DAILY NEWS SUMMARY

Friday, June 27, 2008

National

1. SC passes ethanol law challenged by oil companies

Associated Press

http://ap.google.com/article/ALeqM5hmEcp6fChJI0XNEVIVB5cKC3FrUwD91I2LP03

"South Carolina fuel distributors must have access to pure gasoline needed to make their own ethanol blends under a law that supporters say is first in the nation and will save customers at the pump. Industry experts say other states could enact similar laws. More than a dozen states, largely in the South, will likely consider such legislation next year, said Daniel Gilligan, spokesman for Virginia-based Petroleum Marketers Association of America. But oil companies moved quickly to stop it here and vow to do so elsewhere: They filed a lawsuit in the state's Supreme Court on Thursday — one day after the measure became law — claiming it violates the state constitution."

2. Home ethanol maker gets boost from record oil

Reuters

http://uk.reuters.com/article/oilRpt/idUKN2633753820080626

"A U.S. firm that believes it has the answer to high fuel prices with machines that make ethanol at home says it has been swamped with orders even before the first unit ships in September. Since California-based firm E-Fuel Corp officially unveiled the 100 MicroFueler last month, there had been overwhelming interest in the product due to crude oil holding above $130 a barrel, Chief Executive Thomas Quinn said."

3. Mexico calls for reducing production of ethanol

Associated Press

http://ap.google.com/article/ALeqM5iDQX7qjtPvSwL31D9kfaCAXP1oXAD91HR8UO2

"Mexico's agriculture secretary says ethanol production is bankrupting cattle and poultry farmers and causing food prices to hit record highs around the world. Agriculture Secretary Alberto Cardenas says countries should change their policies and reduce production of grains for the alternative fuel."

Regional

4. Food producers blast ethanol rule

The Express Times (NJ)

http://www.nj.com/news/expresstimes/nj/index.ssf?/base/news-8/1214539535301250.xml&coll=2

"With food prices soaring in the face of a federal mandate to increase production of corn-based ethanol, food producers and retailers Thursday called on Gov. Jon S. Corzine to petition the federal government to relax the ethanol requirement. "We need to restore the balance," Assemblywoman Bonnie Watson Coleman, D-Mercer, told a news conference sponsored by the Food Before Fuel campaign. "Diverting food from people is more damaging than determining whether they can drive from point A to point B.""

5. Ethanol Postal Trucks Not Working Out in SF

CBS 5 (San Francisco, CA)

http://cbs5.com/local/ethanol.postal.trucks.2.758342.html

"An eco-friendly choice has not been working out as planned for the U.S. Postal Service in San Francisco. Dozens of flex-fuel mail trucks are stuck using gasoline, because there is still no supply of E85 ethanol."

6. Local stations get money for having E 85

NBC 25 (MI)

http://www.weyi.com/news/news_story.aspx?id=152015

"Governor Jennifer M. Granholm and Michigan Department of Labor & Economic Growth (DLEG) Director Keith W. Cooley announced today that 14 service stations will receive up to $70,000 in incentives to convert refueling equipment to provide ethanol (E85) fuel. These incentives are part of a larger effort underway to increase the availability of bio-based renewable transportation fuels across Michigan."

Trade Publications

7. Grassley Critical of GMA

Farm Futures

http://www.farmfutures.com/ME2/dirmod.asp?sid=CD26BEDECA4A4946A1283CC7786AEB5A&nm=News&type=news&mod=News&mid=9A02E3B96F2A415ABC72CB5F516B4C10&tier=3&nid=0B8157CE23E042EC931AFA4FFB98E484

"Senator Chuck Grassley, R-Iowa, went to the floor of the Senate Thursday in another effort to set the record straight about ethanol and the Grocery Manufacturers Association. 'Biofuels are being made the scapegoat for rising wheat prices, even though the 2007 crop was the largest planted in four years," Grassley said. 'Biofuels are being blamed for the increased price of things such as rice and bananas, which have no correlation to corn production or our biofuels polices.'"

8. Ethanol Debate Heats up in Oklahoma

Convenience Store News

http://www.csnews.com/csn/news/article_display.jsp?vnu_content_id=1003821618

Aside from purportedly providing a cleaner burning fuel, ethanol blended gasoline on average saves motorist between seven and 10 cents per gallon which is a welcome break in light of continuous gas price spikes. 'It's an economic mandate: if you're not using E10 right now and have a competitor who is, you're getting pounded,' Thornbrugh told the paper."

Opinions & Editorials

9. Weigh cost, benefits of ethanol

The Fremont Tribune (NE)

http://www.fremonttribune.com/articles/2008/06/27/news/local/doc4863beb0482e7360192851.txt

"Ethanol plants can benefit a community by directly employing between 30 and 40 on-site workers, as well as stimulating other local industries like grain haulers, distillers, grain haulers, and local contractors. A community also benefits from property taxes, influx of jobs during the construction phase, partnership with ethanol plans for city infrastructure and another local market for corn. Each person and community has to decide whether these benefits outweigh the costs."

10. Column - David Gibson: Ethanol is a legitimate alternative to Big Oil

Amarillo (TX) Globe-News

http://www.amarillo.com/stories/062708/opi_10644963.shtml

David Gibson, executive director of the Texas Corn Producers Board, writes for the Globe-News about ethanol. ""While ethanol has significantly lowered fuel prices, it has much less impact on overall food prices. Grain prices constitute less than five percent of food costs in the U.S. and ethanol has caused only a 1-percent increase in food prices in the past two years, according to research at the University of Nebraska. The bottom line for American consumers is that the benefits of lower fuel prices from blending ethanol with gasoline far outweigh the small increases in food costs. The estimated net benefit of current ethanol programs to consumers is a savings of tens of billions of dollars per year even after taking into account the cost of federal programs and the lower energy value of ethanol, according to researchers at A&M."

Blogs & Websites

11. Food price spike: Is ethanol to blame?

CNN Money

http://money.cnn.com/2008/06/27/news/economy/ethanol_food_prices/

"Now the rising price of corn is fueling a movement to reduce the amount of corn ethanol that is added to American gasoline. Ethanol's primary component is corn, so demand for the crop has soared since the ethanol standard was enacted in 2005 and increased with the Energy Independence and Security Act of 2007. The government passed the legislation in an effort to support the U.S. farm and ethanol industry, to promote cleaner-burning fuels and to reduce the nation's dependence on foreign oil."

