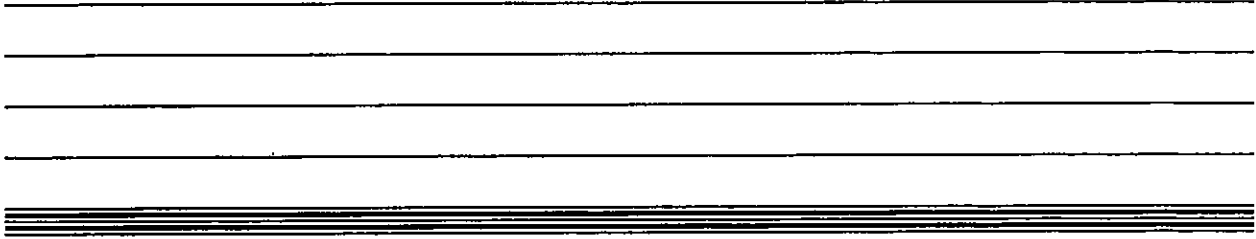


# Oversight Division

Committee On Legislative Research

## PROGRAM EVALUATION

Review of the Department of Agriculture  
Ethanol Incentives and Tax Credits



# Program Evaluation

## Review of the Department Agriculture Ethanol Incentives and Tax Credits

*Prepared for the Committee on Legislative Research  
by the Oversight Division*

*Mickey Wilson, CPA, Director*

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## Committee on Legislative Research Oversight Subcommittee

THE COMMITTEE ON LEGISLATIVE RESEARCH, Oversight Division, is an agency of the Missouri General Assembly as established in Chapter 23 of the Revised Statutes of Missouri. The programs and activities of the State of Missouri cost approximately \$21.6 billion annually. Each year the General Assembly enacts laws which add to, delete or change these programs. To meet the demands for more responsive and cost effective state government, legislators need to receive information regarding the status of the programs which they have created and the expenditure of funds which they have authorized. The work of the Oversight Division provides the General Assembly with a means to evaluate state agencies and state programs.

THE COMMITTEE ON LEGISLATIVE RESEARCH is a permanent joint committee of the Missouri General Assembly comprised of the chairman of the Senate Appropriations Committee and nine other members of the Senate and the chairman of the House Budget Committee and nine other members of the House of Representatives. The Senate members are appointed by the President Pro Tem of the Senate and the House members are appointed by the Speaker of the House of Representatives. No more than six members from the House and six members from the Senate may be of the same political party.

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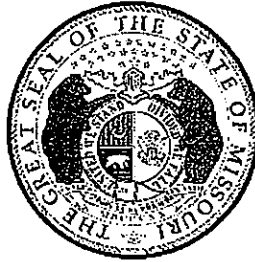
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Members of the General Assembly:

The Joint Committee on Legislative Research adopted a resolution in June 2008, directing the Oversight Division to perform a program evaluation of the Department of Agriculture Ethanol Incentives and Tax Credits to determine and evaluate program performance in accordance with program objectives, responsibilities, and duties as set forth by statute or regulation.

The report includes Oversight's comments on internal controls, compliance with legal requirements, management practices, program performance and related areas. We hope this information is helpful and can be used in a constructive manner for the betterment of the state program to which it relates. You may request a copy of the report from the Oversight Division by calling 751-4143.

Respectfully,

Senator Gary Nodler  
Acting Chairman

## **EXECUTIVE SUMMARY**

The Missouri qualified fuel ethanol producer program and the Missouri qualified biodiesel program are each administered by Missouri's Department of Agriculture (MDA). The programs provide monthly incentive payments to facilities that process Missouri commodities into motor fuel. Since the inception of the programs through fiscal year 2008, the MDA has distributed roughly \$52 million in ethanol incentives and \$21.4 million in biodiesel incentives.

The six Missouri ethanol plants have a combined estimated annual payroll of \$9.92 million and approximately 218 FTEs. Oversight enlisted the assistance of the University of Missouri's Economic Policy and Research Center (EPARC) to estimate the fiscal benefits resulting from Missouri's six established ethanol facilities. Based upon the amount of capital invested in the facilities and the employment estimates for the facilities, EPARC estimated the cumulative, present value impact between the years 2000 and 2025 to be \$2.057 billion.

Through fiscal year 2008, the MDA has licensed six ethanol facilities and eleven biodiesel facilities. Two of the ethanol facilities have received their full 60 month allotment of incentive payments and are no longer participating in the program. Two of the biodiesel facilities have closed their doors by the end of FY 2008 after receiving incentive payments totaling \$62,720. The statutes provide clawback procedures for companies that receive benefits through the biodiesel program and subsequently sell their facility and Oversight notes that the MDA may need to attempt to recapture some biodiesel incentive payments in the near future.

Missouri's Revised Statutes state the facilities participating in the ethanol and biodiesel programs shall be eligible to receive the incentive grants for a total of sixty months, subject to appropriations. It is unclear if the sixty month period must be consecutive (a five year period), or if the facilities may choose which sixty months (for example out of eighty) to apply for the incentive grants. If facilities are allowed to pick and choose which months to apply, the period of time over which a company can receive the grants will be extended and the cumulative amount of grants to be awarded to a facility may be increased.

In fiscal year 2008, the MDA adopted a policy of conducting an annual audit at each of the ethanol and biodiesel facilities participating in the program. Facilities self-report the amount of ethanol or biodiesel produced each month and have committed errors in the calculation. The annual audits help ensure the facilities are correctly reporting the amount of ethanol and biodiesel to the MDA and receiving accurate incentive payments. Oversight recommends the MDA continue to conduct the audits as well as consider requiring an independent third party to review the monthly grant applications to verify its accuracy.

All of the ethanol facilities as well as most of the biodiesel facilities have qualified their investors for New Generation Cooperative tax credits approved and issued through the Missouri Agriculture and Small Business Development Authority (MASBDA). Approved large capital projects may receive up to \$1.5 million in tax credits. One of the ethanol facilities received \$1.5 million in tax credits for the initial plant construction in FY 2000 and then another \$1.5 million

in additional tax credits in FY 2002 for a plant expansion. Oversight believes such a short time period between the two issuances could be construed as an approach to circumvent the \$1.5 million project limit. Oversight recommends the MASBDA consider adopting a policy establishing a minimum time period between tax credit issuances for a single facility.

Oversight has also provided several appendices related to the ethanol and biodiesel programs. Information contained in the appendices include;

- a listing of programs established by other states to increase their production and use of biofuel;
- a listing of state incentives (including from the Department of Economic Development and the Office of the State Treasurer) awarded to the ethanol and biodiesel facilities;
- the potential value added to Missouri corn as a result of ethanol production;
- examples of commodity price fluctuations over the previous ten years;
- annual incentives paid as well as appropriations since inception; and
- estimated future ethanol and biodiesel incentive payments as determined by MDA

Oversight wishes to thank the Missouri Department of Agriculture for their cooperation and assistance during the evaluation.

Mickey Wilson, CPA  
Director

# Chapter 1

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## Purpose/Objectives

The Joint Committee on Legislative Research directed the Oversight Division to conduct a program evaluation of Missouri's ethanol program. Oversight also conducted a simultaneous review of Missouri's biodiesel program. The purpose of the evaluation was to determine the effectiveness of the programs as administered by the Missouri Department of Agriculture. The scope of the evaluation concentrated on the period of July 1, 2005 through June 30, 2008. The methodology used by the Oversight Division included review of MDA reports and transactions, review of similar programs in other states and the compilation of information from various sources related to ethanol and biodiesel.

