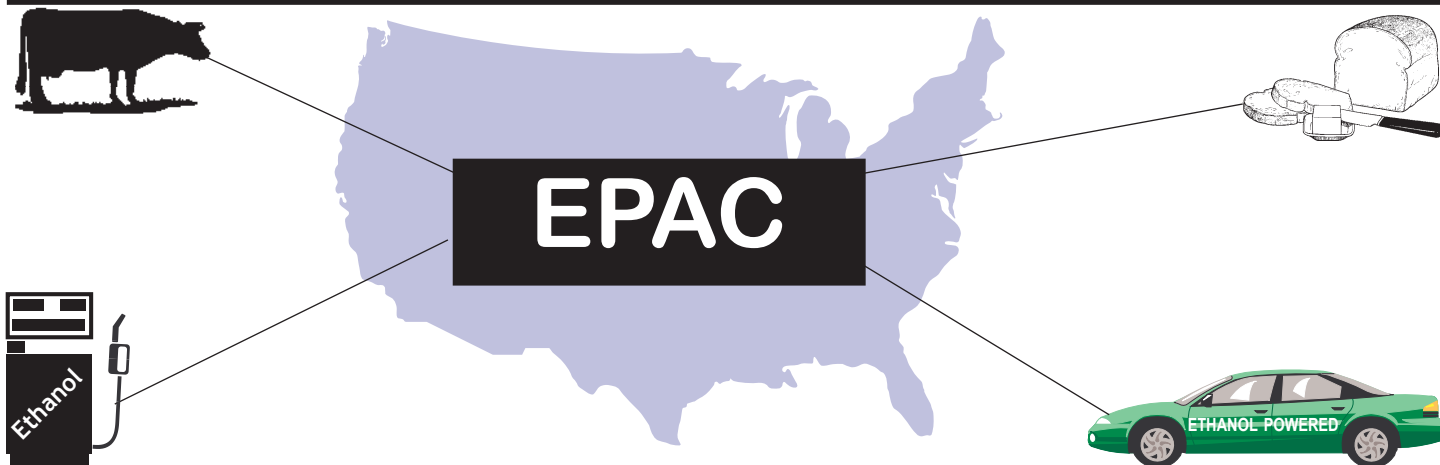


Ethanol Producers And Consumers



This newsletter is sent to members, contributors and sponsors of EPAC.

Ethanol Producers And Consumers (EPAC) is a non profit organization with members throughout the nation who support the production and use of Ethanol as a clean, renewable energy resource. **Volume 17, Number 5: EPAC March/April 2008**
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EXPLORE ETHANOL WORKSHOP AND BUS TOUR

by: Pam Dzick, EPAC Administrative Assistant

Ethanol Producers and Consumers (EPAC) with cooperating partners Eastern Plains RC&D-Sidney, Montana and Dawson Community College-Glendive, Montana conducted a two-day educational and informational Ethanol workshop and bus tour January 28 and 29, 2008.

The workshop was attended by 25 men and women from Eastern Montana and Western North Dakota. Funded by a U.S. Department of Labor Workforce Innovation in Regional Economic Development (WIRED) grant from the Montana Department of Commerce in conjunction with the Montana Department of Labor. The tour included Red Trail Energy, LLC in Richardton, North Dakota, Bosserman's Dairy and Weinreis Feedlot in Golva, North Dakota, and Montola Oil Seed crushing facility in Culbertson, Montana.

Windchill temperatures dipped to 45-degrees below zero and colder, but the group was greeted with warm

... continued on page 2



Senator Frank Smith (front) listens as Mick Miller leads the bus group on a tour and explains the operation at the Red Trail Energy plant.

2008 EPAC CONFERENCE: GOING TO THE SUN

by: EPAC



The 18th annual EPAC conference will be held in Kalispell, Montana right next to Glacier National Park. Traversing the borders of Canada and the United States, Waterton Lakes-Glacier International Peace Park is a meeting of various habitats, land forms and weather systems. Because of this unique environment you will find a variety of plants, trees, wildflowers, bird life and other animals that you could not find in any one place.

Glacier National Park is the United States portion of the park. As the name implies, this is a rugged place that was dramatically formed by glaciers. Wildlife is abundant. Big-horn sheep, mountain goats, brown bears, deer, moose and elk are the larger animals within easy reach of a long lens and it is possible to see grizzly bears and wolves. Most of the park is wilderness.

... continued on page 3

AMERICA NEEDS MORE BIOFUEL

by: Dr. Robert Zubrin, *Billings Gazette*

In the growing firestorm of criticisms about Ethanol and other biofuels, the facts are being badly burned. Opponents decry policy incentives to encourage the industry's growth and make specious claims that American biofuels are driving up food prices and perhaps even encouraging the destruction of forests in other parts of the world. But no one is stopping to ask if any of it is true.

Let's start with the allegedly misbegotten incentives. The United States invests roughly \$3 billion a year through a 51-cent-per-gallon credit to promote the production and use of renewable fuels like Ethanol. The return on that investment? Taxpayers are saving approximately \$6 billion that would otherwise be spent on counter-cyclical crop price supports, plus an additional \$15 billion reduction in the country's petroleum import bill.

