethanol policies have been widely successful in building the world's largest renewable fuels industry. The centerpiece of that policy framework has been the market-based tax incentive – VEETC. It has helped spur the use of ethanol beyond what's needed to meet Clean Air Act and other requirements. It has encouraged the tens of thousands of small business owners that operate corner gas stations to invest in infrastructure to sell ethanol blends and allowed them to offer lower priced fuel to their customers.

The challenge facing ethanol today is more than market access, it is still largely about market economics. Any reform of current policies must work for ethanol producers and consumers when the market is up as well as when it is down.

If reform is to come to ethanol tax policy, it must do so as part of a much larger discussion shedding light on the hundreds of billions of dollars of federal support all forms of energy receive. Oil, natural gas, coal, nuclear – all have benefited from tax or other incentives. Many of these subsidies have lasted much longer than those for ethanol. All totaled, the incentives for ethanol pale in comparison

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## What is VEETC?

VEETC is a \$0.45 per gallon tax credit available for each gallon of ethanol gasoline blenders and marketers use regardless of the ethanol's origin. It is applied against the federal excise tax on gasoline, thus reducing the price for consumers at the pump. As a tax credit, it is not an appropriated sum of money that can be allocated for other

# with Progressive Policy

to the estimated \$280 billion-a-year in federal subsidies for the highly lucrative petroleum industry that resulted in oil's virtual monopoly over the U.S. transportation fuel market.<sup>1</sup>

Advocates of reform must consider why current policies have been successful. VEETC has allowed gasoline marketers to reduce their tax burden and subsequently reduce the price for consumers at the pump. Those that would advocate simply shifting money from this program to another one must recognize that no pot of money exists to be shifted. Because it is a tax credit and not an earmark, VEETC has operated seamlessly from year to year and not required an appropriation from Congress. Any potential reform should appreciate the practicality and efficacy of a market-based policy to spur demand as well as drive investment in increased ethanol fueling infrastructure.

Additionally, any reform must be careful to both provide for the continued expansion of the existing ethanol industry and the commercialization of advanced and cellulosic ethanol technologies. Incentives that are feedstock and technology neutral and that value reducing carbon emissions must be considered.

## A Bridge to the Future

Those who have been critical of ethanol in the past should take a fresh and objective look at the industry today. Those within the industry should be willing to work with our critics to understand their concerns. Just as maintaining the status quo should not be an option, neither should simply allowing the ethanol industry to wither on the vine, leaving a void in the market that can only be filled by increased and significantly more costly oil imports. That of course is neither fiscally responsible nor environmentally sustainable.

uses. It is accompanied by an offsetting secondary tariff on imported ethanol to recover the value of VEETC. As foreign ethanol is treated equally under this tax provision as domestic ethanol, the tariff protects American taxpayers from having to subsidize foreign ethanol production.

*The most pressing issue is developing a roadmap for the future deployment of ethanol after 2011. The extensions have given the industry a year to create a plan, generate support, and implement it. We need to focus on higher ethanol blends and the infrastructure to deliver them.*

In Their  
WORDS

Mike Jerke, General Manager, Chippewa Valley Ethanol Company and RFA Board Member



**"With more research and incentives, we can break our dependence on oil with biofuels... We need to get behind this innovation. And to help pay for it, I'm asking Congress to eliminate the billions in taxpayer dollars we currently give to oil companies. I don't know if you've noticed, but they're doing just fine on their own. So instead of subsidizing yesterday's energy, let's invest in tomorrow's."**

**President Barack Obama**  
*State of the Union Speech*  
January 25, 2011

[1] Calculated by DTN/Progressive Farmer.

# Spanning the Range of Ethanol

To provide enough market capacity to allow for 36 billion gallons of renewable fuel in 2022, America needs to move beyond current artificial limits on ethanol blending. That means allowing for the use of blends above 10 percent ethanol (E10) for all vehicles, expanding the fleet of flex-fuel vehicles (FFVs) able to use up to 85 percent ethanol (E85), and ensuring the infrastructure exists to dispense these fuels. To achieve the goals of the Renewable Fuel Standard (RFS), the nation will need more than 25 percent of the gasoline market to be comprised of renewable fuels.

## E15 Split Decision

In October 2010, the Environmental Protection Agency (EPA) approved the use of 15 percent ethanol (E15) in gasoline for cars and light duty trucks made in model year 2007 and later. In January 2011, EPA expanded upon that decision to include cars, pickups and SUVs made in model years 2001 through 2006. All told, that encompasses approximately 62 percent of all light duty vehicles on the road today.

However, EPA has no immediate plans to review the efficacy of E15 for vehicles older than model year 2001, despite the fact most of these vehicles have outlived EPA's definition of a useful life. An engineering analysis of vehicles from 1994-2000 done by automotive engineering firm Ricardo Inc. concluded "that the adoption and use of E15 in the motor vehicle fleet from the studied model years should not adversely affect these vehicles... or cause them to perform in a sub-optimal manner when compared with their performance using the E10 blend that is currently available."

EPA's decisions have been met with muted enthusiasm from ethanol interests and outright hostility from automakers, oil companies, and engine makers to name a few. Currently, no fewer than three separate lawsuits have been filed to stop EPA's partial waiver from moving forward.