## Background

The Missouri Qualified Fuel Ethanol Producer Incentive Fund was created to provide incentives to facilities that convert Missouri agricultural commodities into fuel ethanol. The Missouri fuel ethanol incentive program was established with Senate Bill 600 in 1988. Under the program, ethanol facilities are allowed to receive payments of 20 cents per gallon for the first 12.5 million gallons of qualified fuel ethanol produced from Missouri agricultural products per fiscal year plus 5 cents per gallon for the next 12.5 million gallons (totals \$3.125 million for 25 million gallons per year). To be eligible, the ethanol producer must be located in Missouri and be at least fifty-one percent owned by agricultural producers actively engaged in agricultural production for commercial purposes. A facility may receive a total of sixty monthly incentive payments.

The ethanol incentives program started in earnest in Fiscal Year 2000, when Northeast Missouri Grain started operations in Macon. This was followed the next fiscal year when Golden Triangle Energy started production in Craig. Today, there are six ethanol plants in Missouri that are either receiving incentive payments under this program, or have received their statutory limit of sixty monthly payments. The production capacity of the six facilities totals roughly 250 million gallons per year (mgy). Through Fiscal Year 2008, the state has paid over \$52 million in ethanol incentives (over \$41 million from General Revenue and \$11 million from the Petroleum Violation Escrow Fund) to these six facilities (See Appendix F). The ethanol program expires on December 31, 2015, per Section 142.029, RSMo.

The Federal Government also offers incentives for the use of ethanol in motor fuel. Through the Volumetric Ethanol Excise Tax Credit (VEETC) program, the federal government issues a tax credit of \$0.51 per gallon of pure ethanol blended into automotive fuel. The company that blends the ethanol and the gasoline together qualifies for this credit. Therefore, for a gallon of



fuel that is 10% ethanol and 90% gasoline (E10), the blender would receive \$0.051 in tax credits, since one tenth of the gallon of blended fuel was ethanol. For a gallon of E85 fuel (85% ethanol and 15% gasoline), the credit would be \$0.4335 ( $\$0.51 \times 85\%$ ).

The Missouri Qualified Biodiesel Producer Incentive Fund was created in 2002 (HB 1348) for a similar purpose; to pay incentives to producers of biodiesel who use Missouri feedstock in the conversion process. In order to qualify for the biodiesel incentives, the facility must be either fifty-one percent owned by agricultural producers who are residents of this state and who are actively engaged in agricultural production for commercial purposes, or at least eighty percent of the feedstock used by the facilities must originate in Missouri. In order to qualify for the program, the facility must also have been registered with the Department of Agriculture by September 1, 2007, have begun construction of the facility before November 1, 2007, and begin production of biodiesel before March 1, 2009. Under the program, biodiesel facilities are allowed to receive payments of 30 cents per gallon for the first 15 million gallons of qualified biodiesel produced from Missouri feedstock in a fiscal year plus 10 cents per gallon for the next 15 million gallons (totals \$6 million for 30 million gallons per year). Again, a facility may receive up to sixty monthly incentive payments.

In Fiscal Year 2007, five facilities began operations and qualified for biodiesel incentive payments. In Fiscal Year 2008, an additional six facilities began operations, while one of the original five facilities that started the previous year closed its doors. Therefore, a total of 10 operations are considered active in this program at the end of Fiscal Year 2008. Missouri has paid roughly \$21.4 million in biodiesel incentive payments during the two fiscal years, all of which were appropriated through the General Revenue Fund. The biodiesel program expires on December 31, 2009; however, biodiesel producers receiving grants prior to that time shall remain eligible for the remainder of the original sixty month time period.

Producers must submit monthly grant applications to the Missouri Department of Agriculture (MDA) stating the number of gallons of ethanol or biodiesel produced as well as the amount and origin of the feedstock used to produce the fuel. In Missouri, the feedstock used in the production of ethanol is primarily corn; whereas, the feedstocks used in the production of biodiesel are primarily soybean oil and for a few of the facilities, a combination of soybean oil and poultry fats. The MDA reviews the application, determines if the facility is eligible for the incentive payment, and then calculates the incentive amount (based upon available appropriations).

Truly Agreed To and Finally Passed Senate Bill 931 in the 2008 session expanded the program to include up to two facilities that produce fuel ethanol from qualified biomass (defined as any wood-derived organic material harvested in accordance with a site specific forest management plan focused for long-term forest sustainability developed by a professional forester and qualified, in consultation with the Conservation Commission, by the Missouri Agricultural and

Small Business Development Authority). Incentives paid to facilities that qualify under this expansion shall not cumulatively exceed \$7.5 million per producer, and are available from January 1, 2009 through December 31, 2019.

Several of the organizations that receive ethanol and biodiesel incentive payments from the state also received tax credits through a program administered by the Missouri Agriculture and Small Business Development Authority (MASBDA). New Generation Cooperative Incentive tax credits can be issued to producer members who invest cash funds in an eligible new generation cooperative or an eligible new generation processing entity. The tax credits can equal up to fifty percent of their investment or \$15,000, or the producer-members' pro-ration of the credits, whichever is less. All six of the entities that have received ethanol incentive payments have also been awarded these credits (which are issued to the individual producer member investors). The tax credit awards were for \$1.5 million per facility, with two exceptions. One facility received two \$1.5 million credit allotments (one for the original construction and then another two years later for a plant expansion) and another facility received an additional \$1.38 million credit allotment in FY 2007 in connection with a plant expansion to produce a higher grade (not for fuel purposes) of ethanol. A total of \$11.88 million in New Generation Cooperative Tax Credits (6 facilities x \$1.5 million each plus two plant expansions of \$1.5 million and \$1.38 million each) have been issued to investors of Missouri's ethanol plants. An additional \$8.1 million in tax credits have been issued (or allocated to be issued in FY 2010) to investors in Missouri's biodiesel plants under the same program. These credits may be carried forward for five years or carried back for three years. They also may be transferred, sold or assigned if a proper notarized endorsement is filed with MASBDA.

In 2006, the Missouri Legislature passed the Missouri Renewable Fuel Standard Act (HB 1270 & 1027) which mandated, with certain exceptions, that after January 1, 2008 all gasoline sold or offered for sale in Missouri at retail shall be fuel ethanol-blended gasoline (90 percent gasoline and 10 percent ethanol). Exceptions to this mandate include premium gasoline, aviation fuel, E75 - E85 fuel ethanol, bulk transfers between terminals and in the instance where a distributor would be unable to obtain ethanol-blended gasoline at the same or lower price as unblended gasoline. Missouri is one of the few states (Minnesota and Montana also) that have such an ethanol mandate in place. Several other states (Florida, Iowa, New Mexico, California and Oregon) have pending ethanol mandates that kick in either at a point in time (i.e. after December 31, 2010) or when a particular production quota is met (i.e. 40 million gallons of ethanol are produced state-wide).

Appendices G and H show the amount of ethanol and biodiesel incentive payments made through fiscal year 2008 as well as the estimated future payments as provided by the Department of Agriculture. The six ethanol facilities are estimated to receive an additional \$47.5 million in incentive payments in addition to the \$52.8 million already received for a total of \$100.3 million. This does not include other ethanol facilities that may be constructed and qualify for the

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Program Evaluation  
Department of Agriculture Ethanol Incentives and Tax Credits

program. On the biodiesel side, the eleven facilities have received over \$21.4 million in state incentive payments through FY 2008, and potentially another \$216 million in future payments. This estimate by the MDA includes \$78.6 million in payments to five facilities that have not started production as of September, 2008 as well as \$7.25 million in potential incentive payments to a facility that is not currently operating.