12. Cellulosic Ethanol

EcoWorld.com

http://www.ecoworld.com/home/articles2.cfm?tid=462

"There is little doubt ethanol is a viable fuel for light vehicles, and there is little doubt cellulosic ethanol feedstocks exist in sufficient sustainable abundance to greatly offset petroleum consumption. Finally, there is little doubt that money and support for cellulosic ethanol commercialization is ongoing; from Washington DC to Detroit to the Silicon Valley, everyone is on board. The uncertainty lies in whether or not the new technologies to extract ethanol from cellulose will emerge in months or decades, and in how fast we can build large scale industrial capacity to exploit these new technologies. Look to pilot plants in Madison, Pennsylvania, and elsewhere, for early indications of what may come, and when."

13. Ethanol, boats an interesting mix

The Atlanta Journal-Constitution

http://www.ajc.com/sports/content/shared-blogs/ajc/outdoors/entries/2008/06/26/ethanol.html

"E-10 is either good or bad for boat engines, depending on who you ask, but it's clear that word is getting out on what to do to prevent problems (such as clogged fuel lines, problems with older boats with fiberglass fuel tanks)."

Associated Press
June 26, 2008

SC passes ethanol law challenged by oil companies

By: Seanna Adcox

COLUMBIA, S.C. (AP) — South Carolina fuel distributors must have access to pure gasoline needed to make their own ethanol blends under a law that supporters say is first in the nation and will save customers at the pump.

Industry experts say other states could enact similar laws. More than a dozen states, largely in the South, will likely consider such legislation next year, said Daniel Gilligan, spokesman for Virginia-based Petroleum Marketers Association of America.

But oil companies moved quickly to stop it here and vow to do so elsewhere: They filed a lawsuit in the state's Supreme Court on Thursday — one day after the measure became law — claiming it violates the state constitution.

Supporters say oil companies want to sell the gas pre-blended so they can keep federal ethanol credits, which can top 8 cents a gallon, and prevent competition from distributors who would pass some of those savings onto customers.

The new law requires oil companies to offer raw gasoline to South Carolina distributors so they can blend it themselves into E10, or 90 percent gasoline and 10 percent ethanol.

Distributors began pushing for the law after BP surprised them this spring with a letter denying them the ability to blend the product themselves. Other oil companies began to follow suit.

"What the oil companies attempted to do is a travesty to the consumers of South Carolina," said Sen. Greg Ryberg, R-Aiken, a former fuel distributor and gas station owner. "I have never seen such an unfair pricing strategy. By blending it and selling a blended product, they're trying to take what should belong to the retailer."

Oil industry advocates deny the accusations and say the law will result in higher gas prices.

The lawsuit, filed by American Petroleum Institute and BP Products North America Inc., argues the law would prevent refiners from complying with federal law that requires annual increases in ethanol use from 9 billion gallons by the end of this year to 36 billion gallons by 2022.

The law "will likely require BP Products to change the manner in which it had planned to comply with federal mandates," the company claims in the suit. Failure to meet the mandates could bring daily penalties of $32,500.

The suit asks the court to prevent the law from being enforced pending a decision.

"In light of the legal challenge, we won't be offering unblended gasoline at our terminals and have no comment," said BP spokesman Scott Dean.

An executive for American Coalition for Ethanol agreed suppliers are under certain mandates but said that doesn't mean they can completely shut out market competition.

Even before the tax credits, ethanol is cheaper per gallon than gasoline. But where oil companies have sold only pre-blended fuel, they're not passing along the savings, said Ron Lamberty, a vice president of the South Dakota-based group.

"We want to stop the big oil takeover of ethanol," Lamberty said. "We need an independent product to keep the refiners honest. If they buy ethanol and overcharge, it hurts our sales."

Fuel suppliers contend South Carolina's law is illegal because it was tacked on in late May to an unrelated bill establishing sales tax holidays.

Senate President Pro Tem Glenn McConnell warned legislators as they overrode Gov. Mark Sanford's veto Wednesday that it violated the single-subject rule and would end up in court. The state Supreme Court has previously struck down such "bobtailing" measures, most recently last week.

"This was the clearest example of bobtailing I've seen in 18 years here," said Rep. Doug Jennings, D-Bennettsville.

Supporters of the law said they didn't have time to get a separate bill through legislative committees after BP's letter to distributors. If the state Supreme Court strikes the measure down, the distributors and retailers are ready for round two.

"We will have bill ready to go before the session opens in January," said Sam Bell, president of Echols Oil Co. and the South Carolina Petroleum Marketers Association. "I hope the oil companies work with us over the next few months to come up with something that will work. That would be the smart thing."

Reuters
June 26, 2008

Home ethanol maker gets boost from record oil

By: Barani Krishnan

NEW YORK (Reuters) - A U.S. firm that believes it has the answer to high fuel prices with machines that make ethanol at home says it has been swamped with orders even before the first unit ships in September.

Since California-based firm E-Fuel Corp officially unveiled the 100 MicroFueler last month, there had been overwhelming interest in the product due to crude oil holding above $130 a barrel, Chief Executive Thomas Quinn said.

"We've got hundreds of orders from individual customers and on the dealers side, we've thousands of interested dealers, which would add up to thousands more orders," Quinn said late Wednesday.

The machine processes sugar and water into alcohol -- the chief energy-producing component in ethanol -- and delivers it to fuel tanks of vehicles through a hose and nozzle just like those used at gas pumps.

It runs on electricity, stands as tall as a stacked up washer/drier, is weather-resistant and can be placed in a garage or anywhere outside the home.

Quinn says the MicroFueler can turn out a gallon of ethanol for just under $1, compared with the average pump price of U.S. gasoline hovering above $4 a gallon. With crude oil hitting a new record above $140 on Thursday, analysts say gasoline is unlikely to get any cheaper.

The MicroFueler can generate 35 gallons of ethanol a week, using 10 to 14 pounds of sugar per gallon.

Since most automotive experts do not endorse 100 percent usage of ethanol in motor vehicles, Quinn said customers could fill three quarters of their tank with the MicroFueler and top up the balance with regular gasoline.

The MicroFueler sells in the United States at just below $10,000. But the cost to U.S. customers is expected to be under $5,000 after federal and state tax credits of up 50 percent for alternate fuels, Quinn said.

E-Fuel estimates that at current gasoline prices, the MicroFueler will pay for itself in under two years for a family that runs two cars and drives about 34,500 miles a year (55,520 kilometers). The company says U.S. purchasers could also get carbon credits,

since making ethanol from sugar emits fewer greenhouse gases than making it from corn.