Despite the confusion caused by the split decision and pending litigation, work remains to ensure higher levels of ethanol, including E15, can be sold. Namely, concerns over proposed labeling language, health effects testing of E15 blends, state fuel regulations, and apprehension from gasoline retailers and automakers must all be addressed to see meaningful volumes of E15 available in the market.



# Blends

## The E15 Checklist ✓

### E15 Label

As part of the requirement of the partial waiver, EPA is creating a label to inform consumers which vehicles can use E15. The RFA has vigorously participated in the process, working with industry partners and gasoline marketers to ensure EPA's label is neither unnecessarily alarming nor misleading. The RFA has submitted comments to EPA and proposed the label seen on this page.

### EPA Fuel Registration

The RFA is working with Growth Energy to develop the necessary health effects data to register E15 as a legal fuel.

### State Regulations

As with E10 blends, the RFA is working with state regulators to properly adjust various fuel regulations to allow for the legal sale of E15 blends.

### Point-of-Sale

Beyond working to develop an appropriate label, the RFA is working with retailers to address concerns over misfueling, E15 storage and other issues. Namely, the RFA worked with the Society of Independent Gasoline Marketers of America (SIGMA), the Petroleum Marketers Association of America (PMAA), and other fuel marketers to introduce the Renewable Fuels Marketing Act in the 111th Congress. The bill would provide a checklist for compliance to satisfy concerns of insurance companies covering gasoline retailers that all proper precautions and safety measures are in place. The RFA will look to get the legislation reintroduced in the 112th Congress.

## Beyond the Blend Wall

A wide variety of ethanol blends will be required to satisfy the demands of the RFS. E15 is just a start. Currently, testing is ongoing into the efficacy of 20 percent ethanol blends (E20) for use in conventional vehicles. Simultaneously, efforts to expand ethanol dispensing infrastructure are under way.

To this end, the RFA is supporting efforts by the U.S. Department of Agriculture (USDA) to install 10,000 blender pumps over the next five years. Additionally, the RFA is working with lawmakers to craft responsible policy that properly incentivizes both blender pump infrastructure and the production of vehicles like FFVs capable of using high level ethanol blends.



RFA Proposed Label

**E15**  
(15% Ethanol Maximum)

Use only in:

- 2001 & Newer Cars and Light-Duty Trucks
- 2001 & Newer Medium-Duty Passenger Vehicles (SUVs)
- All Flex-Fuel Vehicles (FFVs)

Federal law prohibits the use of this fuel in other vehicles and engines.

EPA Proposed Label

**CAUTION!**

This fuel contains 15% ethanol maximum

Use only in:

- 2007 and newer gasoline cars
- 2007 and newer light-duty trucks
- Flex-fuel vehicles

This fuel might damage other vehicles. Federal law prohibits its use in other vehicles and engines.

# Traversing the Environmental

**There is no fuel available at scale today that can match ethanol's ability to improve overall environmental quality compared to gasoline. From its biodegradable nature to reductions in greenhouse gas emissions and tailpipe pollution, ethanol provides a tool to address environmental concerns without requiring an entirely new way for goods and people to get from one place to another.**

## Unparalleled Environmental Gains

The use of an increasing amount of ethanol in American gasoline supplies is making the air we all breathe much cleaner. Using the GREET model developed by the U.S. Department of Energy's Argonne National Laboratory, 13 billion gallons of production and use last year helped reduce greenhouse gas (GHG) emissions from on-road vehicles by 21.9 million tons. That is equivalent to removing 3.5 million cars and pickups entirely from the road.

Ethanol reduces greenhouse gas emissions through the uptake of carbon dioxide (CO<sub>2</sub>) during the growth of ethanol feedstocks. Independent analyses comparing ethanol and gasoline show ethanol reduces GHG emissions from 30-50 percent, depending upon technologies and factors considered. A study published in Yale University's Journal of Industrial Ecology found that GHG emissions from ethanol produced at modern dry-mill facilities are "...equivalent to a 48 percent to 59 percent reduction compared to gasoline, a twofold to threefold greater reduction than reported in previous studies."

Ethanol production is also becoming more efficient, requiring fewer energy inputs while yielding more ethanol. According to May 2010 research on ethanol production resource requirements in 2008 from the University of Illinois at Chicago, energy requirements for ethanol production have decreased 28 percent since 2001, electricity demands by 32 percent, and water use is down to 2.72 gallons per gallon of ethanol production. All of these improvements were achieved while improving ethanol yields by 5.3 percent.

Naturally, ethanol also requires far less fossil fuel inputs than gasoline refining. According to the University of California at Berkeley, the production of 19 units of ethanol energy takes just one unit of petroleum energy. An analysis released by the U.S. Department of Agriculture in June 2010 concluded that one unit of fossil energy used in the corn ethanol production process results in 2.3 units of energy in the form of ethanol. In fact, it is gasoline and not ethanol that requires more energy to produce. Researchers at the Department of Energy's Argonne National Laboratory found that it takes 1.23 units of fossil energy to produce one unit of energy in the form of gasoline.

## Hot Topics for 2011

Environmental issues will continue to be front and center this year. Implementation of the RFS based upon its GHG emissions requirement needs additional monitoring as the science behind EPA's determination of emissions continues to evolve while new regulations on the emissions from ethanol biorefineries seek to penalize ethanol production.