## Chapter 2

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### Overview

Several actions taken by the federal government have increased the demand and production of ethanol fuel. Congress enacted the Energy Policy of 2005, which mandated that 5.4 billion gallons of biofuel be blended with gasoline in 2008 (7.5 billion gallons in 2012). Congress then passed the Energy Independence and Security Act of 2007, which increased the biofuels target for 2008 to 9 billion gallons (36 billion gallons in 2022). This mandate is still in effect. Also, in 1995 the federal government mandated the use of reformulated gasoline in an attempt to combat air pollution. Initially, the additive methyl tertiary butyl ether (MTBE) was used; however, it eventually was found to be polluting ground water supplies and was generally replaced with ethanol.

In addition to the state incentives, ethanol and biodiesel producers may also receive similar federal incentive payments. The federal Small Ethanol Producer Credit allows a \$0.10 tax credit per gallon of ethanol (limited to the first 15 million gallons) to producers with capacity below 60 million gallons which expires December 31, 2010. The federal Small Agri-Biodiesel Producer Credit also allows a \$0.10 per gallon credit to biodiesel producers (first 15 million gallons of producers with capacity below 60 million gallons); however, this tax credit is set to expire December 31, 2008. There also is a blenders credit for biodiesel, in the amount of \$1.00 per gallon of B100 (100% biodiesel) made from agricultural products like vegetable oils and \$0.50 per gallon of B100 from recycled oils. This is scheduled to expire at the end of 2008. As stated in the Background section of the report, the Volumetric Ethanol Excise Tax Credit is a \$0.51 per gallon credit for pure ethanol blended with petroleum gasoline. This credit expires December 31, 2010. Also, the U.S. Customs and Border Protection imposes a 2.5 percent ad valorem tariff on the import of ethanol for use in fuel, and a \$0.54 per gallon of ethanol tariff applies to imported ethanol from most countries.

Oversight reviewed the various approaches other states take to increase ethanol and biodiesel use and production. Oversight has listed the programs/incentives used by the eight states bordering Missouri as well as any other state that was among the ten highest national producers of corn or soybeans. The steps taken included partial exemptions on motor fuel excise taxes for blended fuels, incentive payments for producers of ethanol and biodiesel, mandates on the number of gallons of ethanol to be used in the state (or the percentage of fuel that must be ethanol), and incentive payments for producers of cellulosic ethanol. The summary of these comparisons can be found in Appendix A (ethanol) and Appendix B (biodiesel).

According to the Energy Information Administration (statistical agency for the U.S. Department of Energy), Missouri drivers consumed an average of 7,259,800 gallons of regular unleaded

gasoline each day in 2007. This equates to roughly 2.65 billion gallons of regular gasoline for the year. Therefore, achieving the 10 percent threshold mandated by HB 1270 & 1027 in 2006 would then require roughly 265 million gallons of ethanol each year. According to the Department of Agriculture, the stated production capacity for the current six ethanol facilities in Missouri is 250 million gallons per year.

According to the United States Department of Agriculture, National Agricultural Statistics Service, Missouri farmers harvested 3.25 million acres of corn and 4.55 million acres of soybeans in 2007. Below is a recap of the 2007 statistics of Missouri corn and soybean crops, their production yield as well as production value.

Missouri Commodity	Harvested Acres	Yield per acre	Production	Price / Unit	Value of Production
Corn for Grain	3,250,000	142.0 bus	461,500,000 bus	\$3.95 / bus	\$1,822,925,000
Soybeans	4,550,000	37.0 bus	168,350,000 bus	\$10.50 / bus	\$1,767,675,000

With the stated production capacity of Missouri’s six ethanol plants of 250 million gallons of ethanol per year, and an average of 2.7 gallons of ethanol produced per bushel of corn, Oversight can assume roughly 92.6 million bushels ( $250,000,000 / 2.7$ ) of corn will be utilized at full production. This equates to roughly 20 percent ( $92.6 \text{ million} / 461.5 \text{ million}$ ) of the annual corn production in Missouri.

In addition to the incentive payment programs and the New Generation Cooperative tax credit program, (administered by the MDA and MASBDA respectively and described in the Background section of the report), the ethanol facilities or their parent companies often qualify for other incentives offered through Missouri’s Department of Economic Development (DED). DED’s Enhanced Enterprise Zone program seems to be used most often by the ethanol and biodiesel facilities. Under this program, companies are eligible to receive tax credits if they build a new or expand an existing business facility within a designated enterprise zone. According to the DED, “the tax credits shall be the lesser of a formula amount based on the number of jobs created, number of employees who are residents of the zone, number of employees paid wages above the county average wage and amount of new capital investment OR an amount authorized by DED that is limited to the projected state economic benefit. The credit may be provided each year for up to ten years after the project commences operations.” Two ethanol facilities and five biodiesel facilities have been approved by DED to participate in this program, and their approved cumulative credit amounts total \$3.84 million (ethanol facilities) and \$3.82 million (biodiesel facilities) respectively. Oversight listed on Appendix C the total amount of New Generation Cooperative tax credits, producer incentive payments and DED

incentives each of the licensed ethanol and biodiesel facilities have either received or in the case of the Enhanced Enterprise Zone (EEZ) program, been authorized by DED to receive.

An intended consequence of the ethanol incentive program has been the value added to corn prices within the state for farmers. It would be very difficult to single out or isolate the impact that ethanol production has had on corn commodity prices since the start of the program. Several local and national as well as international factors (such as weather, the value of the United States dollar in relation to foreign currencies, increasing fuel prices, etc.) contribute to the fluctuation in Missouri commodity prices. Oversight could not determine how much of the increase in the price of corn (from \$1.78 per bushel in 2000 to \$5.75 per bushel in July 2008) can be attributed to ethanol production; however, with roughly 20 percent of Missouri's grain corn now being used by the ethanol facilities, it can easily be assumed that the increase in demand for corn has had an impact on the price farmers receive per bushel. Oversight developed Appendix D to show the potential impact to Missouri farmers from an increase in the price of a bushel of corn. The table first shows the potential value added to Missouri's farmers if only the corn used in ethanol production had a \$0.10 or a \$0.25 value per bushel added to its price. As stated earlier, Oversight could not determine the actual increase in value of corn resulting from the ethanol industry; therefore, Oversight uses \$0.10 and \$0.25 markers for comparison purposes. Oversight assumes the potential value added to corn would extend beyond just the corn used in ethanol production, and would impact other areas of the state as well. Therefore, Oversight also shows the potential impact if corn prices state-wide had been increased by \$0.10 or \$0.25 per bushel as a result of the ethanol industry. At the stated capacity of 250 million gallons of ethanol produced per year and an assumed production efficiency of 2.7 gallons of ethanol per bushel of corn, Missouri farmers who supply the ethanol facilities with feedstock would realize an added value to their corn of roughly \$9.26 million from a \$0.10 price increase or \$23.1 million from a \$0.25 price increase.

Appendix E shows the price fluctuations for several commodities in Missouri over the last decade. For example, corn rose from a period-low of \$1.78 per bushel in 2000 to an intra-year price of \$5.75 per bushel in July 2008. Most of the commodities Oversight reviewed had similar spikes in 2007 and 2008. Much debate has been focused nationally on the impact resulting from shifting feedstocks away from food and toward fuel and their possible effect on food prices. The reasons behind the large increase in commodity prices over the past ten years was beyond the scope of Oversight's evaluation; however, many studies have attempted to answer this question. Several reasons given for the recent spike in food prices have been an increase in global demand with increases from China and India specifically mentioned, the large increase in transportation costs, and the drop in the value of the dollar making American commodities more attractive to foreign buyers. For informational purposes only, Oversight has listed the annual prices of several commodities as determined by the United States Departments of Agriculture and Energy from 1999 through 2008.