That is reason enough for anyone interested in America's prosperity or national security to support continued investment in biofuels. But that's really just the beginning.

Environmental benefit

Numerous well-documented studies have shown that by replacing oil with fuel made from biomass, America is reducing its net carbon dioxide emissions and thereby taking a bite out of global warming. That's why many environmental groups that might otherwise reflexively oppose the growth of a new industry support incentives to spur the development and use of Ethanol and other renewable fuels.

Yet the attacks continue. The claims that biofuel production in the United States might indirectly encourage rainforests to be cut down were published recently in the hallowed pages of the journal *Science*. The rabidly anti-Ethanol *Wall Street Journal* quickly piled on: "The ink is still moist on Capitol Hill's latest energy bill and, as if on cue, a scientific avalanche is demolishing its assumptions. To wit, trendy climate-change policies like Ethanol and other biofuels are actually worse for the environment than fossil fuels."

But it turns out that "scientific avalanche" is itself being demolished. The studies published in *Science* offered no new data to substantiate their claim of a causal connection between U.S. Ethanol and forest destruction - just a theoretical model that has since been roundly debunked by respected researchers from the U.S. Department of Energy's Argonne National Laboratory and Biomass Program.

Meanwhile, real-world data from the U.S. Department of Agriculture simultaneously belie claims that American Ethanol is causing arable land to be cleared elsewhere and food prices to rise.

Yields up, not acreage

In fact, the data shows that the total acreage devoted to corn in America is not projected to go up, but that annual corn yields are expected to rise steadily - from 155.3 bushels per acre this year to 173.3 bushels per acre in 2017. That helps explain why the USDA also projects that corn supplies

for export, feed and other nonbiofuel uses will hold steady even as Ethanol production expands.

Those steady corn supplies are just one reason you can't blame Ethanol for food price increases. The real drivers of consumer food price inflation, as the USDA or any reputable economist will attest, are nonfarm factors like labor costs, energy prices, transportation, packaging and marketing. In fact, all grains and other farm products, combined, account for just 19 cents of the consumer's food dollar.

If there is any problem with biofuels it is that America needs to produce more, not less, to put an end to the pick pocketing of our national purse by OPEC. This year, we will import 5 billion barrels of oil. At \$100 a barrel, that amounts to a \$500 billion tax that we pay directly to foreign petrotyrannies every year - a tribute three times the size of the economic stimulus package just passed by Congress. Think about that: What Congress is giving us to avert recession, OPEC is taking away - three times over.

We need to use renewable fuels as a tool to break the oil cartel - and we can. Congress should pass a bill mandating that all new cars sold in America must be flex-fuel vehicles that can run on any combination of gasoline, Ethanol or mEthanol. The technology is readily available, and it only costs about \$100 per vehicle.

By making America a flex-fuel market, we will effectively make flex-fuel the international standard.

Ethanol Workshop . . . continued from page 1

enthusiasm at each stop. First on the tour was Red Trail Energy, LLC, a working Ethanol production plant that has been in operation since January 2007. The plant employs 36 people with an annual payroll of \$1.5 million and produces 50 million gallons of Ethanol annually and is also a distributor of distiller grains, which is a co-product of Ethanol. Plant manager, Mick Miller conducted the tour as he described from inside the bus the components of the plant operation. Regardless of the winter conditions the group was anxious to see as much as possible up close, so when the bus reached the operations computer and research building the tour group braved the wind and went inside to see first hand the workings of the computer room and lab facility.

After an evening of networking, a good night's rest, and a welcomed warming up; the group was escorted the next day to Bosserman's Dairy and Weinreis Feedlot in Golva, North Dakota. These commercial feedlots use the high protein distiller grains to feed their livestock. The group saw the various growth stages and stage percentages of distillers grain that feed the dairy cows and livestock sold to market. After a quick lunch and greeting by the City of Beach Auditor, the bus left North Dakota and headed west to Montana's Montola oil seed processing facility in Culbertson. This locally-owned and operated facility produces high quality, healthy vegetable oils for food and energy industries, and was the final stop of the two -day Ethanol workshop.

ETHANOL INDUSTRY EYES FUTURE

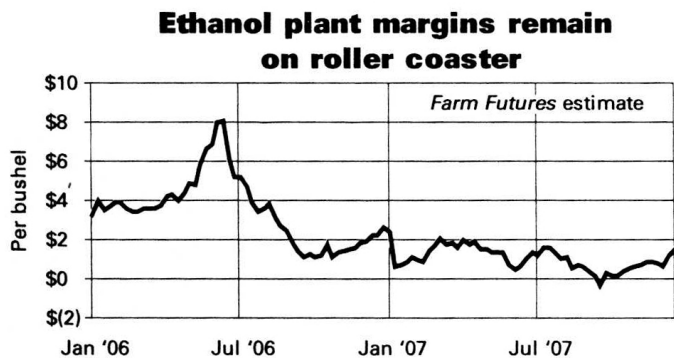
by: Arlan Suderman, Farm Futures

Farmers wondering if the marriage of Wall Street money and agriculture can last have many fronts to watch. One of the biggest is the Ethanol industry.

