The JACOBSEN® Since 1865
Wednesday, August 11, 2010

Biodiesel Bulletin

Available online at www.TheJacobsen.com

Renewable Fuels

Update on the Biodiesel Mandates and RINs
Ag Economists View the 2010-2011 Outlook

John (Jake) Ferris, Professor Emeritus
Department of Agricultural, Food and Resource Economics
Michigan State University, Email: jakemax33@comcast.net

The U.S. Senate's treatment of the biodiesel tax credit provision continues to be an "in" and "out" deal with no action as Congress goes into the August recess. Biodiesel production continues to badly lag the pace needed to reach the 2009 and 2010 mandates. The industry seems to be delaying stepping up production, assuming that the tax credit retroactive to January 1, 2010 will eventually be enacted. One proposal is to extend it through 2012. Of particular interest will be the path of the biodiesel RINs now being reported in Jacobsen's Biodiesel Bulletin and added to Table 5.

With a closer look at the proposed Renewable Fuel Standards (RFS) for 2011 released by the EPA on July 12 and reported in the Biodiesel Bulletin of July 14, here is my best accounting of how the biodiesel industry must meet the mandates. This is contingent upon EPA's response to my recent inquiry for clarification. First, the mandates refer to the availability of biodiesel and not production. The equation is production minus exports plus imports. In 2009, biodiesel production reached about 540 million gallons, but net exports (exports minus imports) was 185 million gallons - resulting in 355 million gallons available domestically.

For the first half of 2010, production was 187 million gallons as indicated in Table 5. Net exports through May were at a rate of about 9.5 million gallons per month, which, if extended to June would amount to about 57 million gallons total for the six months. Therefore, the availability of biodiesel for January to June 2010 was about 130 million gallons (187-57). Adding the availability in calendar 2009 to the availability in first half of 2010 equals 485 million gallons (355+130). To reach the mandate for 2009 and 2010 of 1150 million gallons, the balance needed is 665 million gallons.

For reasons not completely clear, "obligated parties are not required to demonstrate compliance with the 2010 biomass-based diesel volume requirement of 1.15 billion gallons until February 28, 2011." This was stated in the EPA July 12 release. Running the numbers again, in the 8 months from July 2010 to February 2011, the availability of biodiesel must reach 665 million gallons (1150-485). If net exports continue at the rate of the first half of 2010 (9.5 million gallons per month), this would equal 76 million gallons in July 2010 to February 2011, meaning that production would have to reach 741 million gallons.

Under these assumptions, biodiesel production must be ramped up to 93 million gallons per month in the July 2010 to February 2011 period to meet the mandate, compared to 45 million per month in 2009 and 31 million in the first half of 2010. The EPA's assessment is that this is feasible, considering that the industry's capacity is over 180 million gallons.

Ag Economists View the Outlook

The AAEA is the professional association of agricultural economists which recently changed its name from the American Agricultural Economics Association to the Agricultural and Applied Economics Association - changed the name but not the initials. In 1978, a committee of the association, mostly involved in agricultural

extension activities, initiated a survey of members involved in forecasting. As a member of that committee, I am proud to report that the survey has continued; and the 33rd Survey is summarized on selected variables in Tables 1 to 3.

The tables were compiled by Ron Plain, Professor in the Department of Agricultural Economics at the University of Missouri and David Miller, Agricultural Economist at the Iowa Farm Bureau. Early on, Jim Hilker, Professor in the Department of Agricultural, Food and Resource Economics at Michigan State University did the compiling along with my help.

The surveys were conducted in mid July with the focus on the new crop and calendar year, with some references on partially forecasting the current calendar year. Somewhat unique in these surveys is that the forecasts from those who consider themselves as specialists (experts) in a particular commodity can be compared to the total responses.

Table 1.