**Comment 1:**

Oversight attempted to measure the economic impact the ethanol and biodiesel facilities have had on Missouri's economy. Oversight collected employment information (FTEs and quarterly payroll) from the Department of Labor and Industrial Relations - Employment Security as well from some of the facilities for Fiscal Year 2008. The six Missouri ethanol plants have a combined estimated annual payroll of \$9.92 million, among approximately 218 FTE (average of \$45,400 per FTE). Oversight is precluded from providing the employment information in any format that would allow someone to make a deduction regarding a single entity; therefore, Oversight is not able to provide employment information relative to the county or area in which the facilities resides. The combined capital investment cost of the six ethanol plants was reported to the MDA as \$293.8 million.

Oversight then provided summary information to the University of Missouri's Economic Policy and Research Center (EPARC) to determine the indirect benefits the facilities provide to the state. Based upon the employment information as well as the capital investment provided, and under the assumptions that the plants are 100 percent utilized each year (at full capacity), that the rate of return is 6.5 percent per year and that the capital depreciates at 10 percent each year, EPARC estimates the cumulative present value impact between 2000 and 2025 (25 years) to be \$2.057 billion.

The economic impact of the thirteen biodiesel plants proved to be more difficult to measure. Two of the plants have not started production as of the completion of fieldwork. Two additional plants started production, but ceased after only a couple of months of operation. Yet another facility was built adjacent to another aspect of their parent company and all functions at the new biodiesel plant are done via a service agreement with the parent company. Therefore, attaining valid, useful and reportable payroll information for biodiesel plants has proven to be much more difficult.

**Comment 2:**

Missouri statutes are set up to guard against companies that receive state biodiesel producer incentive payments and subsequently sell their facility. Section 142.031.8, RSMo, (HB 741, 2007 session) sets up a sliding scale requiring biodiesel producers to return a portion of the total incentive payments received if the facility is sold. The scale ranges from 50 percent of the total incentive payments if the facility is sold within one year of the last incentive payment, to 10 percent if the facility is sold between four and five years after the last incentive payment. Similarly, MASBDA has established a policy allowing for the recapture of a portion of issued New Generations Cooperative tax credits if coop members sell their majority governance in the facility within five years of the credit issuance. If the sale occurs after five years from the tax

credit issuance, MASBDA would not attempt to recapture any of the credits. There does not appear to be a provision either in statutes or in administrative rules allowing for the recapture of ethanol incentive payments in the event of the sale of an ethanol production facility.

Oversight notes that the MDA may need to attempt to recapture some biodiesel incentive payments in the near future. As of the fieldwork completion date, two separate biodiesel facilities have not reported production for several months and may test MDA's ability to recollect incentive payments. One facility last submitted an incentive application for April, 2007 and has been paid a total of \$34,744. Another facility last requested an incentive payment for production in October 2007, and have been paid a total of \$27,976 in incentive payments. The latter facility's producer member investors also received \$924,000 in New Generation Cooperative tax credits in fiscal years 2007 and 2008.

### **Comment 3:**

Missouri's Revised Statutes state that qualified ethanol and biodiesel producers shall be eligible to receive incentive grants for a total of sixty months, subject to appropriations. It is not specific as to whether the sixty months need to be consecutive (a five year period) or can be selected over a longer time period (i.e. the best sixty months out of eighty). The MDA conducted an audit of a facility in August, 2008 in which the producer chose not to apply for state's incentive grants for three out of the eight months reviewed. The reason given was that the biodiesel facility was not at full production for those three months and the facility was choosing to use later months with higher production toward their sixty monthly incentive payments cap. In essence, the facility was strategically choosing which sixty monthly payments to apply for rather than applying for sixty consecutive months. Oversight is unsure if this was the intent of the Legislature when the program was enacted; however, if ethanol and biodiesel facilities are allowed to be selective in which months they apply for the incentive payments, companies could theoretically be able to apply for the monthly grants up until the \$3.125 million annual cap for ethanol producers (or the \$6.0 million annual cap for biodiesel producers) is reached, and then not submit another grant application until the new fiscal year begins. This would extend the period of time for which the facility would be able to apply for grants as well as raise the amount of total incentive payments facilities may receive since there is an annual limit per facility but not a cumulative limit. Oversight believes, other than this one example, this approach has not been utilized by the ethanol and biodiesel producers, but it seems the ambiguity of the statutes allow for the potential to exist.

### **Comment 4:**

In FY 2008, the MDA adopted a policy of conducting an annual audit at each facility that receives ethanol or biodiesel incentive payments from the state. It should be noted again that



companies participating in the program self-report the amount of ethanol or biodiesel their plant produced each month and the amount of incentive payment for which they qualify. During these inspections, the auditor will review all (if time allows) or a sampling of monthly incentive payments to ensure compliance with the programs. A report by Missouri's State Auditor dated July 2008, pointed out that the MDA had not conducted adequate reviews of the ethanol and biodiesel incentive programs. Through fiscal year 2007, the MDA had paid out approximately \$47.8 million of incentive payments (\$43.59 million to five ethanol facilities and \$4.25 million to five biodiesel facilities) but had only performed two audits, (both on ethanol facilities in fiscal year 2003). In fiscal year 2008, the MDA performed audits on three additional ethanol facilities as well as eight biodiesel facilities.

Several discrepancies have been pointed out in these audits, including companies not correctly calculating the number of gallons produced in a month. The errors included incorrectly adding together the number of gallons of ethanol/biodiesel sold, beginning inventory and ending inventory to determine the gallons produced during the month (instead of subtracting out beginning inventory from the other two). In one example, the facility was overpaid roughly \$109,600 from miscalculating the gallons of ethanol produced. Another error discovered by the audits included incentive payments made to companies for B99 biodiesel instead of B100 as specified in statutes. A small amount of petroleum biodiesel is sometimes added to pure biodiesel (B100) and sold as B99 biodiesel; however, the companies were not differentiating the two and were being paid incentive payments on total sales of blended biodiesel instead of just the pure biodiesel portion. One facility was overpaid \$350 from this type of error. In both of these examples, the MDA later adjusted future payments to these companies to recapture the overpayments.

Oversight encourages the MDA to continue to conduct annual audits of the ethanol and biodiesel facilities. In addition, Oversight encourages the MDA to consider requiring ethanol and biodiesel companies to have the monthly incentive payment applications verified by an independent third party before being submitted to the MDA. Currently in Minnesota, each quarterly claim for incentive payment must be examined by an independent certified public accountant before it is submitted to the Commissioner of Agriculture.

#### **Comment 5:**

As stated earlier, MASBDA can issue New Generation tax credits to producer members who invest in renewable fuel production facilities. There were two separate instances in which ethanol facilities expanded or modified their operations which qualified investors for a second round of state tax credits. In the first instance, investors initially received \$1.5 million in tax credits in FY 2000 for plant construction. Then, in FY 2007, the company offered to modify its facility to begin production of a high grade industrial alcohol in addition to the fuel grade

ethanol. Eligible producer members who invested in this new offering received roughly \$1.38 million in additional tax credits. In the second instance, investors in another facility initially received \$1.5 million in tax credits in FY 2000 for plant construction. Just two years later, in FY 2002, the facility offered investment units to raise capital in order to expand their facility from 15 mgy to 36 mgy production. An additional \$1.5 million in New Generation Cooperative tax credits were approved and issued in FY 2002 for this expansion.