The homemade ethanol industry has been long experimented in the United States but not taken off due to technology, quality and cost issues. Some ethanol experts doubt E-Fuel's creation will transform the industry.

Quinn said what will help the MicroFueler is its dependence on abundantly-available and cheap sugar versus the costlier and scarcer corn, the feedstock for U.S. ethanol plants.

U.S. corn futures hit a record of over $8 a bushel in recent weeks as flood destroyed huge swaths of the crop grown in the country's Midwest region. Sugar futures, in contrast, have remained in the 10-15 cent a lb range for a year.

In the U.S. retail market, sugar fetches about 20 cents a lb. But Quinn says he can source inedible sugar from Mexico for his customers for as little as 2.5 cents a lb.

Quinn said commercial ethanol plants ran high-temperature boilers that consumed much energy to separate alcohol from their feedstock but the MicroFueler did the same with little power using fine microelectronic filters.

Associated Press
June 26, 2008

Mexico calls for reducing production of ethanol

MEXICO CITY (AP) — Mexico's agriculture secretary says ethanol production is bankrupting cattle and poultry farmers and causing food prices to hit record highs around the world.

Agriculture Secretary Alberto Cardenas says countries should change their policies and reduce production of grains for the alternative fuel.

Speaking to cattle farmers Wednesday, Cardenas says the government has earmarked more than 9 billion pesos (US$8.75 million) to help 500,000 ranchers.

Mexico froze prices on more than 150 food products last week to help families cope with rising prices.

President Felipe Calderon said prices for goods such as beans, canned tuna, fruit juices, coffee, ketchup and canned tomatoes will remain fixed until Dec. 31.

The Express Times (NJ)
June 27, 2008

Food producers blast ethanol rule

They ask Corzine to petition for easing of requirement.

By: Dunstan McNichol

TRENTON | With food prices soaring in the face of a federal mandate to increase production of corn-based ethanol, food producers and retailers Thursday called on Gov. Jon S. Corzine to petition the federal government to relax the ethanol requirement.

"We need to restore the balance," Assemblywoman Bonnie Watson Coleman, D-Mercer, told a news conference sponsored by the Food Before Fuel campaign. "Diverting food from people is more damaging than determining whether they can drive from point A to point B."

According to speakers at the news conference, the federally mandated drive to pump up ethanol production has led farmers to divert more than one-fourth of their corn production to fuels and has prompted farmers to expand corn production at the cost of wheat, barley and other crops.

Those developments have contributed to a five-fold increase in the cost of flour and steep increases in livestock feed and other commodities.

Legislation that Congress passed last year authorized states to petition for a reduction of the ethanol mandate if they could prove the increased ethanol production was harming their state.

So far, the governors of Texas and Connecticut have petitioned for such waivers.

"Families in Camden now face the choice between filling up their gas tanks or feeding their families," said Kelly Johnston, vice president of government affairs for Campbell Soup Co.

Ethanol supporters disputed the statistics presented at Thursday's event. They claim the use of corn for ethanol production has only marginally affected food prices and insist the federal mandate will help wean the United States off foreign oil.

"The food companies favor cheap corn; we would rather favor family farmers," said Peter Furey, executive director of the New Jersey Farm Bureau.

In Washington, U.S. Sen. Charles Grassley, R-Iowa, said the campaign against ethanol is a coordinated but misleading attack by the Grocery Manufacturers Association.

Thursday's news conference in Trenton was the latest in a series of events the association has sponsored across the country this month.

"Their campaign is not altruistic," Grassley said in a Senate floor speech the same day. "American consumers need to know that a few big food companies are jeopardizing our efforts toward energy independence simply so they can raise the price of food and increase their profits."

CBS 5 (San Francisco, CA)
June 26, 2008

Ethanol Postal Trucks Not Working Out In SF

By: Jeffrey Schaub

SAN FRANCISCO (CBS 5) — An eco-friendly choice has not been working out as planned for the U.S. Postal Service in San Francisco. Dozens of flex-fuel mail trucks are stuck using gasoline, because there is still no supply of E85 ethanol.

The Postal Service began delivering flex-fuel trucks back in 1999, expecting ethanol to become widely available. Nine years later, it has become a gamble that has not paid off. So far, the closest commercial E85 station is in Los Angeles.

Our video report has more.

NBC 25 (MI)
June 26, 2008

Local stations get money for having E 85

LANSING -- From the Department of Labor and Economic Growth:

Governor Jennifer M. Granholm and Michigan Department of Labor & Economic Growth (DLEG) Director Keith W. Cooley announced today that 14 service stations will receive up to $70,000 in incentives to convert refueling equipment to provide ethanol (E85) fuel. These incentives are part of a larger effort underway to increase the availability of bio-based renewable transportation fuels across Michigan.

"Investing in alternative energy infrastructure and promoting the use of ethanol is an important element of our effort to diversity Michigan's economy," Granholm said. "This program will help deliver the 267 million gallons of ethanol per year Michigan already produces and will deliver advanced cellulosic ethanol as it comes on-line."

Service station owners receiving the incentives have agreed to complete their installation and begin dispensing E85 to the public by November 15, 2008. The following stations are receiving incentives:
Corrigan Oil Corporation, (Brighton)
Coyne Oil Corporation, (Mount Pleasant)
Downtown Wixom Development, (Wixom)
Haggerty Joy Mobil, (Canton)
Jawad Marathon, (Southfield)
Ten & Greenfield Sunoco, (Oak Park)
274 Gratiot Corporation, (New Haven)
Speedway SuperAmerica LLC, (Cheboygan)
Speedway SuperAmerica LLC, (Davison)
Speedway SuperAmerica LLC, (Jackson)
Speedway SuperAmerica LLC, (3625 S. Cedar, Lansing)
Speedway SuperAmerica LLC, (6329 W. Saginaw, Lansing)
Speedway SuperAmerica LLC, (Livonia)
Speedway SuperAmerica LLC, (Ypsilanti)

Director Cooley announced today that the E85 Infrastructure Conversion Incentive Program still has funding available for public station owners and public fleets throughout Michigan. The cash incentive can pay 50% of the cost for converting refueling equipment to E85 up to a maximum incentive of $5,000. For more information or to apply for the incentives, service station and public fleet owners can contact Clean Energy Coalition in Ypsilanti.

Funding for the E85 Infrastructure Conversion Incentive Program was made available through a grant from the U.S. Department of Energy (www.energy.gov). The program is administered by the DLEG Energy Office, (www.michigan.gov/energyoffice).