## ILUC Takes a Hit

A common criticism of environmental activists opposed to ethanol is the notion of indirect land use change (ILUC). This idea states that land used to grow corn for ethanol production in the U.S. requires new acres elsewhere in the world to be brought into production. The resulting "carbon belch" of that land conversion must be attributed to ethanol's lifecycle greenhouse gas accounting, as the theory goes. This theory originally took root in 2008 when environmental attorney Timothy Searchinger imagined that this carbon belch and the perceived emission of GHG through deforestation resulting from increased biofuel production was massive. Subsequently, carbon accounting policies both at the federal and state level sought to penalize ethanol with this yet-to-be-proven theory.

Now, with the benefit of time and improved scientific processes, those original doomsday predictions are being roundly disproven. New ILUC modeling results released by Purdue University in April 2010 reduced corn ethanol ILUC to about 15-18 grams of carbon dioxide (CO<sub>2</sub>) per mega joule (g/MJ), compared to Searchinger's original estimate of 104 g/MJ. Additionally, modeling done by Air Improvement Resource, Inc., the Department of Energy's Oak Ridge National Laboratory, and others suggest little if any additional land was needed domestically or internationally to support the recent growth in U.S. ethanol production, thus eliminating the penalty for ILUC. As ILUC calculations are integral to ethanol's lifecycle GHG emission profile as used by the RFS and in states such as California, these new findings demand a fresh look at ethanol's environmental benefits.

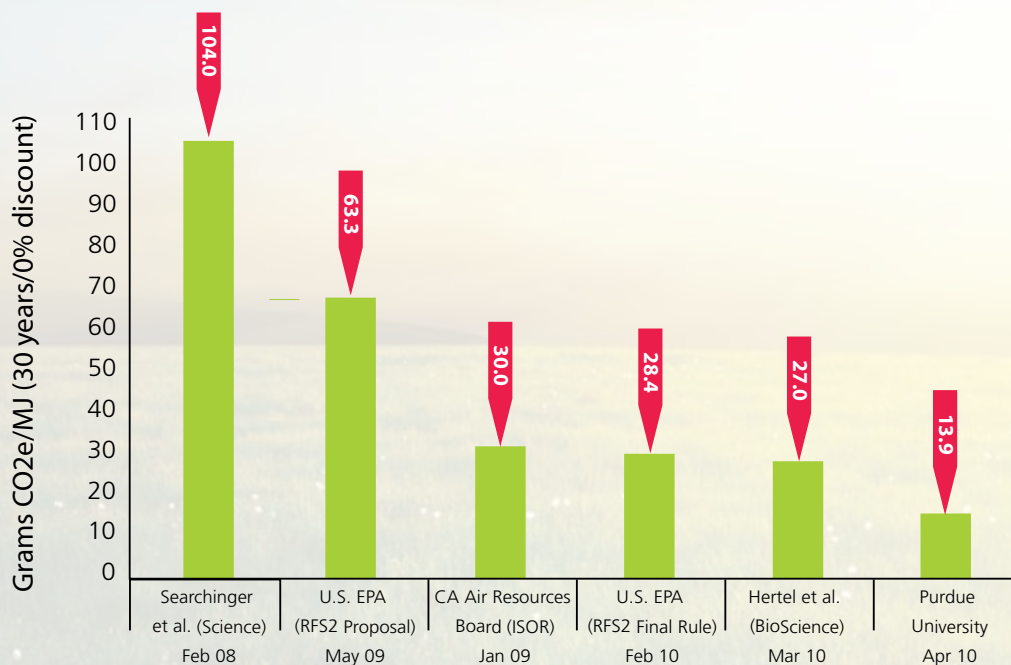
# Landscape

## Amazonian Deforestation Rates Fall

Analysis of satellite imagery by Brazil's National Institute for Space Research (INPE) demonstrates that deforestation rates in the Brazilian Amazon have fallen to their lowest levels since the government began keeping data in 1988. The destruction of rain forests is one of the chief criticisms of environmentalists opposed to ethanol production and use. Yet, as this data shows, deforestation rates are down 14 percent year over year while U.S. ethanol production rose more than 20 percent over the same period.



## CORN ETHANOL INDIRECT LAND USE CHANGE (ILUC) PUBLISHED ESTIMATES



Source: RFA

# Food and Fuel

**The ethanol industry continues to battle the “food vs. fuel” myth, although the debate is losing its intellectual foundation. Several new independent studies on the role of ethanol in the food price spike of 2008 confirmed the industry’s charge that ethanol production plays a marginal role in determining food prices.**

A March 2010 report by the United Kingdom’s Department for Environment, Food and Rural Affairs found that, “available evidence suggests that biofuels had a relatively small contribution to the 2008 spike in agricultural commodity prices.” Even the World Bank, which in 2008 suggested biofuels was playing a large role in higher food prices, released an analysis in July 2010 that found “...the effect of biofuels on food prices has not been as large as originally thought...” and that “...the use of commodities by financial investors may have been partly responsible for the 2007-08 spike.”

The U.K. and World Bank reports confirmed the findings of a 2009 Congressional Budget Office analysis that found “...from April 2007 to April 2008, the rise in the price of corn resulting from expanded production of ethanol contributed between 0.5 and 0.8 percentage points of the 5.1 percent increase in food prices measured by the Consumer Price Index (CPI). Over the same period, certain other factors—for example, higher energy costs—had a greater effect on food prices than did the use of ethanol as a motor fuel.”