Just 18 months ago corn-based fuels were pure gold, as record Ethanol prices drove margins from processing plants to astronomical levels. That enthusiasm faded last summer, when oversupply of product and high corn prices sent some plants into the red. Passage of the energy bill in December 2007 revived interest in corn-based Ethanol, with production mandated to grow from 9 billion to 15 billion gallons over the next eight years. Still, the sky is no longer the limit for the industry.

"It's taking significantly longer to get plants financed and to get authorized to proceed," says Dave VanderGriend, president of ICM Inc., one of the major players in the design and construction of the facilities. Some plans have been delayed and others mothballed, while mergers and a few bankruptcies also have shaken the industry.

As for outside investors, VanderGriend says, "They've gone back home again. They do not understand commodity risk very well. They're a group of people who want something pretty solid that you can lock in both sides, and so



when you cannot lock in profits, they're pretty nervous about playing.

Wall Street may be more willing to finance infrastructure improvements needed to grow the industry, such as transportation and blending, which currently are bottlenecks to expansion. And there's no evidence of investors pulling money out of existing plans.

Demand to Rise

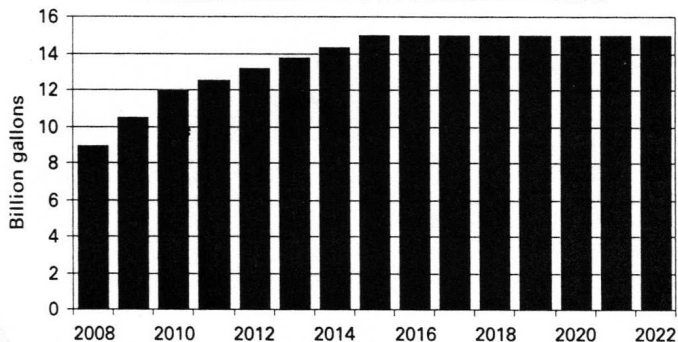
Enough new demand should emerge by the fourth quarter of this year to allow growth to resume, "With all of the delays in the startups, that could actually pull forward to the third quarter," says VanderGriend.

In addition to demand and margins, the other key issue facing the industry is management talent--experienced hands are rare in such a young industry. That could be a strain on less profitable plants that find their margins squeezed.

"Slim margins put everybody under the magnifying glass," says VanderGriend. "Survival is about cash flow. The bank doesn't want the plant. They want it to run. If you can't meet debt service, but you can meet cash flow, they'll let you ride through the valley. If you can't do that, they'd just as well shut you down. *Editor's note: Dave VanderGriend will speak at the EPAC Conference in July.*

Demand for corn-based ethanol looks good

Renewable fuels standard for conventional biofuels



Road to Sun. . . continued from page 1

Only one road traverses Glacier National Park, and what a road it is! This is one of the most spectacular, awe-inspiring 50 miles in the country with sharp mountain peaks and in July there should be spectacular wildflowers. EPAC has arranged for the Sunday pre-conference activity to be a bus ride to Glacier National Park to board the red Jammer buses for a trip on the Going-to-the-Sun Highway. The buses are antique Fords that have been updated to modern safety standards. The canvas top rolls back, and if the sun is shining, it will probably be open. This allows amazing views and photo opportunities of the impressive scenery. EPAC offered this tour a few years ago in June, and it got snowed out so the tour went on an alternate route, but the 2008 conference is moved to July, so snow is less likely. If you are interested in taking this tour, be sure to check the optional box on the registration.

There will be limited seating and first come, first served. For more information about the park and Going to the Sun Road click on <http://www.nps.gov/archive/glac/montana.htm> For registration information, please click on the EPAC website www.ethanolmt.org.

JOIN EPAC TODAY

FARM-BASED ENERGY HAS COME FULL CIRCLE

by: Dr. Daryll E. Ray, *MidAmerica Farmer Grower*

We grew up just after the end of an era when biofuels, although we did not call them that, were the basic means of getting farm work done. Farm houses were heated with wood from the woodlot and the horsepower that plowed the fields and harvested the crops was fed by grass, hay and oats that were grown on the farm. In some places a DELCO or Wind-charger system powered by a windmill provided rudimentary electric lighting for the farm. In addition, windmills were universally used to pump water for livestock and household use.

With the advent of gasoline and diesel tractors and rural electrification, the energy we used on farms came from somewhere else. It was refined from crude oil or generated from coal and much of the pasture and oat fields were converted to crops like corn and later soybeans. The bulk truck and the on-farm fuel tank became the source of energy that was used to power the agricultural work of the farm. In time, the idea of biofuels began to sound strange.