Farm Futures
June 27, 2008

Grassley Critical of GMA

Senator says targeting of ethanol is unfounded.

Senator Chuck Grassley, R-Iowa, went to the floor of the Senate Thursday in another effort to set the record straight about ethanol and the Grocery Manufacturers Association.

"Biofuels are being made the scapegoat for rising wheat prices, even though the 2007 crop was the largest planted in four years," Grassley said. "Biofuels are being blamed for the increased price of things such as rice and bananas, which have no correlation to corn production or our biofuels polices."

Grassley said the Grocery Manufacturers have focused all their efforts on ethanol. They see ethanol and renewable fuels as the root cause, and the most vulnerable to their attack. But Grassley argued that it is important to note that biofuels are actually working to lower the price of gasoline at the pump. So, while high energy costs are driving the increases in food prices the Grocery Manufacturers would have you believe that the solution is less energy supply.

"The Grocery Manufacturers Association doesn't seem to care much for the facts. Their criticisms and talking points aren’t based on sound science, economics or even common sense," Grassley said. "We're all supportive of efforts to promote advanced biofuels. But, undercutting the current industry is not the way to get fuels from biomass. Those who are determined to pull the rug out from under today's biofuels should know that the next generation won't exist if the current generation is undermined."

Convenience Store News
June 27, 2008

Ethanol Debate Heats up in Oklahoma

TULSA, Okla. -- New legislation requires Oklahoma stations selling gasoline blended with ethanol to inform customers with mandated pump labels, a move receiving mix reactions from operators.

"We're in the process of putting them up now," QuikTrip Corp. spokesman, Michael Thornbrugh, told the Tulsa World. The c-store chain has been using an E10 blend since last September and will be in full accordance by the July 1 deadline. "We're glad the state is letting us put them up," he told the paper.

Aside from purportedly providing a cleaner burning fuel, ethanol blended gasoline on average saves motorist between seven and 10 cents per gallon which is a welcome break in light of continuous gas price spikes.

"It's an economic mandate: if you're not using E10 right now and have a competitor who is, you're getting pounded," Thornbrugh told the paper.

The ethanol movement is not universal as detractors claim use of the ethanol can cause more harm than good. Take for example Ken Bippus, owner of the Shell-branded Southland Service Center, who is doing the opposite by advertising that he is not selling the blended fuel.

To this end, he proudly flies a banner that says he sells "real gas." His opposition does come at a price as he charges about $3.95 per gallon instead of the $3.79, which is the current price at many QuikTrip locations.

"I know what ethanol does to vehicles," Bippus told the paper. "I will not sell it."

Bippus told the Tulsa World that ethanol's perceived drawbacks include corrosive action that plugs fuel filters and damages spark plugs. Vehicles using it, he said, also get fewer miles per gallon.

"Most people don't check their gas mileage," Bippus told the paper. "They're sliding something under people's eyes."

AAA Oklahoma spokesman Chuck Mai told the paper that his organization pushed the labeling legislation after getting calls from members who noticed their mileage going down over the past year.

AAA, however, remains neutral on the ethanol debate, as it finds pros and cons, said Mai. In the plus column: a step toward using less fuel from foreign suppliers. However,

corn-based ethanol burns hotter but definitely delivers less fuel efficiency -- sometimes as much as 15 percent less per gallon.

"You need to run some tests yourself and decide if the savings is worth it," Mai told the paper.

The Fremont Tribune (NE)
June 26, 2008

Weigh cost, benefits of ethanol

By: Dave Varner

Nebraska has 21 ethanol plants in operation and another six plants under construction.

This increased production of ethanol has raised many questions about the overall cost-benefit ratio of this industry.

Many controversial factors affect the production of ethanol, including fossil fuel use, environmental concerns, water use, and job creation in communities near ethanol plants. To accurately assess the costs and benefits associated with ethanol, all these factors need to be evaluated.

Much of the controversy about ethanol production in the past has been created by conflicting studies that support both sides of the ethanol energy debate.

Most recent studies have determined that ethanol produces a net energy gain. A life-cycle energy analysis in 2007, which examined corn input costs and fossil fuel use, showed ethanol produces a 30 percent positive net energy increase over the amount of fossil fuels used during production.

The environmental costs and benefits are more difficult to measure. One concern is that large numbers of Conservation Reserve Program acres will be put into corn production, and this along with increased corn acres will increase the amount of fertilizer and pesticides used in the environment, increasing nutrient runoff and reducing habitat for wildlife.

Although some CRP acres were put into production in 2007 and more look to come out in the future as contracts expire, some CRP acres will not be put into production because they are highly erodible, marginal land, or not suitable for corn production. Improved farming methods, such as no till and heartier corn hybrids increase the chances that acres taken out of CRP will be farmed with less erosion and fewer chemicals than when placed into the program.

Water also is a concern when considering where ethanol can be produced. It is estimated that it takes three to six gallons of water to produce one gallon of ethanol, so a sustainable water supply is needed for ethanol production. Whether the economic benefits of an ethanol plant make good use of water is up to the observer and since water isn’t valued like energy it is difficult to put into context.

Before an ethanol plant is built, the local Natural Resource District must issue a permit. The NRD examines whether the proposed site has sufficient water for ethanol production. There must be enough water available to provide for the plant without adversely affecting the supply to nearby populations. If ample water is available a permit usually is granted because of the economic benefits ethanol brings to an area.

Ethanol plants can benefit a community by directly employing between 30 and 40 on-site workers, as well as stimulating other local industries like grain haulers, distillers, grain haulers, and local contractors. A community also benefits from property taxes, influx of jobs during the construction phase, partnership with ethanol plans for city infrastructure and another local market for corn. Each person and community has to decide whether these benefits outweigh the costs.

Dave Varner is an extension educator with the University of Nebraska-Lincoln Extension office in Dodge County. He may be contacted at 727-2775, 1206 W. 23rd St., in Fremont, or at dvarner1@unl.edu

Amarillo (TX) Globe-News
June 27, 2008

Column - David Gibson: Ethanol is a legitimate alternative to Big Oil

By: David Gibson

LUBBOCK - Using corn to make ethanol currently saves the average American household $6 in lower gasoline prices for every $1 in higher food prices caused by ethanol.

That is the finding of researchers at Texas A&M University, who are among the leading experts on food policy issues. Their studies are consistent with independent research conducted at a number of major universities.

While they use complex computer modeling to crunch the numbers, the basic facts are simple. At current prices, it costs about $1 per gallon less to make fuel from corn than from than from crude oil.