Forecasts of Selected Crop Production and Prices from the 2010 AAEA Annual Outlook Survey

Item	Unit	2010 Crop Production Mil. Bu.	Farm Price $/ Bu	Nearby Futures Contract Price 12/1/2010	3/1/2011	6/30/2011
Soybeans						
Average		3351	9.10			
Std. Dev.		89	0.40			
Experts		3335	9.14			
Corn						
Average		13204	3.88			
Std. Dev.		183	0.35			
Experts		13109	4.04			
CBOT Soybeans						
Average	$/Bu.			9.44	9.63	9.72
Minimum	"			8.80	8.65	8.90
Maximum	"			10.00	11.00	11.50
CBOT Soy Oil						
Average	Cents/Lb.			38.2	39.1	39.1
Minimum	"			36.5	37.4	37.6
Maximum	"			40.5	42.5	43.0
CBOT Corn						
Average	$/Bu.			3.96	4.23	4.26
Minimum	"			3.60	3.75	3.63
Maximum	"			4.38	4.92	5.12

As indicated in Table 1, for soybeans and corn production and prices, the averages of the survey are embraced with what is called "Std. Dev." or standard deviation, which is a representation of the variation in the survey. About two-thirds of the forecasts are within the range of the average plus or minus the standard deviation. Those who self identified themselves as "experts" are tabulated for their "averages." The "experts" are a bit more optimistic on farm prices than the others.

Table 2.

Forecasts of Annual Livestock Production from the 2010 AAEA Annual Outlook Survey in Terms of Percent Change from the Year Before

Item	2010 Average	2010 Standard Deviation	2010 Average of Experts	2011 Average	2011 Standard Deviation	2011 Average of Experts
Beef	-1.1	0.6	-1.2	-1.1	0.9	-1.2
Pork	-3.3	0.4	-3.2	0.9	0.8	1.1
Broilers	2.7	0.2	2.7	2.8	1.0	0.7
Turkeys	-1.8	0.6	NA	1.9	0.9	NA

On Table 2 on livestock production, the conclusion is that beef output will decline in 2010 and into 2011. On pork production, the drop in 2010 will reverse in 2011. For broiler production, the rate will continue to increase into 2011, but "experts" expect the rate of increase will slow down. For turkey production, a reduction in prospect for 2010 is expected to be reversed in 2010. There were no turkey "experts" in the Survey.

On Table 3 on farm land prices and selected macroeconomic variables, the "experts" are somewhat less optimistic about farm land prices increasing than the average respondent. However, they are more positive about expansion in the increase in the real GDP and CPI than the average. The Dow Jones Industrial Index closed at 10644 on August 10, 2010. The economists expect the index to hold at that level by the end of June 2011 with the "experts" a bit more optimistic for a 5 percent gain. On crude oil prices, which were about $83 per barrel at Cushing, OK in early August, respondents expect that level to hold into June 2011 while the "experts" see some weakening.

Table 3.

Forecasts of Farm Land Prices and Selected Macroeconomic Variables from the 2010 AAEA Annual Outlook Survey

Item	Unit	Average	Standard Deviation	Average of Experts
Farm Land Values				
January 1, 2010	% Change	1.7	1.4	-0.1
January 1, 2011	"	2.0	1.5	1.3
Real GDP (1996 $)				
Year 2010	% Change	2.1	0.6	2.5
Year 2011	"	2.1	0.9	3.0
CPI, All Items				
Year 2010	% Change	1.7	0.4	2.0
Year 2011	"	2.1	0.6	2.5
Dow Jones Industrials				
Low in next 11 months	Index	9182	468	9000
High in next 11 months	"	11435	614	12000
Close on 6/30/2011	"	10743	526	11200
Crude Oil Prices [1]				
Low in next 11 months	$/ Barrel	67.42	4.40	71.50
High in next 11 months	"	89.01	5.78	82.00
Average for June 2011	"	81.38	5.77	75.00

[1] WTI spot, Cushing, OK, monthly average

Perhaps, one of the major values of this long, continuous survey is that it establishes parameters on the risks involved in forecasting for the year ahead. Ron Plain tabulated the departures of the forecasts from the subsequent actual values in terms of absolute errors, that is, the differences without regard to signs. Large plus and minus errors could average out to small if signs were included. The results are presented in Table 4 on selected variables.