Later on, low corn and soybean prices sent farmers looking for some way to get more dollars out of the raw products they were producing. Ethanol and biodiesel seemed like logical products, after all Rudolf Diesel used peanut oil to fuel his early engines and farmers have been converting corn into alcohol for a long time. It was a struggle to develop the budding biofuels industry in the late 90s. The idea of biofuels sounded farfetched.

Then along came Katrina, political instability in the Middle East, and crude oil above \$60 a barrel and suddenly everyone was talking about biofuels and energy independence. Though commodity prices have risen in response to the additional demand for corn to be converted to Ethanol, oil prices have continued to rise as well and suddenly it seems that everyone is in the biofuel business.

At the opening of the North American International Auto Show in Detroit, General Motors announced that it had bought a stake in Coskata, a startup company. They plan to make Ethanol by using inputs-wood chip and industrial and municipal waste other than corn. When it is in full production, Coskata expects to be able to produce Ethanol for less than \$1 a gallon. They claim their process gets more energy per ton of input than other processes and uses less than a gallon of water for

each gallon of Ethanol produced.

A recent article in the proceedings of the National Academy of Sciences of the United States (PNAS), reported that "switchgrass produced 540% more renewable energy than nonrenewable energy consumed...[and] estimated average greenhouse (GHG) emissions from cellulosic Ethanol derived from switchgrass were 94% lower than estimated GHG from gasoline."

Diversified Energy Corporation recently demonstrated a process that takes renewable oil-both plant and animal-and converts it directly into a "biogasoline fuel very similar to traditional unleaded gasoline." The process they used was developed by scientists at North Carolina State University (NCSU). Dr. Henry Lamb, NCSU Professor of Chemical and Biomolecular Engineering and lead investigator on the bio-gasoline work, remarked, "With over 243 million vehicles on U.S. roads (with a majority using gasoline), finding an affordable renewable drop-in replacement would be a major achievement."

At one time people were talking about 5 to 7 to 10 years before biofuels other than corn-based Ethanol would be available commercially. Today the press releases are talking about having plants online by 2011, three years from now.

It should be noted that this type of research is not limited to the US. The Japanese have adopted a biomass policy that will convert rice straw and other cellulosic waste products into liquid fuels.

At this point it is unclear which technology will become the standard of the future. Likewise it is unclear what impact all of this research work will have on agriculture and how much and what kind of land will be involved. What we do know is that people need to eat and corn may not be the primary feedstock for the production of biofuels in the not too distant future.

With so much money being poured into cellulosic research by so many, technology advances that make cellulosic-based fuel a competitive reality seem like a very good bet indeed. Farms will again play a central role in energy as well as food production, except most of the energy will be used off the farm this time around.

Traveling to Montana for Conference

Travel to the 18th annual EPAC conference can be selected from a number of options. Northwest, Delta/SkyWest, Alaska/Horizon and United Express service the Glacier Park International Airport. A more relaxing form of travel would be by rail. Amtrak travels from Chicago to Seattle, and makes a stop in Whitefish, Montana, just a few miles from the EPAC 2008 conference hotel at Kalispell. Riding on Amtrak's Empire Builder takes you on an exciting adventure as you relax in the Sightseer Lounge to watch the ever changing scenery. Tasty meals are served in the dining car

and a variety of sleeping accommodations are available on long distance routes. Showers are even available on Amtrak these days. One train passes in each direction on a daily basis. Amtrak arrives in Whitefish in the evening on the westward bound trip and arrives in the morning on the eastern bound trip. No matter how you travel to the conference, you will find a warm welcome and an interesting conference agenda, as well as optional activities. The EPAC Board of Directors and staff look forward to seeing you in Kalispell.

PRESIDENT OF KATZEN INTERNATIONAL JOINS BOARD OF DIRECTORS

by: EPAC

Phil Madson, President of Katzen International, Cincinnati, Ohio has been chosen to fill the vacancy on the EPAC Board of Directors. Madson replaces Jim Redding from Aventin Renewable Energy Inc., Pekin, Illinois who resigned at the end of 2007.

Phil Madson has served as President of KATZEN International Inc. since 1993. KATZEN is a consulting engineering firm organized to provide efficient economical and technical engineering services for the chemical and biochemical industry. Technology developed exclusively by KATZEN has enabled companies to apply highly efficient, low-energy, low pollution techniques to a broad range of projects in over 25 countries and are reknowned for the efficiency of their Ethanol separation and distillation technology. Madson's focus throughout his tenure as President has been the research and development, design and execution of advanced technology for the Ethanol and related industries world-wide. Madson has a B.S. and M.S. degree in Chemical Engineering from Iowa State University and is a registered Professional Engineer.



Executive Director, Shirley Ball welcomes the newest member of the EPAC Board of Directors, Phil Madson of Katzen International, Cincinnati, Ohio.

EPAC

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STUDY: E20 POSES NO PROBLEMS FOR MINNESOTA VEHICLES

by: Rachel Gantz, *Oil Price Information Service*

In what may be a boost for those seeking approval of higher Ethanol blends, research released today by the state of Minnesota indicates that using an E20 blend "does not present problems for current vehicles or fuel dispensing equipment and provides similar power and performance."