The Texas A&M research projected that gas prices would be 42 cents per gallon greater without ethanol while the U.S. Department of Energy estimates pump prices would be 20 to 35 cents per gallon greater.

While ethanol has significantly lowered fuel prices, it has much less impact on overall food prices. Grain prices constitute less than five percent of food costs in the U.S. and ethanol has caused only a 1-percent increase in food prices in the past two years, according to research at the University of Nebraska.

The bottom line for American consumers is that the benefits of lower fuel prices from blending ethanol with gasoline far outweigh the small increases in food costs. The estimated net benefit of current ethanol programs to consumers is a savings of tens of billions of dollars per year even after taking into account the cost of federal programs and the lower energy value of ethanol, according to researchers at A&M.

The major force driving food costs higher is the price of energy, not the price of corn. The doubling of crude oil prices in the past year has made it far more expensive to transport, process and package the food we buy. The cost of energy has three times as much impact on food prices as the cost of the farm products used to make the food.

Added to this is the effect of massive speculation in commodity futures. Banks, hedge funds and giant pension funds - some of the same folks who brought us the housing boom and bust - have turned their sights on commodity markets to make some big

profits.

Last month, the U.S. Senate Committee on Homeland Security and Governmental Affairs heard testimony that large institutional investors had increased their commodity investments from just $13 billion in 2003 to $260 billion this year, a 20-fold increase.

They are not buying corn futures so they can put cereal on your breakfast table like the farmers and food processors who traditionally have used futures markets to reduce their risks. And, these institutional investors are placing tremendous pressure on regulators to loosen the rules so they can make even larger bets on commodities. Does this sound similar to the sub-prime mortgage debacle?

Compared to these forces driving grain prices higher, the use of corn to make ethanol has very little impact on our food prices.

However, not everyone benefits from ethanol production. Blending ethanol with gasoline cuts into the profits of major oil refining companies and they have waged a relentless campaign to turn public opinion against ethanol.

The high price of corn also hurts livestock producers who use corn for feed. More than half of all corn is used as livestock feed and producers have very little ability to pass on their higher costs. Meat producers truly need some form of help or many of them will be forced out of business.

But if ethanol production is cut back, the cost to consumers will be enormous.

Without ethanol, world oil production would have to increase by 1.9 million barrels per day.

In the U.S., we would need 7.2 billion more gallons of gasoline this year, driving up oil imports and prices. Even if we stopped making ethanol completely, there would be little, if any, overall reduction in food prices.

Our current national policy on ethanol produces the greatest benefits for the greatest number of people.

If Washington politicians abandon our current policies on ethanol to satisfy the big oil companies and other ethanol critics, all of us will pay more at the gas pump with no savings at the grocery store.

David Gibson is executive director of the Texas Corn Producers Board.

CNN Money
June 27, 2008

Food price spike: Is ethanol to blame?

A devastated corn crop is likely to exacerbate costs at the grocer. Some people are pointing a finger at the ethanol production laws.

By: David Goldman

NEW YORK (CNNMoney.com) -- It's hard to miss: Americans are paying more at the supermarket checkout these days.

Prices have increased 5% since last year, and it could get worse. The U.S. Department of Agriculture projects that food prices will bump up another 5.5% in 2008.

One of the reasons is that the price of corn - a staple ingredient in a variety of foods from cereals to cola and the main ingredient in animal feed - is selling above $7.50 a bushel, about 119% above the price from a year ago.

The nation'scorn crop was hurt by an unusually rainy spring. More recently, the havoc-wreaking floods in the top Midwestern corn-growing states wiped out farms and threaten future harvests.

"It seems pretty clear that we'll have a substantially lower planted acreage than last year, and we'll probably have a lower yield too," said former U.S. Department of Agriculture chief economist Keith Collins, who was commissioned by Kraft Foods to study food prices. "We're looking at a good drop in production, and as a result, corn prices will spike."

Now the rising price of corn is fueling a movement to reduce the amount of corn ethanol that is added to American gasoline.

Ethanol's primary component is corn, so demand for the crop has soared since the ethanol standard was enacted in 2005 and increased with the Energy Independence and Security Act of 2007. The government passed the legislation in an effort to support the U.S. farm and ethanol industry, to promote cleaner-burning fuels and to reduce the nation's dependence on foreign oil.

But in late April, Texas Gov. Rick Perry petitioned the Environmental Protection Agency to grant a 50% waiver on the nation's 9 billion gallon corn-based Renewable Fuel Standard.

"While the RFS was a well intentioned policy, it has had the unintentional consequence of harming segments of our agriculture industry and contributing to higher food prices," Perry wrote in his petition.

The EPA has opened a period of public comment about the standard and will make a decision on the waiver by July 24.

The EPA requires that 7.76% of gasoline products be blended with ethanol in 2008. That amounts to about 9 billion gallons U.S. ethanol producers have to put out this year. Next year, they will have to produce 10.5 billion gallons.

Gov. Perry said the the "artificial pressure" on the corn crop created by the mandate threatens "irreparable damage" to livestock operations across the country.

Ethanol puts pressure on food prices

Critics of the program argue that a corn shortage could be exacerbated by the government's demand for ethanol, thus raising food prices even further for consumers.

"A lot depends on how badly this weather has devastated the corn crop," said Thomas Elam, an agricultural economist at Indiana University who was commissioned by the Balanced Food and Fuel Coalition to release a study on the matter. "A smaller crop will be devastating to meat, dairy, and poultry producers if the Renewable Fuels Standard is maintained, and consumers will suffer as food and fuel costs rise."

About 5% of the world's corn supply goes to producing bio fuels - representing a whopping three years of growth in typical crop production, according to Elam.

"Corn will have to go to at least $8 a bushel to squeeze out enough food use to keep up with corn for ethanol," he said. "Food prices will be significantly impacted by corn if RFS goes to 10.5 billion gallons for 2009."

How significantly? Collins said food costs could rise 23% to 35% above the normal annual inflation rate of 2.5% over the next two to three years if the RFS mandates are not reduced. Elam said food price inflation rate could go as high as 7% without a mandate reduction.

The USDA also maintains ethanol has an impact on food prices, even if it is an indirect link.

"Higher ethanol production definitely and directly raises the price of corn," said USDA economist Ephraim Leibtag. "Higher corn prices have an impact on food prices on the retail level."

By contrast, if the government were to reduce the RFS by just half, both Elam and Collins agree that corn prices would fall $2 a bushel, which could save more than $9 billion in feed and food costs.