MASBDA officials state they do not have a policy limiting additional tax credit issuances to companies, but state they review each application on a case by case basis. Oversight believes that such a short time period between the two tax credit issuances to investors of the same company could be construed as an approach to circumvent the \$1.5 million per large capital project limit. In effect, the investors in the 36 mgy facility received a total of \$3.0 million in state tax credits. Oversight recommends MASBDA consider adopting a policy establishing a minimum time period between tax credit issuances for a single facility.

**Comment 6:**

The original statutes for the program were written with the intent that ethanol producers would apply for an incentive grant from the state before the month's production actually occurred. For example, an ethanol company would apply for an incentive grant in May based upon the estimated production it hoped to achieve in June. The difference between the incentive payment the company received in June (based upon the estimate) and the incentive actually earned by the company for their June production, would be added to or subtracted from their payment for the estimated production for July. Under this scenario, Missouri would award incentive payments before they were actually earned by the ethanol producer. In order to protect the State, the original legislation required companies to obtain a surety bond payable to the State for roughly the amount of a monthly incentive check. Therefore, if the company failed to produce ethanol in a given month and quit production, the surety bond would ensure Missouri could get their estimated payment back. This approach was used for the first couple of years; however, now all ethanol facilities apply for the monthly incentive payment after the actual production has been determined (deadline is the 15<sup>th</sup> day after the month applying for). The statutes still require ethanol companies participating in the incentive program to be bonded (within Section 142.028.1(3), RSMo); therefore, to satisfy statute requirements, all four of the licensed ethanol producers still receiving monthly state incentive checks have a surety bond payable to the State of Missouri, for \$1 each.

Oversight assumes paying incentive payments to companies after the fact based upon actual production is preferable to making estimated incentive payments before the month occurs and later making up the difference between estimated and actual production. The biodiesel program does not provide for estimated incentive payments and only allows companies to submit

applications after the month's actual production has been determined. Therefore, Oversight assumes changes could be made to the statutes pertaining to the ethanol incentive program that more truly reflects the process used. This would not have an impact on the program, but would clarify the statutes and save the ethanol producers a small amount of time and expense required to procure the \$1 surety bond that is needed to satisfy current statutes.

Also, there appears to be a discrepancy in the expiration date of the ethanol incentive program. Section 142.029, RSMo, simply states that Section 142.028 (ethanol incentive program) shall expire on December 31, 2015. However, through Senate Bill 931 passed in the 2008 session, a new subsection (142.028(7)) was added that allows for incentive payments for fuel ethanol made from qualified biomass. The stated expiration date of this part of the program is December 31, 2019. Therefore it is unclear if the entire section 142.028 (including the new qualified biomass subsection) would expire in 2015 even though the new subsection within 142.028 has a stated expiration date of 2019. Oversight assumes a correction is needed to clarify.

Also, it appears that a minor correction is needed in statutes regarding the New Generation Cooperative tax credit program (which has been utilized by all licensed ethanol facilities). The last sentence in subsection 348.432.5, RSMo, states what is required to be submitted to the Missouri Agriculture and Small Business Development Authority when recipients intend to sell, assign or convey their tax credit. Currently, the statutes state that "a notarized endorsement shall be filed with the authority specifying the name and address of the new owner of the tax credit or the value of the credit." Oversight assumes the authority should have the name and address of the new owner and the value of the credits being sold for their records.

#### **Comment 7:**

There are several differences in how Missouri pays ethanol and biodiesel production incentive payments compared to other states. Here are a few examples:

1. Nebraska's \$0.18 per gallon producer incentive is based on the amount of ethanol produced before denaturing (the process of adding an ingredient to the pure alcohol to render it toxic in order to prevent human consumption). Missouri pays incentive payments based on the amount of ethanol produced during the month, which includes the amount of pure ethanol produced at the facility plus the amount of denaturant added. From the audits performed by MDA on the facilities in Macon and Craig, it appears the denaturant comprises roughly 5 percent of the ethanol sold from the facility (and used in the 'gallons of ethanol produced' calculation). Therefore, if a facility reaches its \$3.125 million annual limit on incentive payments and 5 percent of the amount produced is from the added denaturant, it appears the MDA would be providing roughly \$150,000 in incentive payments to the facility each year for the denaturant additive.

2. Most payments seem to be set up as quarterly or annually instead of monthly;
3. Some states have a cumulative limit on production incentive payments to facilities. Missouri has a 60 month limit but Oversight is unsure if the 60 months should be consecutive or may be selective;
4. Minnesota requires an independent third party to verify the accuracy of the incentive application before it is submitted to the state government.

## APPENDICES

Appendix A  
Other states' Ethanol programs

State	State Excise Tax Exemption	State Producer Incentives	Ethanol Mandate/Incentive	Additional Information
Missouri	None	\$0.20 / gal - 1 <sup>st</sup> 12.5 mg \$0.05 / gal - 2 <sup>nd</sup> 12.5 mg	Mandate 10% ethanol blend unless ethanol is not priced lower than unblended gasoline. Premium gasoline is exempt	Producer incentive limited to 60 months - can total \$3,125,000 per producer per year. Starting 01/01/09, program applies to biomass producers (limited to two at \$7.5 million cumulative each) Payments - monthly
Arkansas	None	3 separate programs began 1/1/07: 1. \$0.20 / gal grant to producers for construction, retrofitting, etc. facility not more than \$2 million per facility 2. Grant to feedstock processors for construction, retrofitting, etc. feedstock processing facility not more than \$2 million per facility 3. Grant of not more than \$50,000 to assist alternative fuel distributors	None	Arkansas Alternative Fuels Development Act establishes an annual goal of 50 million gallons of alternative fuels produced at production facilities in the state by October 6, 2008. Funds budgeted for the Alternative Fuels Dev. Act (including three programs described) were/are \$26 million in FY 2008 and \$26 million again in FY 2009
Illinois	The 6.25% sales tax on gasoline is reduced to 5% (6.25% x 80%) on gasohol. Ethanol blends between E70 and E90 are sales tax exempt	None	None	Renewable Fuels Dev. Fund provides grants to eligible applicants (new and existing ethanol production facilities which produce at least 30 mgly & use primarily Illinois agricultural products). Shall not exceed \$20 million per year.
Indiana	None	\$0.125 / gal - annually limited to: \$2 million if production between 40 mgly and 60 mgly of grain ethanol. \$3 million if production at least 60 mgly of grain ethanol \$20 million if production at least 20 mgly of cellulosic ethanol	None	An E85 retailer is entitled to a tax credit against gross retail tax of \$0.18 per gal of E85 sold during reporting periods ending before 7/1/2020. Total deductions may not exceed \$1 million for all retail merchants

Appendix A  
Other states' Ethanol programs (continued)