For Ethanol blends higher than 10-percent to be used (not including E85), the U.S. Environmental Protection Agency (EPA) must issue a waiver. In 2005, Minnesota Gov. Tim Pawlenty (R) signed a bill requiring E20 in all gasoline by 2013, unless Ethanol has already replaced 20% of the state's motor fuel by 2010.

Minnesota officials, through the University of Minnesota, had been conducting tests of E20, required to receive the waiver for the use of E20.

Over the past year, OPIS had been tracking Minnesota's E20 research efforts, which included four concurrent studies: Vehicle Fuel System Materials Compatibility; Vehicle Drivability; Vehicle Exhaust and Evaporative Emissions; and Vehicle Fuel System and Engine Durability. Officials involved in the testing had been mum about its progress, but today the Minnesota Department of Agriculture released findings of two of those studies, on materials compatibility and vehicle drivability.

"Based on the materials compatibility and drivability testing results of this scoping report, there are no issues that would prevent moving forward with the comprehensive testing required to certify E20 as a federally approved motor fuel," the study said.

According to the summary of the study, for the drivability testing portion, the researchers used 40 pairs of vehicles from the University of Minnesota Twin Cities Fleet Services car pool, using a cross section of MY2000-2006 vehicles from Chrysler, Ford, General Motors and Toyota. All vehicles were fuel-injected and some included hybrid models. For the study, one vehicle in each pair was fueled with non-oxygenated gasoline, while the other was fueled with E20. The vehicles were driven over the course of a year to expose the vehicles and the fuels to different weather conditions and experts in vehicle drivability were also brought to Minnesota to conduct similar testing.

"While there were two vehicle issues raised during the fleet testing that were not fuel related, the 20% Ethanol blended fuel proved effective at both powering the vehicles successfully and was also non-distinguishable in performance by either the university drivers or the professionally trained drivers," the study noted.

The study also evaluated the effect of E20 on materials commonly found in conventional vehicle fuel systems, including components made of various metals, rubber and plastics. Specifically, the researchers compared the effects of E20 vs E10 and non-oxygenated gasoline on the materials found in automotive, marine and small engine fuel system components. While the study did find some issues with all metals exposed to the E20 and with some of the rubber materials, "test results indicated E20 was compatible with the vehicle fuel systems," according to the summary.

"Until now, there has been limited information available on the performance of fuels with higher Ethanol content," said Minnesota Agriculture Commissioner Gene Hugoson. "This research gives us solid information on how these fuels can be expected to perform in today's vehicles," he added. The state plans to soon officially file for a waiver request from the EPA to allow for E20 to be used.

The emission testing is still ongoing, according to the researchers, and will be released as soon as the comprehensive testing is complete. The study, done in cooperation with the Minnesota Department of Agriculture, the Minnesota Pollution Control Agency and the Renewable Fuels Association (RFA), also included input from refiners, automakers and small engine manufacturers, with funding support from the Minnesota Corn Growers Association and the Council of Great Lakes Governors.

RFA praised the E20 study findings, while the American Coalition for Ethanol pointed to similar results in tests it conducted recently, which found that mid-range Ethanol blends can, in some cases, provide better fuel economy than conventional unleaded gasoline. "The new research strongly suggests that there is an 'optimal blend level' of Ethanol and gasoline -- most likely E20 or E30 -- at which cars will get better mileage than predicted, based strictly on the fuel's per-gallon BTU content," according to a summary of that study.

However, independent auto consultant Gary Herwick, a former official at General Motors, warned the Ethanol industry not to rush the testing process. "Before we can say with any confidence that E20 has no problems, we need more testing. ... We need to understand all the issues to avoid a potential consumer backlash," he said. Specifically, he recommended the emissions testing, as well as that on catalytic converters.

The full study is available at www.mda.state.mn.us.

BEYOND CORN Energy bill mandate for corn-free Ethanol presents huge opportunity, challenge for industry

by: Dan Caterinicchia, Associated Press

By mandating a boom in Ethanol output from sources other than corn, the energy bill presents a huge opportunity for the country's fledgling biofuels industry - and uncertainty for the transportation-fuel market.

The commercial viability of making Ethanol from grasses and agricultural waste is unproven, and if industry can't meet the challenge, consumers could end up paying the price.

The U.S. currently produces nearly 7 billion gallons of Ethanol, all of it made from corn, thanks in large part to government mandates and subsidies included in the 2005 energy bill. The 2007 bill, mandates 36 billion gallons by 2022, with 21 billion gallons coming from so-called cellulosic Ethanol.

There are significant obstacles to meeting this goal, however, not least of which is devising a profitable method of producing cellulosic Ethanol.

Other challenges include: growing enough feedstock without harming the environment and efficiently transporting it to Ethanol refineries; delivering the finished fuel to pumps nationwide; and bolstering consumer demand. The lack of an adequate transportation system for biofuels and limited demand already have squeezed Ethanol producers' profits this year.