For comparison purposes, "absolute percentage errors" were included. Note the difficulty in forecasting the coming year's prices on soybeans, corn and the stock market versus the other variables. Also, even as late as July, forecasting the fall crops of soybeans and corn registered an error of 5-6 percent over a 32 year period. Livestock production errors were relatively small compared to crops.

Table 4.

Past Errors in Forecasts of Selected Agricultural and Macroeconomic Variables for the Next Year from the 2010 AAEA Annual Outlook Survey

Item	Unit	Time Period	Absolute Error	Absolute Percentage Error
Soybeans				
Production	Mil. Bu.	1978-2009	127	5.4
Farm Price	$/Bu.	1978-2008	0.76	12.2
Corn				
Production	Mil. Bu.	1978-2009	575	6.5
Farm Price	$/Bu.	1978-2008	0.34	13.7
Livestock Production				
Beef	% Change	1979-2009		2.4
Pork	"	"		1.8
Broilers	"	"		1.6
Turkeys	"	1998-2009		2.8
Farm Land Values	"	1979-2009		4.4
Real GDP (1996 $)	"	"		1.4
CPI, All Items	"	"		1.3
Dow Jones Industrials	Index	1989-2010	1016	13.1

Monthly Update

The sharp increase in energy prices into early August was more than offset by soybean oil prices which pulled down the profit level from that feedstock. However, prices on the animal fats and yellow grease did not follow, allowing increased margins from those feedstocks (Table 5). Since most indications for the U.S. soybean crop have been positive, the surge in prices in the soybean complex has been somewhat surprising as have a $2 increase in wheat futures in July.

Check the important USDA's World Board forecasts in their Thursday August 12 release which includes the first objective survey of prospective yields of fall harvested crops. Also of interest would be a comparison with the forecasts from the AAEA survey generated in July. For the selected crop and livestock variables in Table 4, the USDA errors were about the same or slightly larger than the Survey's except for smaller errors on the farm price of soybeans.

Table 5.

Monthly Data on Selected Variables Related to Biodiesel, September 2009 to Auguust 2010 [1]

Item	Unit	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	August
Energy Prices													
Crude Oil [2]	$/Brl.	68	72	74	73	75	75	77	81	73	75	76	82
Diesel, No 2, DOE	$/Gal.	1.85	1.98	2.04	2.00	2.08	2.02	2.16	2.31	2.18	2.17	2.12	2.31
Heating oil, NY	"	1.73	1.93	1.98	1.97	2.05	1.98	2.08	2.20	2.04	2.03	1.98	2.14
Biodiesel, Upper Midwest	"	3.09	3.05	3.25	3.28	3.36	3.28	3.36	3.31	3.25	3.18	3.15	3.30
Basis, Heating Oil, NY	"	1.36	1.12	1.27	1.31	1.31	1.30	1.28	1.11	1.21	1.15	1.17	1.16
Margin over Energy Equiv. [3]	"	0.45	0.28	0.43	0.50	0.51	0.48	0.43	0.25	0.32	0.25	0.26	0.23
Input Prices													
Soybean Oil, Crude, Decatur	Cents/Lb.	33.5	33.2	36.9	39.6	35.0	36.7	36.4	37.2	35.6	34.7	35.2	38.9
Bleachable Fancy Tallow [4]	"	30.3	22.3	26.1	29.0	28.6	27.5	31.4	32.6	33.0	32.7	32.2	32.0
Choice White Grease [5]	"	26.8	22.5	24.1	25.8	27.1	25.6	29.1	31.1	31.8	32.0	29.6	29.0
Stabilized Poultry Fat [6]	"	20.2	18.7	19.6	21.0	23.1	24.0	26.8	26.9	26.0	26.0	23.0	22.0
Yellow Grease, Illinois	"	21.6	19.2	20.7	20.8	23.8	23.8	26.8	26.1	27.1	25.8	23.8	22.8
Methanol [7]	$/Gal.	0.84	0.95	1.00	1.10	1.10	1.10	1.10	1.10	1.00	1.05	1.05	1.05
Natural Gas, Industrial [8]	$/1000 c.f.	3.81	4.80	5.37	5.97	6.88	6.76	6.05	5.07	5.01	5.22	5.33	5.19
Gross Margins [9]													
Soybean Oil	$/Gal.	0.10	0.06	-0.02	-0.21	0.21	0.01	0.12	0.03	0.10	0.10	0.03	-0.10
Bleachable Fancy Tallow	"	-0.10	0.45	0.35	0.14	0.23	0.25	0.04	-0.08	-0.16	-0.20	-0.20	-0.04
Choice White Grease	"	0.16	0.43	0.50	0.38	0.35	0.40	0.22	0.03	-0.07	-0.15	0.01	0.19
Stabilized Poultry Fat	"	0.68	0.73	0.85	0.76	0.66	0.52	0.40	0.36	0.38	0.32	0.52	0.73
Yellow Grease	"	0.37	0.49	0.57	0.57	0.41	0.34	0.20	0.22	0.10	0.13	0.25	0.48
DDG Corn Oil	"	-0.01	0.40	0.37	0.21	0.24	0.27	0.08	-0.07	-0.16	-0.23	-0.14	0.03
Biodiesel Production [10]													
Soybean Oil	Mil. Gals.	27	33	32	32	12	14	18	17	14	12		
Other	"	20	22	34	29	20	19	16	14	15	15		
Total	"	48	55	65	61	32	34	34	31	29	27		
Biodiesel Trade [11]													
Exports	Mil. Gals.	10	18	36	19	13	6	19	10	11			
Imports	"	5	7	5	7	2	1	3	2	4			
Net Exports	"	4	12	31	12	11	5	16	8	7			
RINs	$/Gal.											0.55	0.53