The case for the ethanol standard

Not everyone is convinced that ethanol poses such a definite threat to food prices.

"Collins' conclusions are at odds with the conclusions of a number of other ethanol studies," said Geoff Cooper, director of research at the Renewable Fuels Agency. "The global food index has increased 40% and ethanol is only responsible for 2% to 3% of that," he said, referring a study conducted by Bush administration economists.

It's also possible that the corn crop will rebound before the growing season ends in the fall. As a result, Cooper noted the impact that ethanol will take on food prices this year is still up in the air.

Another RFA spokesman suggested that Collins' study was biased, since it was sponsored by Kraft Foods, which would benefit by a reduction in the RFS.

Kraft said that it expects the company's commodity costs to increase 12% or $1.7 billion in 2008, but dismissed the RFA's claim.

"Dr. Collins is a widely-respected, credible and award-winning researcher and former chief economist of the U.S. Department of Agriculture," said Michael Mitchell, a spokesman for Kraft. "His credentials speak for themselves."

Ultimately, Cooper said he doubts that Gov. Perry's waiver request will succeed, because the EPA can only accept a waiver if the law creates significant economic hardship on a state.

"He did not come close to demonstrating criteria of significant economic harm," said Cooper. "The waiver request does not meet the EPA's criteria, because it affects only a fraction of his state's GDP."

EcoWorld.com
June 27, 2008

Cellulosic Ethanol

What is it, can we make it cost effectively, and when?

By: Ed Ring

Last month, for the first time in history, the cars racing in the Indianapolis 500 were fueled by pure ethanol. This should put to rest any concerns about ethanol lacking sufficient energy density to function as a motor fuel.

While the absolute amount of energy contained in ethanol is somewhat lower than gasoline - about 100,000 BTUs per gallon for ethanol compared to about 125,000 BTUs per gallon of gasoline - ethanol has higher octane, 108 vs. 90, allowing it to run in higher compression, higher efficiency engines. A car optimized to run on ethanol will get virtually the same mileage as a car optimized to run on gasoline.

There are other concerns about ethanol, for example, the notion that it takes more energy to manufacture ethanol than the energy value of the fuel itself, the suggestion that it isn't "carbon neutral" after all, and the whopper, the accusation that ethanol production has taken food crops out of production. All of these concerns have some validity, but are shrouded in complexities that defy simple characterizations or easy conclusions. Yet that is what has happened. A few years ago, biofuel in general, and ethanol in particular, could do no wrong. Today the situation is reversed, and around the world, for the most part the powerful media and environmentalist communities have turned on biofuel.

In many respects this awakening is healthy - when mandatory carbon offset trading in the European Community was subsidizing rainforest destruction in southeast asia to make way for oil palm plantations, something was clearly out of whack. But corn ethanol in the USA has drawn the most visible criticisms. California's Air Resources Board, struggling to implement a lower carbon fuel standard, has recently determined, perhaps correctly, that hauling tank cars by rail over the Rocky Mountains from Iowa to the west coast probably eliminates any carbon neutrality ethanol may have otherwise enjoyed. In Washington D.C., the political backlash continues to build against the subsidies corn ethanol receives, with increasing urgency due to the global food shortages that are allegedly exacerbated by dedicating so much acreage to corn for ethanol.

There are many responses to these concerns, however. When producing ethanol from Brazilian sugar cane, for example, the energy payback can go as high as 8 to 1. In the case of corn ethanol, most analysts put the payback around 1.5 to 1, and at a margin that thin, there is plenty of room for interpretation. But the analyses that claim corn

ethanol's energy payback is insufficient to justify its use as a fuel ignore the added value of the distiller's grain, a byproduct of corn ethanol production.

Critics of corn ethanol subsidies ignore the value of keeping these dollars in the U.S. to reduce the trade deficit. Those environmentalists concerned about the growing "dead zone" caused by agricultural runoff, presumably destined to grow even faster as we turn more acreage to biofuel, are certainly justified. But it is disingenuous to suggest that because we are distilling corn instead of harvesting grain there is somehow a more urgent problem than before. The dead zone in the Gulf of Mexico needs to be cleaned up. Agricultural runoff is an environmental challenge that awaits cost effective solutions - with or without the reality of biofuel.

The most problematic challenge to corn ethanol undoubtedly comes from those who are concerned it is causing rising food prices. But here again there are many significant factors that in aggregate eclipse the impact of corn ethanol, possibly by orders of magnitude. Rising per capita income in Asia has caused increased consumption of meat products, and livestock requires grain. Estimates vary, but for every calorie of meat consumed, about eight calories of grain have to be grown and fed to the livestock. This phenomenon has caused global demand for grain to grow far faster than it would already be growing due to increasing human population. At the same time, there have been temporary but severe setbacks to global grain output - a drought in Australia, flooding in the American mid-west. If that weren't enough, commodities speculators have hedged themselves against devaluing dollars and falling asset values in stocks and real estate by purchasing commodities futures - driving prices up more than the forces of normal supply and demand already have.

Ethanol proponants have answered the critics in a variety of ways. The "25x25 Alliance," an industry group committed to the goal of the USA producing 25% of its energy from renewable sources by 2025, has issued "sustainability principles" for biofuel production. The National Corn Growers Association has compiled a great deal of data in an attempt to debunk the position that corn ethanol is the primary cause of worldwide food shortages and commodity price increases. Automakers are caught in the middle - a powerful environmental lobby demands cars capable of being fueled with alternatives to gasoline, then savagely turns on corn ethanol, despite the fact it is the only motor fuel alternative we've got that we can produce in meaningful quantities today.

In any event, corn ethanol isn't the ultimate solution to biofuel supplies, it is only a transitional fuel. This crucial point is often lost amid the controversy surrounding corn ethanol. It is cellulosic ethanol that has the potential to completely replace petroleum based fuel, and when cellulosic ethanol begins to arrive in high volume, a preexisting ethanol infrastructure - cars that run on ethanol, fueling stations that sell ethanol, and a transportation network to deliver ethanol to retailers - will need to be in place. Corn ethanol is priming the pump for the arrival of cellulosic ethanol.

Within the next few years corn ethanol production in the United States is predicted to top 10 billion gallons. This is not a trivial amount of fuel, given the entire light vehicle fleet in the USA consumes only 15 times that amount. Corn ethanol has already reduced the demand for foreign oil for light vehicle use by about 6.5%. Nonetheless, critics who claim corn ethanol production cannot possibly increase enough to replace petroleum are correct. The math of these critics is elegant - 10 billion gallons of corn ethanol, at 2.8 gallons per bushel and 155 bushels per acre equates to 23 million acres, about 7% of America's active farm acreage. If you use corn ethanol to service 100% of America's fuel requirements for light vehicles, you use 100% of America's farmland.