It is unclear how government or industry will respond if the country's ambitious cellulosic Ethanol goals cannot be met, though one potential unintended consequence is higher pump prices if fuel supplies fail to match rising demand.

"In this industry, they always say cellulosic is five or six years away, but they've been saying that for the last 15 years," said David Swenson, an associate scientist in economics at Iowa State University.

Renewable Fuels Association President Bob Dinneen heard similar concerns two years ago when critics questioned how the industry would produce a previously mandated 7.5 billion gallons by 2012 "and we will do that by next month."

It's not a technological issue, Dinneen said, but "it's really a question of the marketplace and the economics ... and the bill is clearly empowering the marketplace to resolve those issues."

Farmers in Iowa, a top Ethanol producer, say the goals are achievable.

"It will take a lot of research money, a lot of coordination and cooperation but I honestly believe we can do it just like we were the first to put a man on the moon," said Craig Lang, president of the Iowa Farm Bureau Federation.

The bill doesn't specify who would be punished if Ethanol-production mandates aren't met, but one potential loser in that scenario is motorists.

With the government heavily promoting an alternative to gasoline, this acts as a disincentive for oil refiners when it comes to long-term planning about increasing their own capacity.

"It introduces an enormous amount of uncertainty," said John Felmy, chief economist at the American Petroleum Institute. If the Ethanol industry is unable to produce as much fuel as is mandated, it very well could fall on the shoulders of oil refiners to make up the

difference - but the industry might not be able to add capacity quickly enough to avoid supply imbalances that drive prices higher.

Another possibility is that biofuel refineries of the future will be able to make Ethanol from a variety of feedstocks, said Roya Stanley, director of the Iowa Office of Energy Independence.

While questions remain about how the country's next wave of Ethanol expansion will play out, the message to industry is crystal clear: grow.

To that end, privately held Poet, which has been investing in cellulosic for seven years and is the nation's largest Ethanol producer, plans to expand its existing plant in Emmetsburg, Iowa, to produce Ethanol from the corn cobs and stalks normally left behind in the fields, said Jeff Broin, the company's president and chief executive.

But farmers, who have been pinched recently amid rising costs for fertilizer and fuel, are embracing the push for cellulosic Ethanol with some reservations. For example, they have mixed feelings about using parts other than the kernels for Ethanol.

"I'm not against it if we make Ethanol out of cellulose," but soil erosion and other environmental concerns must be addressed, said 76-year-old Harlan Meier, a corn farmer in Davenport, Iowa. "The fertilizer content in corn stalks is very important for the next year's crop."

A more than five-fold increase in Ethanol production over the next 15 years means the government and industry must also lay the groundwork for stimulating consumer demand.

Currently, Ethanol is blended with gasoline, making up no more than 10 percent of any gallon pumped into vehicles while accounting for roughly 5 percent of the nation's vehicle fuel mix. At 36 billion gallons in 2022, Ethanol would account for about 22 percent of the country's vehicle fuel mix, and the expectation is that the auto industry will produce many more vehicles that run on E85, or fuel that is 85 percent Ethanol.

"The reality is that we are a long way from being able to market that much Ethanol," said Wallace Tyner, a professor of agricultural economics at Purdue University.

In the meantime, corn Ethanol leaders Archer Daniels Midland Co., Verasun Energy Corp. and Poet will continue to focus on growing market share. Several Wall Street analysts raised their profit predictions on the large Ethanol producers based on the energy bill's mandates.

Broin remains confident the industry will meet the new mandates, noting corn Ethanol production will rise to up to 13 billion gallons next year from 2 billion in 2002. Poet alone has 375 million gallons of capacity under construction including a pilot cellulosic facility in South Dakota and the expanded plant in Iowa partially funded with an Energy Department grant.

There always will be peaks and valleys in any rapidly expanding industry with "price fluctuations and boom and bust scenarios," he said. "But when the dust settles, we had a highly successful industry and we will continue to have a highly successful industry."

ROSENTRATER AND QUIATTINI ADDED TO CONFERENCE SPEAKER LIST

by: Pam Dzick, EPAC Administrative Assistant

Shirley Ball, Executive Director of Ethanol Producers and Consumers (EPAC), Nashua, MT announced today that Kurt Rosentrater, Lead Scientist, Agricultural and Bioprocess Engineer, Ag Research Service, Bookings, SD and Gordon Quaiattini, President, Canadian Renewable Fuels Association, Ottawa, Canada have been added to the rostrum of speakers at the 18th Annual EPAC Ethanol Conference, Ethanol: Fuel AND Food, July 20-22, 2008 in Kalispell, Montana.

Rosentrater recently completed a study, "Developing Human Food Applications for Corn-Based DDGS (Distiller's Dried Grains Solubles)" in cooperation with South Dakota State University. The study used food grade DDG (Distiller Dried Grains) processed into a DDG flour product to make consumable breads and cookies.