If any more evidence of ethanol’s trivial impact on food prices is needed, one needs only to consider that the CPI for food was projected to increase just 0.5-1.5 percent in 2010—the lowest annual food inflation rate since 1992. Even as ethanol production is set to reach record levels in 2011, USDA’s forecast for 2011 food inflation is 2 to 3 percent, compared to the more normal rate of 3 to 4 percent.

## Off to the Races in 2011

The food and fuel debate has plagued American ethanol production from the beginning. While the facts clearly demonstrate the marginal role of ethanol production in food prices, the recent rise in all commodity prices will undoubtedly refuel the inflammatory rhetoric that was rampant in the summer of 2008 as corn prices followed oil prices to record highs.

According to some predictions, corn prices could approach the non-inflation adjusted highs seen in 2008. Like then, oil prices are also expected to rise to \$100 or more per barrel. Such an environment is fertile ground for speculators, as the World Bank noted when it revisited the 2008 commodity bubble.

Much of the speculation is being fueled by a perceived shortage in global grain supplies. Farmers base their planting decisions on price signals from the marketplace. Higher world prices for corn resulting in part from lower-than-expected 2010 production in the United States and elsewhere will lead farmers in other parts of the world to plant more corn instead of other less profitable crops.

Further, U.S. farmers have a history of responding quickly to market signals by adjusting acreage and switching crops to best capitalize on current and expected prices. As an example, a short corn crop in 1995 caused prices to spike and left ending stocks at just 426 million bushels. Farmers responded the next year by increasing corn acres by 11 percent and boosting total production by 25 percent.

More recently, farmers increased corn acreage by some 15 million acres in 2007 in response to demand and price signals. The 19 percent increase in corn acreage and 24 percent increase in production in 2007 clearly demonstrate the ability of farmers to react swiftly to changes in the marketplace.

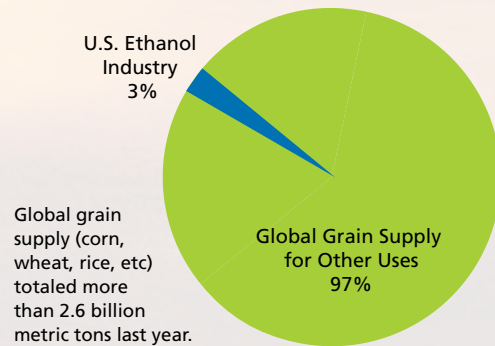
Hopefully, the lessons learned from the rush to judgment about the causes of the 2007/08 food price escalation will lead media and policymakers to take a more careful and measured approach to discussions of the current grain market situation and the role of biofuels.



The impact of U.S. ethanol production on world grain supplies is minimal. U.S. ethanol production accounts for just 3 percent on a net basis of the second-largest global grain supply in history - 2.6 billion metric tons. That means 97 percent of all the grain produced in the world is available for other uses. In the U.S., where ethanol demand for corn has grown, so too has the production of livestock feed from ethanol biorefineries. As the chart below points out, DDGS are becoming a growing source of feed for domestic use and for export.



## U.S. ETHANOL'S INDUSTRY SHARE OF GLOBAL GRAIN SUPPLY\*

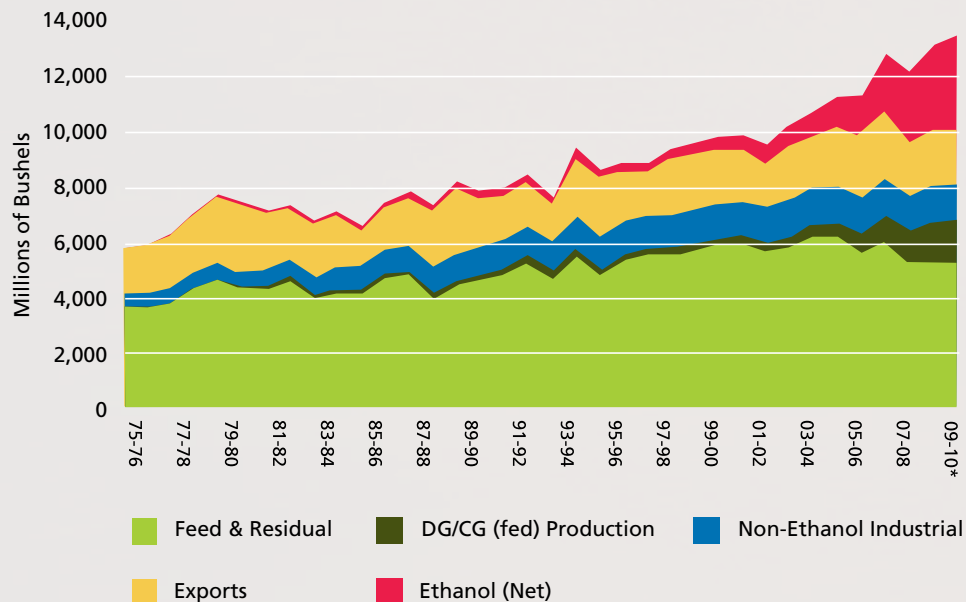


Source: USDA and RFA

\*Estimated



## U.S. CORN USE BY SEGMENT



Source: USDA

\*Estimated

# Connecting World Markets with

While domestic challenges consumed much of the debate around ethanol in 2010, advancements in the global market for ethanol showed promise for establishing a true world trade in renewable fuels.