State	State Excise Tax Exemption	State Producer Incentives	Ethanol Mandate/Incentive	Additional Information
Iowa	Tax on motor fuels varies from \$0.20 and \$0.21. Ethanol blended fuel is taxed at \$0.19 and E85 fuel is taxed at \$0.17 (depending on various factors)	None	Incentive Beginning 01/01/09, retailers can receive incentive tax credits for biofuel percentages (10% in 2009 to 25% in 2019). The credits equal \$0.065 for retailers meeting goal (if short of goal, retailers can get \$0.045, \$0.025 or \$0 per gallon)	Retail service stations at which more than 60 percent of gasoline sold are blended with ethanol receive a tax credit of \$0.025 per gallon blended above the 60% threshold. This expires 12/31/08.
Kansas	Tax on motor fuels normally \$0.24 per gallon - however tax on E85 is \$0.17 per gallon. Starting 07/01/2020 the tax per gallon will be \$0.18 and E85 will be \$0.11 (7 cent per gallon exemption)	\$0.075 / gal - 1 <sup>st</sup> 15 mgy if produced or increased production more than five million gallons per year	Incentive Beginning 01/01/09, retailers can receive incentives for selling and dispensing renewable fuels. Up to \$0.065 per gallon of fuel if 10% requirement threshold is met. Threshold increases to 25% in 2024	Producer payments limited to 7 years (84 months) and can total \$1,125,000 per producer per year. Payments - quarterly
Kentucky	None	\$1.00 / gal for ethanol produced (annual cap of \$5 million); also \$1.00 / gal for ethanol produced from cellulosic biomass materials (annual cap of \$5 million)	None	Credit forms filed annually by January 15
Minnesota	Tax on motor fuels; \$0.20 / gal (except E85) \$0.142 / gal for E85	\$0.20 / gal - through 06/30/10. Limited to \$3 million per year to a given producer. Production must have begun at a specific location by 06/30/00. Limited to 10 years after start of production. Temporarily reduced to \$0.13 due to budget constraints in FY s 2004 - 2007	Mandate All gasoline must contain 9.2% - 10% ethanol. The mandate increases to 18.4% - 20% by August 2013	Stated goal of Minnesota is to attain a total annual production level of 480,000,000 gallons of ethanol in 2008 and beyond. Producer claims are filed quarterly and must be examined by an independent CPA
Nebraska	Motor fuels sold to an ethanol facility or produced at an ethanol facility are exempt from certain motor fuel taxes	\$0.18 / gal produced, before denaturing. Limited to 1.5,625,000 gpy and must be filed monthly. Can receive credits for a period of 96 consecutive months (8 years). Plants must be producing by 06/30/04. Program sunsets 06/30/12.	None	Metering devices used to measure production must be approved by Nebraska's Dept of Agriculture annually. Forms filed monthly

Appendix A  
Other states' Ethanol programs (continued)

State	State Excise Tax Exemption	State Producer Incentives	Ethanol Mandate/Incentive	Additional Information
Ohio	None	None	None	An E85 retailer is entitled to a tax credit in 2008 and 2009. The credit shall be \$0.15 per gallon of E85 sold in 2008 and \$0.13 per gallon of E85 sold in 2009.
Oklahoma	OK gasoline tax is \$0.16 / gal. Excise tax credit of \$0.016 / gal of ethanol if the retailer provides a price reduction to the purchaser of the ethanol fuel of the same amount	\$0.20/ gal - if facility operating at 25% or more of its capacity before 12/31/10. \$5 million per facility / year (\$1.5 million for all facilities per year).  \$0.20 / gal of ethanol produced in excess of original nameplate design capacity for expansions completed before 01/01/2009	None	Producer credit applies up to 60 months. The credit is for facilities constructed by June 2003. Current credits end December 31, 2012. New credit starts January 1, 2013 in the amount of \$0.075 per gallon of ethanol, before denaturing for period not to exceed 36 consecutive months for facilities that have not received current credits.
South Dakota	Tax on motor fuels: \$0.22 / gal (except ethanol blends) \$0.20 / gal for ethanol blends (except E85) \$0.10 / gal for E85	\$0.20 / gal - limited to \$1 million per facility per year. Facility must have produced qualifying ethyl alcohol before December 31, 2006. Facility is limited to \$10 million cumulative total. Annual total for all facilities is \$7 million.	None	Monthly payments to facilities limited to 416,667 gallons (5,000,000 gallons per year) or \$1,000,000 per year.
Tennessee	None	None	None	
Wisconsin	None	None	None	Wisconsin had a program which sunset on 6/30/06 that paid \$0.20 per gallon to producers for not more than 15 mgy if the producer had been producing ethanol for fewer than 60 months.



Appendix B  
Other states' Biodiesel programs

State	State Excise Tax Exemption	State Producer Incentives	Biodiesel Mandate/Incentive	Additional Information
Missouri	None	<p><u>Biodiesel Production Incentive</u> \$0.30 per gallon 1<sup>st</sup> 15 million gallons per fiscal year \$0.10 per gallon for the next 15 million per fiscal year</p> <p>Maximum of 60 monthly payments to producers; \$6 million maximum per facility per year</p>	None	<p><u>Alternative Fueling Infrastructure Tax Credit</u> Credit for constructing a qualified alternative fuel vehicle station - total credits may not exceed \$3,000,000 for taxable year 2009, \$2,000,000 for taxable year 2010, &amp; \$1,000,000 for taxable year 2011</p> <p><u>Biodiesel Production Incentive</u> 51% of the production facility must be owned by Agricultural producers who are residents of MO or 80% of feedstock originates in-state.</p>
Arkansas	None	<p><u>Alternative Fuel Grants</u></p> <ol style="list-style-type: none"> <li>1. Alternative fuel producers can receive up to \$0.20 / gal, not exceeding \$2 mil</li> <li>2. Feedstock processors can receive up to \$2 mil for construction, modification, alteration or retrofitting</li> <li>3. Alternative Fuel Distributors can receive \$50,000 to assist with the distribution and storage of these fuels</li> </ol> <p>The Alternative Fuels Commission may provide grants not to exceed \$0.10 per gallon of biodiesel produced. Limited to first 5 million gallons produced annually for a period not to exceed 5 years.</p>	None	<p><u>Arkansas Alternative Fuels Development Act</u> establishes an annual goal of 50 million gallons of alternative fuels produced at production facilities in the state by October 6, 2008.</p>

Appendix B  
Other states' Biodiesel programs (continued)

State	State Excise Tax Exemption	State Producer Incentives	Biodiesel Mandate/Incentive	Additional Information
Indiana	Biodiesel blends of 20 percent or more are exempt from the \$0.16 per gallon license tax	<u>Production Tax Credit</u> \$1.00 / gal of biodiesel produced. May not exceed \$3 million for all taxable years. May be increased to \$5 million. Contingent upon funding and is currently not available	None	<u>Blending Tax Credit</u> \$0.02 per gallon of fuel blended, may not exceed \$3 million for all taxable years. Contingent upon funding and is currently not available. <u>Retailer Tax Credit</u> Through 2010, \$0.01 per gal of blended diesel sold. May not exceed \$1 million for all taxpayers for all years. Contingent upon funding and is currently not available.
Iowa	None	None	<u>Incentive</u> Beginning 01/01/09, retailers can receive incentive tax credits for biofuel percentages (10% in 2009 to 25% in 2019). The credits equal \$0.065 for retailers meeting goal (if short of goal, retailers can get \$0.045, \$0.025 or \$0 per gallon). Biodiesel is added to ethanol to determine 'biofuel' totals	<u>Biodiesel Tax Credit</u> Through December 31, 2011 retailers who's sales are at least 50% biodiesel can receive \$0.03 credit for each gallon of biodiesel blended fuel (at least B2) sold.
Kansas	None	<u>Biodiesel Procurement Incentive</u> \$0.30 per gallon sold by Kansas producer. Payments are made quarterly	<u>Renewable Fuel Retailer Incentive</u> Beginning 01/01/09, retailers can receive incentives for selling and dispensing renewable fuel. Up to \$0.03 per gallon of biodiesel if 2% requirement threshold is met. Threshold increases annually up to 25% in 2024	<u>AFV Infrastructure Tax Credit</u> Credit for 40% of the fueling station cost for stations placed in service after January 1, 2005 and before January 1, 2009 and may not exceed \$160,000. After January 1, 2009 the credit amount is reduced and may not exceed \$100,000