[1] First part of August [2] Composite refiner acquisition cost [3] Margin of biodiesel prices over the energy equivalent plus the $1.00 blenders' tax credit [4] Renderer, Chicago [5] Chicago [6] Alabama/Georgia [7] Source: Methanex, at the Gulf [8] Source: DOE [9] Returns over variable and fixed costs and a normal profit [10] Derived from consumption of fats and oils in methyl esters, Current Industrial Reports (M311K) of the U.S. Census Bureau [11] Source: U.S. Census Bureau, Foreign Trade Statistics

CHARTS & TABLES

* * Only viewable through our website * *

CHARTS	TABLES
Biodiesel	Crude Oils, Glycerin & Fatty Acid Production
Biodiesel Regions Map	Edible & Inedible Fats Production

EUROPEAN BIODIESEL

Biofuel End of Day Pricing

Bio Diesel **Forward Curve**

USD MT	SPOT 6-8 Week Forward EN14214 Virgin Veg Oil					EUR/USD	1.2892
FOB ROTT	Bid	Offer	**Q4 '10**	**Q1 '11**	**Q2 '11**	**Q3'11**	**Q4 '11**
RME	1070	1100	$1090-1120	1110-1140	1120-1150	1130-1160	1140-1170
SME	990	1020	$1000-1030	1000-1030	1010-1040	1020-1050	1030-1060
PME	940	970	$950-980	950-980	960-990	960-990	960-990

0 cfpp	990	1020	$990-1020	990-1020	990-1020	1000-1030	1000-1030
USD MT SPOT 6-8 Weeks Fwd 100% Biomass no UCO, TME or PME 300ppm Water							
FOB ARGENTINA USD MT			**Sep**	**Oct**	**Nov**	**Dec**	**Jan**
SME ASTM/EN Indication Level			$973-1003	978-1008	978-1008	983-1013	988-1018

****Prices Courtesy of SCB Group**

European Outlook
Courtesy of Alex Nimmo

The European biodiesel market has clicked into a groove in the last couple of months. Prices are now beginning to track feedstocks a lot more than the gasoil or diesel price, as was previously the case. In July we saw Argentine basis points, which usually trade below CBOT, go into the positive for the first time in roughly a year on the back of dry weather concerns. Basis points are now beginning to come down once more as the grains and softs complex cools a little, although the sell side is still trying to keep the premium positive. This somewhat unusual situation kept SME supplies in NWE tighter during the summer months, which meant that volumes of FAME 0 available to the spot market fell noticeably. However, the feedstock for RME, rapeseed oil, climbed by 12% from the start of July to early August going from around €707/mt to a high of €800/mt FOB Dutch Mills. Despite this there was a little more focus on RME FOB ARA than other methyl ester products.