## Surging Global Production Matched by Growing Demand

On the back of greater than anticipated ethanol production in the U.S., global production of ethanol grew nearly 15 percent in 2010 to 22.9 billion gallons. Leading ethanol producers in the U.S., Brazil, Canada, and Europe saw increases in ethanol production reflective of the growing appetite for renewable fuels.

Perhaps even more representative is the growth seen in trade of ethanol, particularly in exports of ethanol from the U.S. Long a net importer of ethanol, the U.S. reversed course in 2010 by sending a record of more than 350 million gallons of denatured and undenatured ethanol to overseas markets.

As previously noted, this surge in ethanol exports was mirrored by increases in exports of distillers grains. A record of nearly 9 million metric tons of this high value livestock feed were exported in 2010, with much of the product headed for markets in Asia and Europe.

## Barriers to a Global Market

Expanding industries are bound to experience coinciding growing pains, and the global ethanol industry is no exception. While production and demand grow, so does the spotlight on trade policies in various regions.

One issue that has received repeated attention over the years is the charge by Brazil that the U.S. tariff on imported ethanol blocks the trade of ethanol between the two nations. Frustrated that they were unable to manipulate U.S. policy to meet their goals, the Brazilians are threatening action in the World Trade Organization. However, as has always been the case, Brazil or any other potential importer of ethanol to the U.S. are beneficiaries of the tax credit known as VEETC. Because VEETC is applied equally to all gallons of ethanol regardless of origin, Congress imposed a secondary tariff to recapture the value of VEETC and

### 2010 GLOBAL ETHANOL PRODUCTION (millions of gallons)\*

Continent	Africa	Asia	Australia	Europe	North and Central America	Oceania	South America
2010	43.59	785.91	66.04	1,208.58	13,720.99	66.04	7,121.76

Source: F.O. Lichts

Nation	Brazil	Canada	China	European Union
2010	6,921.54	356.63	541.55	1,176.88

\*Estimated



# Ethanol

prevent American taxpayers from further subsidizing ethanol industries that already receive handsome government support in their own countries.

A new issue has also arisen in the European Union (EU). Because of EU tariff schedules, ethanol blended with just 10 percent gasoline can be imported into the economic zone at a lower rate than traditional denatured or undenatured ethanol. Following the recent rise in exports to Europe, EU officials have charged that American ethanol tax policy is encouraging further use of this tariff loophole through such trade. However, imports of ethanol with the additional gasoline blending have been entering EU markets and paying the lower

tariff for years. While the complaints of the European ethanol industry are understandable, their angst is misguided. This issue is largely one of EU tariff policy and not U.S. tax policy.

Finally, and most recently, China announced that it would be conducting an investigation into an antidumping claim lodged by Chinese ethanol and dry distillers grains (DDGs) producers regarding the exports of U.S. dry distillers grains. China claims that alleged DDGs dumping into the country's livestock markets is presenting unfair competition to China's own ethanol producers who cannot produce DDGs as cheaply. The U.S. ethanol industry strongly disputes China's antidumping claims and is confident that the results of the investigation will render the complaint moot.

## HISTORIC U.S. ETHANOL IMPORTS (millions of gallons)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
MGY	45.5	60.9	159.9	135.5	653.3	435.2	600.0	193.7	10.0*

## HISTORIC U.S. ETHANOL EXPORTS (Denatured and Undenatured, Non-Beverage, in millions of gallons)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
MGY	46.8	63.4	47.3	62.7	36.8	150.2	157.7	113.3	350.0*

Source: International Trade Commission, RFA

\*Estimated



# RFA Behind the Scenes

Much of the work that is needed to allow American ethanol production to grow and evolve is done out of the spotlight and without fanfare. Whether it is dealing with specifications for various substances in ethanol measured in parts per million, expanding markets for all products of ethanol production, or providing the necessary information for the safe operation and transport of ethanol, the success of the industry is as much a function of quality technical expertise as it is policy development.

## The Devil is in the Details

For the past 30 years, the RFA has been and remains the unchallenged expert on the critical technical issues that are the difference between the smooth integration of ethanol into the nation's fuel mix and failure to access the marketplace. RFA's Technical Committee, comprised of leading experts within the ethanol industry, actively engages international, national, and state level regulatory and standard-setting agencies to develop specifications that allow for the maximum amount of ethanol use in the marketplace. The work of the Technical Committee has been instrumental in opening new markets to ethanol blends and setting standards within ASTM and other bodies that allow for the seamless integration of ethanol into gasoline products coast to coast.

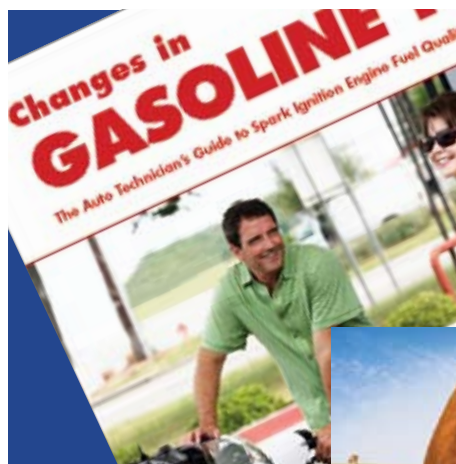
In 2011, the expertise of Technical Committee members will be instrumental in addressing the ongoing decisions of EPA regarding the use of E15 and other higher level ethanol blends in motor vehicles. Additionally, committee members will be engaged with federal and state regulators to amend current fuel regulations to allow for the widespread availability of E15.