Appendix B  
Other states' Biodiesel programs (continued)

State	State Excise Tax Exemption	State Producer Incentives	Biodiesel Mandate/Incentive	Additional Information
Kentucky	None	Producer income tax credit incentive of \$1.00 per gallon of B100. Total for all producers is limited to \$1.5 million per year (\$5 million in calendar year 2008 and \$10 million for calendar year 2009). Forms are filed annually.	None	
Minnesota	None	None	Mandate All diesel fuel sold or offered for sale for use in internal combustion engines must contain at least 2% biodiesel fuel by volume. Increases to 5% in 2009, 10% in 2012, and 20% in 2015	The stated minimum content levels on the mandate are effective only during the months of April, May, June, July, August, September & October.
Nebraska	Motor fuels sold to a biodiesel facility or produced at a biodiesel facility are exempt from certain motor fuel taxes	<u>Tax Credit</u> Investors in Nebraska biodiesel production facilities can get up to 30% of the amount invested in the facility back as a tax credit between January 2008 and January 2015, not to exceed \$250,000	None	The credit is only available for facilities that produce B100, perform all processing in Nebraska and are at least 51% owned by Nebraska individuals
Ohio	None	None	None	<u>Tax Credit</u> Retailers who sell E85 or biodiesel are eligible for a tax credit of \$0.15 per gallon using a metered pump in 2007 & \$0.13 per gallon of E85 or biodiesel sold in 2008

Appendix B  
Other states' Biodiesel programs (continued)

State	State Excise Tax Exemption	State Producer Incentives	Biodiesel Mandate/Incentive	Additional Information
Oklahoma	None	<u>Biodiesel Production Tax Credit</u> \$0.20/ gal - if facility operating at 25% or more of its capacity (expires 12-31-12) also \$0.20 / gal expansion credit - applies to gallons produced over original nameplate capacity of biodiesel facility which results from expansion before 2009. (credit expires 12-31-12) or Starting January 1, 2013, a \$0.75 / gal credit for new production not to exceed 36 consecutive months. Facility may not have received either credit above.	None	Eligible facilities must produce at least 25% if nameplate design capacity for at least 6 months on or before December 31, 2008. The credit is allowed for 60 months.
South Dakota	Currently biodiesel taxed at \$0.22 per gallon. Once biodiesel production capacity reaches 20 mgy, the excise tax rate is reduced to \$0.20 per gallon. This reduction expires once production threshold gets to 35 mgy	None	None	A tax refund is available for contractors' excise taxes and sales or use taxes paid for the construction of a new agricultural processing facility, which includes an expansion to an existing soy bean processing facility if the expansion will be used for the production of biodiesel. The project cost must exceed \$4.5 million in order to qualify for a refund.
Tennessee	None	Biodiesel manufacturer's Incentive \$0.20 per gal produced and sold to Tennessee companies, up to 10 million gallons annually	None	
Wisconsin	None	None	None	None

Appendix C  
State incentives to Ethanol facilities:

Location - Name	Investors received New Generation Coop. Tax Credits	Producer Incentive Payments through FY 2008	Linked Deposits (STO)	Year	DED Incentives	
					Program	Amount
Craig - Golden Triangle	\$1,500,000 in FY 2000 \$1,380,660 in FY 2007	\$15,261,064	\$0	2008	Mo. Job Development Tax Credit	\$5,000 \$300,000
Macon - Northeast Mo. Grain Coop.	\$1,500,000 in FY 2000 \$1,500,000 in FY 2002	\$16,249,986	\$0	2000	Mo. Job Development Fund	\$3,000
Malta Bend - Mid-Mo. Energy Coop.	\$1,500,000 in FY 2004	\$12,076,171	\$0		Nothing	\$0
Laddonia - ECAP Coop.	\$1,500,000 in FY 2006	\$ 6,250,000	\$0		Nothing	\$0
St. Joseph - AgraMarke Quality Grains Coop.	\$1,500,000 in FY 2007	\$2,816,648	\$0	2007-2011	EEZ	\$1,728,471
				2006-2007	Mo. Job Development Fund	\$ 7,522
Carrollton - Show Me Ethanol	\$1,500,000 in FY 2008	\$ 125,258	\$0	2008-2012	EEZ	\$2,111,492

Appendix C  
State incentives to Biodiesel facilities:

Location - Name	Investors received New Generation Coop. Tax Credits	Producer Incentive Payments through FY 2008	Linked Deposits through STO	Year	DED Incentives	
					Program	Amount
Mexico - Mid-America Biofuels	\$1,500,000 in FY 2006	\$9,896,958	\$0	2007-2011	EEZ	\$ 713,967
Deerfield - Prairie Pride	\$1,500,000 in FY 2007	\$1,717,711	\$0		Nothing	\$0
Lilbourn - Great River Soy/Sun Processing	\$ 924,000 in FYs 07 & 08	\$ 27,976	\$0	2003	Community Development Block Grant	\$ 350,000
Kansas City - Paseo Biofuels	\$1,500,000 in FY 2008	\$1,005,120	\$0		Nothing	\$0
St. Joseph - Terra Bio Energy	\$1,183,500 in FYs 08 & 09	\$0	\$0	2008 - 2012	EEZ	\$ 563,710
Moberly - Producer's Choice Soy Energy	\$1,500,000 (\$1,147,340 issued in FY '09 and \$352,660 to be issued in FY '10)	\$0	\$0	2008 - 2013	EEZ	\$ 233,540
Bethel - Missouri Bio-Products, Inc.	\$0	\$ 34,744	\$0		Nothing	\$0

Appendix C  
State incentives to Biodiesel facilities (continued):

Location - Name Biodiesel (cont.)	Investors received New Generation Coop. Tax Credits	Producer Incentive Payments through FY 2008	Linked Deposits through STO	Year	DED Incentives	
					Program	Amount
Hayti - Natural Biodiesel Plant, LLC	\$0	\$1,341,916	\$4,295,000		Nothing	\$0
St. Joseph - Northwest Biodiesel, LLLP	\$0	\$1,526,348	\$0	2007 - 2011	EEZ	\$ 256,761
High Hill - High Hill Biofuel, LLC	\$0	\$ 47,258	\$0		Nothing	\$0
Bunceton - Missouri Better Bean, LLC	\$0	\$ 54,135	\$0			\$0
St. Joseph - AG Processing Inc., A Cooperative	\$0	\$5,021,714	\$0	2008 - 2012	EEZ	\$2,049,600