The implication of biofuel tracking its feedstocks to a greater extent than the mineral oils is an indicator of the growing maturity of the biofuels market, which in line with the change in hedging patterns towards feedstock swaps bodes very well for the future. The market in used cooking oil methyl ester (UCOME) is gaining pace as more end users become comfortable with the regulations and plants get certified. It is encouraging for the industry that more focus is being placed on waste material and that subsidies and tax breaks are enticing more participants into this particular market.

Alex Nimmo is a renewable fuels broker at SCB Group in Switzerland.

Alex Nimmo can be reached by phone at 41-22 365 5305 or email Alex@starsupply.ch

ANIMAL FAT – BIODIESEL

The animal fat market seems to be heating up this week with higher prices being reported on BFT, CWG and YG as well as poultry fat. While the BFT market has fallen silent in the past couple of days, it kicked off the week with a jump and YG and CWG have followed suit. CWG is trading in a wide range FOB the Mo. River and this is directly attributable to quality and buyer. Sources have suggested that buyers looking for specific material in lesser quantities are going to find themselves paying a premium. There are reports of a lot of higher acid material available due to the high ambient temperatures across the country and if a buyer is willing and/or able to take some higher acid material, they could find themselves getting a good deal.

There have been reports of good demand from biodiesel operators the last week and a half. There are concerns that the recent drop in crude prices as well as some strengthening in the fats and oils market could send those same buyers back to the sidelines if the pricing trends continue.

RENEWABLE FUELS – BIODIESEL

B100 values are not following feedstock prices as closely as we have seen in the past. The simple answer to this would be that much of the available product was produced from lower valued feedstock and stored as the market remains thin. The industry may be further coming to a crossroad in which it is best to move product and generate income then worry about making sales at a point that is indicated by expected margins. This works in the short term specifically if the plant is not concerned about the need to replace feedstock at current values. It also reminds us that the industry is close to rolling over and playing dead without some help from somewhere. This help could still come in the form of a Blender's Tax Credit or an enforceable nationwide blending mandate.

FEEDSTOCK INFORMATION

PALM OIL

Rough numbers for Palm Oil (RBD) would indicate at forty-five and a half to forty-six cents a pound (US Gulf and West Coast) and at seven and a half pounds per gallon for B100 without production costs the value would be from $3.375 to 3.45 a gallon.

SOYBEAN OIL

Rough numbers for Soybean Oil (RBD) at forty to forty-one cents a pound (Midwest) and seven and a half pounds for a gallon of B100 without production costs the indicated value would be from $3.00 to 3.075 a gallon.

B100 PRICES BY REGION

- **Northeast** - The average price for the region today is $3.35 a gallon with the range unchanged from last week. There were reports this week of trades outside the quoted range, both above and below.
- **Southeast** - The price in the region today averaged $3.25 a gallon with the low end of the range up a dime a gallon from this time last week.
- **Lower Midwest** - Today the average price for the region is $3.30 a gallon with both ends of the range up five cents a gallon from this time last week.
- **Upper Midwest** - The price in this region today averaged $3.35 a gallon with both ends of the range up five cents a gallon since this time last week.
- **South Central** - The average price for the region today is $3.15 a gallon with the range unchanged since last week.
- **Rocky Mountain** - The price for this region today averaged $4.35 a gallon with the both ends of the range raised by ten cents a gallon from last week.
- **West Coast** - The average price for the region today is $3.65 a gallon which is unchanged from a week ago.

B100 PRICES BY FEEDSTOCK

SME (Soyoil Methyl Ester) The price range for this week is from $3.20 to 3.70 a gallon with both ends of the range up five cents from last week.