The work of the Technical Committee with regard to fuel specifications and the proper use of ethanol blends can be found in the *Changes In Gasoline Manual: Fourth Edition*. This resource has become the definitive reference for auto technicians, engine repair shops, and fuel distributors. The full manual is available for free at [www.EthanolRFA.org](http://www.EthanolRFA.org).

In short, the ability of domestically-produced ethanol from all feedstocks to capture more market share and fulfill the goals set forth by the Renewable Fuel Standard is in no small measure dependent upon successful outcomes to the many technical issues regarding fuel ethanol.

## More than Fuel

The importance of distillers grains and other feed co-products provided by American ethanol producers has never been more prominent. As domestic livestock and poultry producers research new and increased uses for DDGs and global trading partners discover the value of this product, the quality and reliability of the DDGs produced is paramount. The RFA's Co-products Committee has stayed fully abreast of all the issues regarding the trade and use of DDGs. Members of the committee routinely interact with our trading partners and other groups, such as the U.S. Grains Council and the National Corn Growers Association, to appropriately address any issues that may arise as well as capitalize on new markets and opportunities for the use of DDGs.



## Safety First

The safety of employees within the ethanol industry and our neighbors in the communities in which the ethanol industry operates is priority number one. The Ethanol Emergency Response Coalition (EERC, [www.ethanolresponse.com](http://www.ethanolresponse.com)), a coalition of both industry and government representatives and led by the RFA Plant and Employee Safety Committee, provides detailed and up to date training materials to first responders to educate them about techniques and tools that are most effective in responding to ethanol-related incidents. The EERC's flagship resource, the *Complete Training Guide to Ethanol Emergency Response*, has been distributed to more than 3,000 personnel all across the world and is continually updated to offer the most accurate information available.

In addition to emergency response, the RFA Safety Committee also provides industry best practices focused squarely on the safety of employees and neighbors. The Safety Committee monitors new regulations from federal and state safety bodies such as the Occupational Safety and Health Administration (OSHA) and the U.S. Department of Transportation and provides ethanol biorefineries with recommended practices to ensure the safety of all employees. From combustible dust regulations to improved accident frequency rates, the RFA Plant and Employee Safety Committee's mission is continuous improvement.



## Staying in Compliance

The RFA Environmental Compliance Committee has put a priority on protecting the environment while providing a forum for navigating the complex environmental regulations imposed on ethanol production facilities. EPA's Greenhouse Gas Tailoring Rule, Mandatory Greenhouse Gas Reporting requirements and Industrial Wastewater regulations are all topics leading the agenda of this committee.



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*The RFA's value to the industry stretches far beyond Washington. Whether it's fuel regulations, product quality improvements, implementation of federal regulations, or keeping employees and our communities safe, the technical information the RFA provides is invaluable to operating an ethanol plant and meeting the needs of our customers. The technical expertise of the RFA staff is second to none.*

In Their  
WORDS

Chuck Woodside, CEO of KAAPA Ethanol  
and RFA Chairman of the Board

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# Building Awareness, Driving

Ethanol is a high-octane, cleaner-burning, and cheaper alternative to imported oil for fueling America's vehicle fleet. The production of ethanol is providing economic opportunity for tens of thousands of Americans, particularly those living in rural areas. Telling consumers the benefits of ethanol, and more importantly where they can buy it, is vital to ensuring the policies enacted are successful.

## Pedal to the Metal in 2011

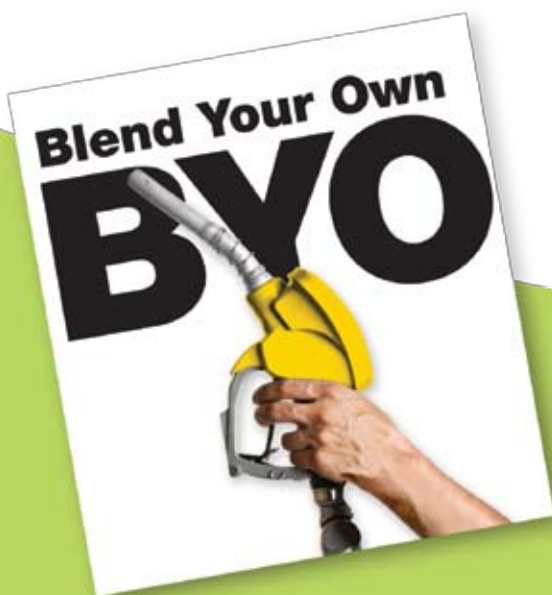
The RFA Market Development Team has partnered with the American Coalition for Ethanol (ACE), the National Corn Growers Association (NCGA), and 12 state corn grower associations to educate gasoline marketers and retailers about the use of mid-level ethanol blends (MLEBs) and the blender pumps needed to dispense them. Begun in 2009, the Blend Your Own (BYO) Ethanol campaign has worked tirelessly to lay the groundwork for extensive installation of blender pumps. With certification from Underwriters Laboratories (UL) of several blender pump models, the marketplace now has access to both the technology and the information to install, offer, and market MLEBs to the American driver.

To date, the BYO campaign has contacted tens of thousands of retailers, provided thousands of sales kits, and participated in dozens of leading petroleum industry meetings all across the country. More information about the campaign and access to blender pump information is available at [www.BYOethanol.com](http://www.BYOethanol.com).