Once again, however, this math is missing the point. Corn ethanol, distilled from corn mash, is not the end of biofuel, it is just the beginning of biofuel. Even the impressive global production of ethanol from sugar cane is easily eclipsed by the potential of cellulosic extraction. So what is cellulosic ethanol, where does it come from, how can it be produced, and how long will it be before meaningful quantities of this fuel arrive at the corner filling station?

One of the most visible and visionary proponants of biofuel is the noted venture capitalist Vinod Khosla, who early in his career was one of the four co-founders of Sun Microsystems, and has parlayed this spectacular victory into an impressive portfolio of investments in private sector companies. Over the past few years Khosla Ventures has invested in dozens of clean technology and sustainable energy companies, including several top tier biofuel ventures, including Coskata and Mascoma, mentioned later in this report. In a recent research paper written by Vinod Khosla entitled "Where will Biofuels and Biomass Feedstocks Come From ," Khosla identifies and quantifies the many potential sources of cellulosic feedstock for ethanol fuel. Some of the information on the table below borrows from Khosla's research, but changes some of the assumptions; other data comes from the U.S. Dept. of Energy.

The figures on this table are arguably realistic, not optimistic, based on the following assumptions for each feedstock:

Dedicated land use refers to cellulosic crops, such as miscanthus or switchgrass, planted on 5% of American farmland (total US farmland is estimated currently at 317 million acres), less than is currently planted for corn ethanol production. At a yield of 15 tons of cellulosic feedstock per acre and 100 gallons of ethanol per ton of feedstock, nearly 24 million gallons of ethanol can be produced each year. While 15 tons of feedstock per acre is more than can currently be grown, it is considerably lower than forecasts of yields expected within the next couple of decades, which range as high as 25 tons per acre.

Winter cover crops would not displace existing farmland, and if they were profitable to grow it isn't unlikely they could become additional income for farmers on 25% of land already under summer cultivation. At a yield of 3 tons per acre - projections go as high as 5 tons per acre - another nearly 24 million gallons of ethanol can be produced each year.

Excess forest biomass is a difficult number to calculate, but when one considers there are about 750 million acres of forest in the USA (ref. Forest Resources of the United States), as well as the fact nearly all of them have become dangerously overgrown (major factors in more catastrophic fires and beetle infestations, ref. Restoration Forestry), the figure we've used of 226 million tons per year is probably quite low. It would suggest a growth in forest mass of less than one-third of a ton per acre per year. And in our estimate, even the figure of 226 million tons is only assumed to be 70% utilized. Forest thinning is a form of stewardship long overdue, it will return America's forests to their healthier historical densities, and their excess mass will power our engines instead of burn in forest fires.

Construction debris and municipal solid waste are obvious candidates for cellulosic harvesting, and even the non-cellulosic materials can be used as fuel for the extraction of syngas (which is converted into ethanol), or reclaimed as building materials. According to the Dept. of Energy, 325 million tons of these waste resources are produced each year. We have assumed 90% utilization, and only 75 gallons of ethanol per ton, a yield that is below most projections.

Other waste resources are deliberately understated - just our industrial emissions are probably sufficient to deliver 100 million tons of feedstock. Also not included in this analysis anywhere else are crop residue, a huge source of feedstocks, some percentage of which can certainly be allocated sustainably to ethanol production without sacrificing soil health.

It isn't easy to estimate just how much cellulosic feedstock could be sustainably harvested each year in the USA, but but two things are clear from this analysis. (1) When cellulosic ethanol extraction becomes a commercially competitive process, and the industrial capacity is in place to produce high volumes of ethanol from cellulosic materials, there will be plenty of feedstocks - at least 1.0 billion tons per year; probably twice that. Cellulosic ethanol definitely has the potential to become a significant source of transportation fuel, and (2) Khosla's contention that land use dedicated to ethanol production in the USA might actually decrease when cellulosic processing takes over is completely plausible. In the example above, no corn ethanol was produced, and the dedicated acreage committed to cellulosic ethanol was assumed to be 5% of America's farmland, whereas today corn ethanol is grown on about 7% of America's farmland.

So how will we convert cellulosic material into ethanol? There are hundreds of companies around the world working on ways to accomplish this, using a variety of technological approaches. Last month, while on a General Motors sponsored tour for automotive journalists, I had the opportunity to visit two companies who are pursuing promising, and very different, solutions to the cellulosic ethanol puzzle.

Our trip began in Chicago on the morning of May 21st, where about a dozen journalists assembled to drive a convoy of GM vehicles, all equipped to run on E85 ethanol. In a completely unexpected turn of events, I found myself behind the wheel in a high riding Chevy Silverado, painted with GM colors that announced to the world the truck's status

as an ethanol fueled vehicle, with extended cab and a monstrous bed. Although I was unaccustomed to piloting such a behemoth, there was excellent road visibility from the cab, and GM's OnStar tracked my position and provided constant audio directions, so I swung into downtown Chicago traffic, and joined the late morning rush out of town. At one point it was clear we needed to move across a couple of lanes to catch our exit, and to make sure we would safely execute this maneuver amidst the 18 wheelers and such, I found it appropriate to smash the gas pedal to the floor and hold it there. The tactic was brilliantly successful, as this gigantic truck leapt forward with impressive accelleration and increased our speed from 45 to 75 in a matter of seconds. Safely in our place on the correct route, I let off the accelerator and knew the power of corn.

About 40 miles west of Chicago, in Warrenville, Illinois, are the labs of Coskata, a company that is contending to be the first to commercialize production of cellulosic ethanol.

In February 2008 General Motors invested an undisclosed sum in this three year old private company, whose CEO, Bill Roe, stated "we do not believe we have any remaining technological hurdles." Coskata is betting on this with a pilot plant they are building in Madison, Pennsylvania, near Pittsburgh. They expect to have this plant operating early in 2009, producing 40,000 gallons of fuel per year. GM intends to use the fuel to test their growing fleet of E85 flexfuel vehicles.