Gordon Quaiattini was named president of the Canadian Renewable Fuels Association in September of 2007. In a recent interview with BIODIESEL Magazine Quaiattini was asked about the food-versus-fuel debate and its impact on animal feed costs. "The so-called food-versus-fuel debate is one where the facts do not seem to matter as they are seldom reported in the media. The facts are that only a small amount of grain costs exist within the retail price of food, and distiller grains is an important coproduct of Ethanol production and a valuable high-protein livestock feed."

Rosentrater and Quaiattini join Phil Madson, President KATZEN International, Cincinnati, Ohio, professional engineer and co-founder of the annual World Ethanol Conference; Dave Vander Griend, President/CEO ICM, Inc., world-leading Ethanol plant building company, Colwich, Kansas; David B. Levine, Associate Professor, Department of Biosystem Engineering, University of Manitoba, member of the Husky Energy NSERC biofuels research team endeavoring to enhance Ethanol and H2 production from wheat starch or cellulosic agricultural residues and John Urbanchuk, Director, LECG, LLC, Wayne, Pennsylvania, expert economic analyst of agricultural and renewable fuels policy issues.

"The 2008 conference speakers represent a wide range of expertise in the renewable fuels industry including construction and engineering companies, support associations, transportation interests, research institutes and co-product studies. EPAC has been educating and promoting the issue of Food AND Fuel as opposed to Food VERSUS Fuel since 1991. We are very excited by the recent research and studies using Distiller Grains that will be shared at this year's conference" said Ball. "The conference provides the latest information about the Ethanol and biodiesel industry, and allows for valuable networking among the attendees." Ms. Ball noted that the conference continues the discussion of the essential roles of agriculture, industry and the environment in the Ethanol and biodiesel industry."

Registration for the 18th Annual EPAC Conference, Food AND Fuel, is open to the public and registration forms and additional conference information is available at www.ethanolmt.org, e-mail epac@ethanolmt.org or call 406-785-3722.

NEVC NEWS

The NEVC would like to note there are approximately 7 million Flexible Fuel Vehicles (FFV) on the nation's highways. These autos and light trucks are both certified by the EPA and warranted by the auto makers to operate at any level blend of Ethanol, including E10, E20, E30 up to E85. If these 7-million FFVs were able to operate at least 50-percent of the time on E85, an additional 2.5 billion gallons of Ethanol could be consumed annually.

Ford, General Motors and Chrysler--each members of the NEVC--have pledged that beginning in model year 2012 at least 50-percent of their total production will be FFVs. This new production will add no less than 4 million new FFVs per year to the existing FFV population. Additional production of FFVs by both Toyota and Nissan will expand this number.

Today there are about 1,500 existing E85 fueling locations across the nation and the development of infrastructure, whether for E20 or E85 remains a major hurdle.



The National Ethanol Vehicle Coalition held their annual meeting in St. Louis in February. The Board of Directors gathered for a picture (**seated from left**): Phil Lampert, NEVC; Scott Negley, Dresser Wayne; Bernie Punt, Siouxland Energy & Livestock Coop.; Greg Krissek, ICM; Roger Moore, MN Corn Growers Assn. (**2nd row from left**): Mindy Larson Poldberg, IA Corn Growers Assn.; Shirley Ball, EPAC; Theresa Schmalshof, NCGA; Ethan Taylor, MO Corn Growers Assn.; (**from top left**): David Hallberg, PRIME BioSolutions; Todd Sneller, GEC; Scott Schramm, Chrysler; Omer Sagheer, White Energy; and Melissa Ullerich, VeraSun Energy.



Bernie Punt Of Sioux Land Energy and Livestock Cooperative, center, leads the NEVC Board meeting following his election as President. To his left is Greg Krissek of ICM, Inc. who is immediate past president, and to his left is Phil Lampert, Executive Director for NEVC.

STUDENT TO BE RECOGNIZED AT CONFERENCE

Students who have conducted projects relating to Ethanol or other biofuels are invited to submit a summary of that project to EPAC (Ethanol Producers And Consumers) for consideration for the "Spirit of Ethanol" award. EPAC is a non-profit, grass roots organization involved in educating about Ethanol fuel. Organized in 1991, EPAC offers the competition each year to a student who has completed a project about Biofuels. Sponsor of the award is R.J. O'Brien.

The project is self determined, and could be an essay or hands on project on the production or use of Ethanol or biodiesel. It could deal with crops that can be processed to biofuels, the value of distillers grain co-products or it could also be about fuel performance. Students who have completed any project associated with biofuels in the past year are invited to apply. The project could have been done for school, 4-H, FFA or other youth groups. Please tell in a maximum of two pages, the nature of the project, the results, and why a project on biofuels was chosen. Identify the teacher or leader of the group. On another page, include any awards won by the student in other competitions. If the project was recognized by media, include that information. Entries are due by May 18, 2008. Be sure to include complete contact information.

The EPAC Board of Directors will review the entries and choose a student to receive the "Spirit of Ethanol" award. The award consists of a plaque and \$100.00 in cash and full registration with lodging at the EPAC conference. In addition, a parent or leader will be offered a free registration to the 18th Annual EPAC conference that will be held July 20-22, 2008 in Kalispell, Montana. Applications can be returned to the EPAC office at 172 Ball Road, Nashua, Montana or by email to epac@Ethanolmt.org or pamd@Ethanolmt.org.