## Giving Consumers Choice

Outside the mission of the BYO Ethanol campaign, the RFA's Market Development team is focused on identifying opportunities to assist gasoline retailers in offering MLEBs, up to E85. Seeking out markets with high concentrations of flex-fuel vehicles (FFVs) capable of using higher ethanol blends, the Market Development team has partnered with fuel providers like Protec and pump providers like Gilbarco to put blender pumps and E85 pumps in locations all across the country.

One notable success of the RFA's marketing efforts is the adoption of E85 by a growing number of military installations across the country. Government fleets, including military vehicles, must give preference to alternative fuels where available. The problem has been a lack of availability of E85 for the tens of thousands of military FFVs. An example of this expansion is the installation of an E85 pump at the front gate of the Norfolk Naval Air Station in Norfolk, Virginia. There are more than 10,000 FFVs near the Naval Station that previously had no access to E85.



# Demand

## Different Strokes for Different Folks

The American consuming public is not homogenous. Different approaches and creative thinking are required to bring ethanol's message to a diverse consuming public. What works with lawmakers on Capitol Hill may not speak to mothers in suburban Atlanta. Ethanol's economic benefits are of interest to farmers in Nebraska, but ethanol's performance is what will move motorcycle enthusiasts in Sturgis, South Dakota. Recognizing these differences, the RFA has engaged in a wide variety of marketing initiatives to engage, inform, and ultimately motivate millions of Americans to choose ethanol.

## ChooseEthanol.com

Driving RFA's consumer marketing is the website [www.ChooseEthanol.com](http://www.ChooseEthanol.com). The site contains simple information about American ethanol, a listing of FFVs to help consumers identify if they are driving one, and tools to help drivers find ethanol fueling locations in their neighborhoods.

## There's an App for That

On the cutting edge of technology, the RFA has launched several applications for mobile devices – smartphones, iPhones, iPads – to help consumers locate E85 fueling locations. These apps use GPS technology to alert drivers to gas stations near them offering ethanol blends. Directions to download and install these apps are available on [www.ChooseEthanol.com](http://www.ChooseEthanol.com). Additionally, programming for GPS devices such as the Garmin and TomTom is also available for download.

## All About Alternatives

The RFA recognizes that America will need a host of renewable energy choices to end our addiction to oil. After securing a two-year Department of Energy grant in 2009, the RFA is working with the biodiesel, natural gas, and propane industries on a national education effort. Partnering with Clean Cities coordinators in major metropolitan areas across the country, this effort seeks to educate those making fueling infrastructure decisions about the merits of these various alternative fuels. The program consists of in-person training and online webinars to provide up-to-date information on all fuel technologies. The program will continue in 2011.



# The RFA at 30

Since 1981, the Renewable Fuels Association has been the unparalleled voice of American ethanol in Washington and around the world. The RFA and its members have been at the center of every successful policy fight and market initiative that has meaningfully expanded ethanol production and use. No fewer than five times has the RFA and its members successfully convinced Congress to extend key tax incentives for ethanol use, including the unlikely extension at the end of the year in 2010. The RFA and its members were a driving force helping to establish the first Renewable Fuel Standard (RFS) in 2005. And, it was the RFA and its members that led the push to expand the RFS 500 percent just two years later.

The expertise of the RFA and its members is not limited to Capitol Hill. For 30 years, the RFA has been the authoritative voice on the technical issues that determine the size of ethanol's market share. The RFA has worked with regulators to implement amendments to the Clean Air Act (CAA) in the 1990s that expanded ethanol's position in major markets seeking to come into compliance with CAA requirements. The RFA has also led efforts to amend state regulations to allow for the use of E10 and continues those efforts in advance of the introduction of E15.

The ability of the RFA's staff to be successful is derived from the commitment of its members to the mission of the association. The RFA has been able to advocate on behalf of American ethanol production because those who actually produced the fuel supported the RFA and the industry.

As the industry moves forward, the RFA will continue to advocate on its behalf to enact policies and meaningfully expand the market for all ethanol producers regardless of feedstock.

## RFA Staff

### Washington D.C. Office

Cara Barrett	<i>Administrative Assistant</i>
Bob Dinneen	<i>President &amp; CEO</i>
Mary Giglio	<i>Director, Special Projects and Events</i>
Matt Hartwig	<i>Director of Public Affairs</i>
Edward S. Hubbard, Jr., Esq.	<i>Legislative Counsel</i>
Christina Martin	<i>Executive Vice President</i>
Taryn Morgan	<i>Communications Specialist</i>
Alex Obuchowski	<i>Chief Financial Officer</i>
Anne Rhine	<i>Office Manager</i>
Samantha Slater	<i>Vice President, Government Affairs</i>
Matt Stuckey	<i>IT Director</i>

### St. Louis Office

Geoff Cooper	<i>Vice President, Research and Analysis</i>
Ann Lewis	<i>Project Manager</i>
Kristy Moore	<i>Director, Technical Services</i>

### Omaha Office

Taylor Irish	<i>Marketing Coordinator</i>
Randy Klein	<i>Director of Membership</i>
Jen Kracher	<i>Administrative Assistant</i>
Missy Ruff	<i>Market Development Manager</i>
Robert White	<i>Director of Market Development</i>



## Membership

RFA membership includes a broad cross-section of businesses and organizations dedicated to the expansion of the U.S. fuel ethanol industry.