Coskata's technology for extracting ethanol from cellulose is elaborate, but apparently closer to commercialization than competing processes. Whether or not Coskata's technology ultimately dominates is harder to assess, but according to Roe, the variable costs to produce a gallon of ethanol using their technology is expected to be under $1.00 per gallon. Here's how Coskata intends to produce ethanol:

In the diagram below, "Coskata's Manufacturing Process," there are three primary steps. First the feedstock is shredded and dried, and fed into the gasifier, where it is reduced to syngas at a temperature of 5,000 degrees. Some of the syngas is used to provide the energy for the conversion process, but about 85% of the syngas is converted into ethanol in step two. A recent study by Argonne National Labs estimates Coskata's process yields an energy payback of about 8 to 1.

The second step is to feed the syngas into a bioreactor, where microbes eat the syngas and excrete ethanol. These microbes are anerobic, meaning they can't survive in atmosphere, and they are the result of careful selective breeding whereby they are now 100 times more efficient converting syngas into ethanol than they were when they began the process a few years ago. "We know our microbes can convert syngas to ethanol at commercial quantities, cost effectively," said Roe.

The final step in the process is to feed the ethanol and water out of the bioreactor into a recovery tank, where the ethanol is extracted and the water is recycled back into the bioreactor.

From the look of things during our visit to Coskata's lab in Warrenville, about the only bugs left in their process are the bugs in the bioreactor. According to Wes Bolson, Coskata's Chief Marketing Officer, the company is actively seeking partners among the companies who have access to huge quantities of cellulosic feedstock, and currently have nothing they can do with it. These candidates include timber companies, sugar cane refiners, pulp and paper mills, and waste management companies. Coskata can also partner with companies who already are generating syngas, but haven't got the bioreactor technology.

After spending a half-day at Coskata, our corn fueled convoy got back on the highway and headed south to Indianapolis, driving most of the way on southbound Interstate 65. And as our expedition hurtled through America's heartland on this beautiful afternoon, as far as the eye could see, across the rain watered endless fertile fields of Indiana sprouted new shoots of spring corn.

If you are within blocks, long blocks, of the Indianapolis Motor Speedway, during the last full week in May, you will likely hear the roar of the engines. And as we neared the track on the morning of May 22nd, we too heard and felt the sound as the drivers did qualifying laps in advance of the 92nd running of the Indianapolis 500. In a thankfully soundproof auditorium on the massive infield of the racetrack, we attended an ethanol summit co-sponsored by GM, where I had an opportunity to meet Dr. Mike Ladisch, Chief Technical Officer of Mascoma. This company, like Coskata, is hot on the trail of commercializing cellulosic ethanol production, but they are pursuing a solution that will not rely on high temperature gasification. Instead, Mascoma is developing a biochemical method to convert cellulose into ethanol. Ladisch, a genial scientist who has taken a leave of absence from Purdue to serve as CTO at Mascoma, was understandably guarded about his company's technology, but characterized it in the following way:

"The work at Mascoma is based on organisms and processes designed to rapidly break down the components of biomass, convert a range of sugars and polymers of sugars to ethanol, and thrive in a manufacturing environment."

Mascoma intends to do this in one step using genetically engineered microbes that are capable of performing both processes. This is known as consolidated bioprocessing, or CBP, and perhaps represents the ultimate technology to extract ethanol from cellulose.

Another informed opinion on Mascoma (and cellulosic technology in general) was obtained via email from Dr. Lee Lynd, a professor at Dartmouth who, along with Ladisch, is one of the leading scientists in the world pursuing advanced cellulosic technologies. Here is what he wrote:

"Mascoma has the largest and most focused effort worldwide on consolidated bioprocessing, which I consider to be the ultimate low-cost conversion strategy. If Mascoma is able to continue this aggressive effort, I believe that they will succeed and that they will have the lowest cost technology for converting herbaceous and woody

angiosperms (e.g. grass and hardwoods) to ethanol and other biofuels. It is less clear that the Mascoma approach will be best for gymnosperms (softwoods), and this could be a long-term niche for thermochemical processing along with processing residues from biological processing. Mascoma's business strategy features a 'staircase' of process configurations, starting with options that can be commercially implemented very soon and progressing ultimately to CBP."

How soon will Mascoma and others deploy these technologies? Although Mascoma's website has an excellent description of the various cellulosic technologies (ref. Consolidated Bioprocessing), exactly when they expect their technology to be ready for commercialization appears to be a closely guarded secret. Other observers, off the record, have stated commercially viable enzymatic processing is 5-10 years away. But advances in biotechnology are happening at a staggering pace, and unforeseen breakthroughs are not something to bet against. On the other hand, even if Coskata, Mascoma, and countless other credible contenders to deliver commercially competitive cellulosic ethanol technologies were all ready tomorrow, it will still take years to build the new refineries and transform America's light vehicle fleet.

In the meantime, corn carries the weight of being the primary source of ethanol in the USA, as the rest of the infrastructure falls into place. There are already 1,600 ethanol stations in the U.S. - about 1% of all gasoline retailers - and with UL certification imminent the big box chains are going to begin offering ethanol fuel, greatly increasing access. General Motors now offers 15 models of flexfuel vehicles; and they are now producing over 1.0 million of them per year. Other automakers are following suit. All over the world, governments are determining what percentages of ethanol fuel - along with other biofuels, biodiesel in particular - to blend into their transportation fuels.

How long can corn carry the weight of this growth, serving as the transitional feedstock? How soon can hybrids and extended range vehicles level off or even reduce the demand for transportation fuel? There is little doubt ethanol is a viable fuel for light vehicles, and there is little doubt cellulosic ethanol feedstocks exist in sufficient sustainable abundance to greatly offset petroleum consumption. Finally, there is little doubt that money and support for cellulosic ethanol commercialization is ongoing; from Washington DC to Detroit to the Silicon Valley, everyone is on board. The uncertainty lies in whether or not the new technologies to extract ethanol from cellulose will emerge in months or decades, and in how fast we can build large scale industrial capacity to exploit these new technologies. Look to pilot plants in Madison, Pennsylvania, and elsewhere, for early indications of what may come, and when.

The Atlanta Journal-Constitution
June 26, 2008

Ethanol, boats an interesting mix

By: Scott Bernarde

With E-10 gasoline (10 percent ethanol) available virtually everywhere in metro Atlanta, most boat owners are filling up their tanks with the blended fuel.

That'll be especially true next weekend. The July 4 weekend will be one of the busiest of the season on area lakes.

E-10 is either good or bad for boat engines, depending on who you ask, but it's clear that word is getting out on what to do to prevent problems (such as clogged fuel lines, problems with older boats with fiberglass fuel tanks).

That doesn't mean the problems have disappeared.

No matter how you feel about the subject, E-10 is here to stay.

What's your story on E-10?