The popular one and half day conference attracts an international audience. The 2008 conference titled "Ethanol:Food AND Fuel", will feature speakers who are knowledgeable in feedstocks, processing methods, financing facilities, fuel performance and other biofuels issues. There is also a trade show pertinent to the industry. Please call 406-785-3722 or visit EPAC's web site at www.Ethanolmt.org for more information about the competition or the conference.

FLORIDA GRANTS FOR Ethanol

Agweek

A dozen entities will share \$25 million in renewable energy grants as a part of Florida Agriculture and Consumer Services Commissioner Charles H. Bronson's Farm to Fuel Initiative. The program is designed to encourage Florida's agriculture industry to produce 25-percent of the state's energy needs by the year 2025. The 12 groups chosen are among 76 that applied for the money. They are investing nearly \$157 million of their own resources into their renewable energy projects. The companies receiving the most money are Gulf Coast Energy of Walton and U.S. Envirofuels. They will receive \$7 million each to put toward the construction of Ethanol plants.

WASTE NOT, WANT NOT

Western Farmer-Stockman

Ethanol plants pop up throughout the West, farmers plant more corn, and green-scene pundits pontificate on futureistic bioeconomies.

Yet few find an economically viable solution to the limiting factor of Ethanol production: What to do with the byproducts when all that corn turns to alcohol?

Wet distillers grains left over from the Ethanol process still contain valuable protein, but they are so heavy and bulky that economics dictate only a 750 to 100-mile transportation radius.

Feedlots face different production and marketing limitations from Ethanol plants, so side-by-side Ethanol-feedlot ventures are not always successful. Feedlots create profit from inexpensive feed that cattle can efficiently convert to beef, but cold climates reduce feed efficiencies in cattle. Also, feedlots need nearby cattle to bring in and a slaughter facility at the end of the feeding process.

Most Ethanol plants need nearby corn, regardless of the climate or proximity to slaughter facilities.

Fortunately for both the energy and livestock industries. Bob Thornberg has patented a process to dry the distillers grains and add minerals and a special yeast to improve livestock digestion. The result is SweetPro Premium Feed Supplements, a lighter-weight feed supplement that can boost producers' profits.

Lemons to Lemonade

As the manager of an Ethanol plant in Walhalla, North Dakota, Thornberg was limited by his capacity to dry condensed solubles left over from the ethanol process. The drying process was expensive, but necessary, because wet distillers grains only can be stored for about seven days before spoiling.

"It was a classic case of taking a lemon and making lemonade," he says. "Leftover solubles are a headache in most plants. We thought we'd take advantage of what would normally be a limitation."

Thornberg's granules and lick blocks concentrate added nutrition to ranchers can afford to feed them, even if they live 1,000 miles from Thornberg's new livestock supplement plant, which sits three miles from the Ethanol plant that he once managed.

"Range operators haven't had exposure to distillers grains because they don't have a trough," Thornberg says. "This stuff is formulated for low intake so ranchers can scatter it all over the range."

Fallon, Montana, rancher Irv Haidl was dubious until four years ago, when he tested Thornberg's SweetPro. "Now I count on feeding about 25-percent less hay in the winter than I fed before," says Haidle, who now sells SweetPro products for Thornberg.



General Motors had a line up of Flexible Fueled Vehicles at the Renewable Fuels Association conference in Orlando in February. Mark Maher, Executive Director - Powertrain / Vehicle Integration for GM shows Shirley Ball the new logo they will use on their FFV's.

GM JOINS WITH RENEWABLE ENERGY COMPANY Agweek

General Motors Corp. says it has taken an ownership stake and formed a partnership with Coskata Inc., a renewable energy startup company that plans to produce Ethanol from agricultural leftovers and municipal and industrial waste. The partnership represents a rare foray by a major auto maker into the production side of non-fossil fuels as GM and its rivals, under pressure from tougher U.S. fuel efficiency standards, pursue a mix of fuel-efficient vehicles and technologies. GM Chairman and Chief Executive Rick Wagoner says it will take more than 12 years to replace most of the vehicles now on the road with more energy-efficient, electrically driven vehicles. Meantime, Ethanol is needed to decrease oil dependence "because there are already millions of flex-fuel vehicles on the road right now, for example, more than 6 million in the U.S. alone. Vehicles that could be running on Ethanol if it were more readily available"



Live entertainment at the Renewable Fuels Association conference in Orlando in February was Shannon Brown, a Nashville recording artist and Iowa native. The Verasun Energy company has partnered with Shannon Brown to raise awareness of Ethanol in a way that everyone can relate to—music. Along with traditional country music and the blues, Shannon sings the praises of Ethanol. Her debut album is titled Corn Fed. Shannon graciously agreed to pictures with some of the audience. Pictured here with Shannon are Bob Dinneen, President and CEO of the RFA and Shirley Ball, Executive Director of EPAC

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