### Supporting Members enjoy:

- Participation in Annual Membership meeting
- Industry alerts and issue briefs
- Access to Association publications and educational materials
- Reduced registration fee for National Ethanol Conference

### Prospective Producer and Associate Members enjoy all benefits of Supporting Members and additionally:

- Weekly updates on regulatory, legislative, research and technical market development and communication issues.
- Provide input on RFA policy, activities and priorities through attendance at Annual Membership meeting
- Networking opportunities with producer members
- Link on RFA web site
- Access to Member Center section of RFA web site
- Committee participation

### Producer Members receive all benefits of Prospective Producers, Associate and Supporting Members, while also enjoying unique benefits including:

- Voting member of the RFA Board of Directors
- Participation in Association meetings and the development of policies
- Eligible to serve as a member of the Association's Executive Committee
- Timely and accurate legislative and regulatory updates, alerts and issue briefs
- State legislative activity summary
- Industry reports and studies

## RFA Committees

Within the association, the RFA has a host of committees that address issues ranging from blending and performance standards to safety concerns to the development of cellulosic ethanol technology. The committees include:

Technical Committee

Environmental Compliance Committee

Cellulose Committee

Co-Products Committee

Plant & Employee Safety Committee



The Renewable Fuels Foundation (RFF) is dedicated to meeting the education, research and strategic planning needs of the U.S. fuel ethanol industry.

The goal of the RFF is to assure a growing and healthy renewable fuels industry well into the future. The focus of the RFF is toward academia, industry and public policy makers as we address issues related to new uses, new feedstocks and new technologies that will impact the future of ethanol. More information on the RFF is available at [www.renewablefuels-foundation.org](http://www.renewablefuels-foundation.org).

### RFF Officers

Mike Jerke  
*Chairman*  
*Chippewa Valley Ethanol Company*

Bob Sather  
*Vice Chairman*  
*Ace Ethanol, LLC*

Mick Henderson  
*Treasurer*  
*Commonwealth Agri-Energy, LLC*

Steve Gardner  
*Secretary*  
*East Kansas Agri-Energy, LLC*

## Prospective Producer Members

**BioEnergy International, LLC** [www.bioenergyllc.com](http://www.bioenergyllc.com)  
**BioFuel Energy, LLC** [www.bfenergy.com](http://www.bfenergy.com)  
**BlueFire Ethanol, Inc.** [www.bluefireethanol.com](http://www.bluefireethanol.com)  
**Bunge North America** [www.bungenorthamerica.com](http://www.bungenorthamerica.com)  
**Corn, LP** [www.cornlp.com](http://www.cornlp.com)  
**DuPont Danisco Cellulosic Ethanol** [www.ddce.com](http://www.ddce.com)  
**First United Ethanol, LLC** [www.firstunitedethanol.com](http://www.firstunitedethanol.com)  
**Heron Lake BioEnergy, LLC** [www.heronlakebioenergy.com](http://www.heronlakebioenergy.com)  
**INEOS New Planet BioEnergy, LLC** [www.inpbioenergy.com](http://www.inpbioenergy.com)  
**Iogen Corp.** [www.iogen.ca](http://www.iogen.ca)  
**Osage Bio Energy** [www.osagebioenergy.com](http://www.osagebioenergy.com)  
**Penford Products Company** [www.penfordproducts.com](http://www.penfordproducts.com)  
**Permolux International, LP** [www.permolux.com](http://www.permolux.com)  
**Range Fuels, Inc.** [www.rangefuels.com](http://www.rangefuels.com)  
**Renewable Energy Technologies, LLC**  
**SWI Energy, LLC**  
**Taunton Regional Solid Waste Management Facility**  
**Verenium Corp.** [www.verenium.com](http://www.verenium.com)  
**ZeaChem, Inc.** [www.zeachem.com](http://www.zeachem.com)

## Associate Members

**AgCountry Farm Credit Services** [www.agcountry.com](http://www.agcountry.com)  
**AGRA Industries, Inc.** [www.agraind.com](http://www.agraind.com)  
**AgStar Financial Services** [www.agstar.com](http://www.agstar.com)  
**Alfa Laval, Inc.** [www.alfalaval.com](http://www.alfalaval.com)  
**Arisdyne Systems, Inc.** [www.arisdyn.com](http://www.arisdyn.com)  
**Barr Engineering Company** [www.barr.com](http://www.barr.com)  
**BBI International** [www.bbibiobiofuels.com](http://www.bbibiobiofuels.com)  
**BetaTec Hop Products, A Division of John I Haas, Inc.**  
[www.betatechopproducts.com](http://www.betatechopproducts.com)  
**Biofields S.A.P.I de C.V.** [www.biofields.com](http://www.biofields.com)  
**BrownWinick** [www.brownwinick.com](http://www.brownwinick.com)  
**Carl Marks Advisory Group** [www.carlmarks.com](http://www.carlmarks.com)  
**Ceres, Inc.** [www.ceres.net](http://www.ceres.net)  
**CF Industries** [www.cfindustries.com](http://www.cfindustries.com)  
**CH2M Hill** [www.ch2m.com](http://www.ch2m.com)

**Christianson & Associates, PLLP** [www.christiansoncpa.com](http://www.christiansoncpa.com)  
**CHS Inc.** [www.chsinc.com](http://www.chsinc.com)  
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