FAME (Fatty Acid “Animal Fats” Methyl Ester) The price range for this week is from $2.85 to 3.35 a gallon which is unchanged from a week ago.

PME (Palm oil Methyl Ester) Based on palm oil as the feedstock, B100 would be about $3.375 to 3.45 a gallon before processing costs.

The Blends The various feedstock’s were priced in a range of $2.85 to 3.35 a gallon this week which is unchanged from a week ago.

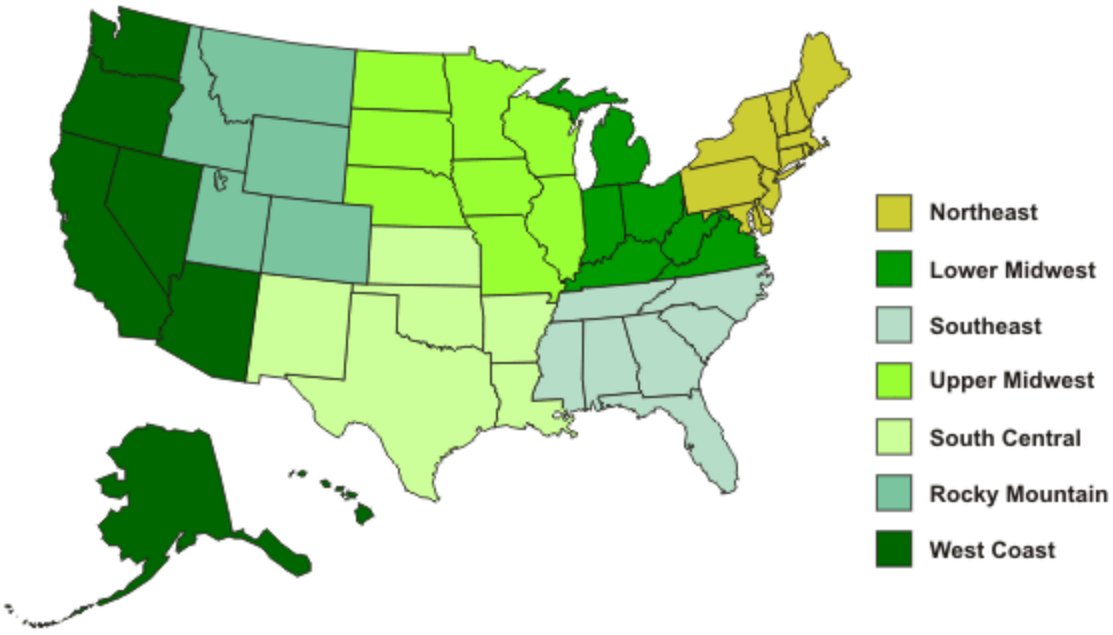
RIN VALUES

This week we would place RIN values between fifty-two and fifty-four cents.

Please direct questions or comments to Lenny Carpenter at 765-279-5041 or lenny@thejacobsen.com

The JACOBSEN® Since 1865

Biodiesel (B100) Reporting Regions



The Jacobsen B100 Index for August 11 is $3.3700.

The Jacobsen B100 Index for August 04 was $3.3400.

B100 GROSS PROCESSING MARGIN
(Jacobsen Upper Midwest Values – August 11, 2010)

Components	Pricing Date: 8/11/2010
RBD Soy Oil Price ($/lb)	$0.4077
RBD Cost @ 7.5 lb/gal	$3.0578
Methanol Price ($/gal)	$1.20
Methanol Cost @ 0.112 utilization	$0.1344
Processing Costs ($/gal)	$0.2266
Byproduct Credit ($/gal) [Glycerin @$0.0550/lb X 0.8530 #/gal]	$0.0597
Total Transesterification Costs ($/gal)	$3.3590
B100 Market Price ($/gal)	$3.35
Gross Processing Margin ($/gal)	$-0.0090
Change From 8/4/2010 $-0.0283 ($/gal)	0.0192