Appendix D

Potential value added to corn in Missouri resulting from ethanol production

	Gallons of Ethanol produced	Bushels of corn used ****	Value added at \$0.10 per bushel	Value added at \$0.25 per bushel	Missouri corn production (bushels) ***	Value added at \$0.10 per bushel (state-wide)	Value added at \$0.25 per bushel (state-wide)
at capacity	250,000,000	92,592,593	\$ 9,259,259	\$23,148,148	N.A.	N.A.	N.A.
FY 2008*	160,503,005	59,445,557	\$ 5,944,556	\$ 14,861,389	369,200,000	\$ 36,920,000	\$ 92,300,000
FY 2007	154,485,337	57,216,791	\$ 5,721,679	\$ 14,304,198	461,500,000	\$ 46,150,000	\$ 115,375,000
FY 2006	110,834,572	41,049,841	\$ 4,104,984	\$ 10,262,460	362,940,000	\$ 36,294,000	\$ 90,735,000
FY 2005	79,436,946	29,421,091	\$ 2,942,109	\$ 7,355,273	329,670,000	\$ 32,967,000	\$ 82,417,500
FY 2004	59,793,540	22,145,756	\$ 2,214,576	\$ 5,536,439	466,560,000	\$ 46,656,000	\$ 116,640,000
FY 2003	43,464,260	16,097,874	\$ 1,609,787	\$ 4,024,469	302,400,000	\$ 30,240,000	\$ 75,600,000
FY 2002	40,011,740	14,819,163	\$ 1,481,916	\$ 3,704,791	283,500,000	\$ 28,350,000	\$ 70,875,000
FY 2001	22,523,273	8,341,953	\$ 834,195	\$ 2,085,488	345,800,000	\$ 34,580,000	\$ 86,450,000
FY 2000	1,810,801	670,667	\$ 67,067	\$ 167,667	396,110,000	\$ 39,611,000	\$ 99,027,500
Totals **	672,863,474	249,208,693	\$24,920,869	\$ 62,302,174			

\* MDA estimated production for two of the ethanol plants (at Macon and Craig) for FY 2008. Also only 8 full months of production at Lifeline in St. Joseph (45 mgy capacity) and only 1 month full production at Show-Me Ethanol in Carrollton (50 mgy capacity) in FY 2008.

\*\* FY 2000 through FY 2008 ('at capacity' estimates are not included)

\*\*\* Source: United States Department of Agriculture - based upon marketing years (September 1 - August 31). 2008 corn production of 369,200,000 bushels is estimated by the USDA. Estimates were not available for marketing year 2009.

\*\*\*\* assumes 2.7 gallons of ethanol per bushel of corn



Appendix E  
Examples of commodity prices for the previous ten years

Year	Corn \$/ bu	Soybeans \$/ bu.	Winter Wheat \$ / bu	Oats \$/ bu	Sorghum \$/ cwt	Rice \$/ cwt	Beef Cattle \$/ cwt	Hogs & Pigs \$/ cwt	Gasoline \$/ gal	Crude Oil \$/ barrel
2008 *	5.75	14.00	5.94	N.A.	11.20	17.20	93.80	48.10	3.57	101.25
2007	3.95	10.50	5.35	2.85	6.95	10.90	91.60	40.60	2.85	60.52
2006	3.06	6.47	3.52	1.95	5.68	9.38	94.20	40.40	2.62	57.71
2005	2.03	5.67	3.35	1.80	3.42	6.87	98.00	45.50	2.31	45.74
2004	2.03	5.62	3.24	1.65	3.21	6.98	92.30	46.10	1.72	32.54
2003	2.46	7.52	3.09	1.65	4.29	7.20	77.00	34.10	1.60	26.06
2002	2.45	5.54	3.03	1.85	4.22	3.90	69.40	30.10	1.38	21.67
2001	1.96	4.32	2.42	1.65	3.46	3.70	76.20	41.30	1.47	23.50
2000	1.78	4.55	2.28	1.65	3.14	5.40	76.00	38.60	1.52	22.29
1999	1.96	4.67	2.10	1.80	2.99	5.60	65.60	27.50	1.20	28.21

\* 2008 are intra-year (July monthly) prices for all commodities except gasoline and oil since the season was not complete at the time of this report. Gasoline and oil prices are average weekly prices. Oats prices are not published monthly (only a seasonal average is published); therefore, a 2008 price for Oats is not available.

Source: United States Department of Agriculture and the United States Department of Energy

Appendix F  
Ethanol production with incentives paid  
FY 2000 (inception) - FY 2008

Fiscal Year	No. of facilities	Gallons Produced*	Incentives Paid	Incentive paid/gal	Incentive earned/gal	Appropriation Funding**		Deferred	Deferrals Paid out	Balance
						PVE ***	GR			
FY 2000	1	1,810,801	\$ 364,259	\$ 0.201	\$ 0.201	\$ 364,259	\$ 0	\$ 0	\$ 0	\$ 0
FY 2001	2	22,523,273	\$ 4,524,990	\$ 0.201	\$ 0.201	\$ 4,524,990	\$ 0	\$ 0	\$ 0	\$ 0
FY 2002	2	40,011,740	\$ 4,896,521	\$ 0.122	\$ 0.164	\$ 3,560,751	\$ 1,335,770	\$ 1,675,669	\$ 0	\$ 1,675,669
FY 2003	2	43,464,260	\$ 3,093,749	\$ 0.071	\$ 0.136	\$ 1,000,000	\$ 2,108,921	\$ 2,829,464	\$ 0	\$ 4,505,133
FY 2004	2	59,793,540	\$ 3,576,485	\$ 0.060	\$ 0.100	\$ 500,000	\$ 3,120,196	\$ 2,403,956	\$ 0	\$ 6,909,089
FY 2005	3	79,436,946	\$ 5,340,834	\$ 0.067	\$ 0.109	\$ 0	\$ 5,367,800	\$ 3,324,636	\$ 0	\$ 10,233,726
FY 2006	3	110,834,572	\$ 8,102,393	\$ 0.073	\$ 0.048	\$ 165,409	\$ 7,967,800	\$ 0	\$ (2,795,735)	\$ 7,437,991
FY 2007	4	154,485,337	\$ 13,687,991	\$ 0.089	\$ 0.040	\$ 420,711	\$ 13,312,991	\$ 0	\$ (7,437,991)	\$ 0
FY 2008	6	160,503,005	\$ 9,191,905	\$ 0.057	\$ 0.057	\$ 585,600	\$ 8,606,305	\$ 0	\$ 0	\$ 0
Totals		672,863,474	\$52,779,127	\$ 0.078	\$ 0.078	\$ 11,121,720	\$ 41,819,783			

\* Includes MDA estimated production from 2 facilities (Macon and Craig) in FY 2008. Also Lifeline in St. Joseph began operations in October 2007 and Show-Me Ethanol started operations in May 2008.

\*\* Includes transfers of \$15,172 in FY 2003, \$43,711 in FY 2004, \$26,966 in FY 2005, \$30,816 in FY 2006, and \$45,711 in FY 2007 to the Office of Administration's Cost Allocation Plan

\*\*\* PVE = Petroleum Violation Escrow

Sources: Missouri Department of Agriculture and Senate Appropriation Staff

Appendix F (continued)  
 Biodiesel production with incentives paid  
 FY 2007 (inception) - FY 2008

Biodiesel (\$0.30 / gal for 1 <sup>st</sup> 1.5 million gallons - \$0.10 / gal for 2 <sup>nd</sup> 1.5 million gallons)						
Fiscal Year	No. of facilities	Gallons Produced	Incentives Paid	Incentive paid/ gallon	Appropriation Funding	
FY '00 - '06	0	0	\$ 0	\$0.00	0	
FY 2007	5	16,762,333	\$ 4,250,802	\$0.254	General Revenue	
FY 2008	10	75,818,159	\$ 17,190,016	\$0.227	General Revenue	
Totals		92,580,492	\$ 21,440,818	\$0.232		

Appendix G  
Total estimated future Ethanol incentive payments

Facility / Location	Start Date	Incentives paid through FY '08	60 month window closes - (program expires 12/31/15)	Annual capacity (gallons)	Estimated future payments	Total estimated incentive payments
Northeast Mo Grain - Macon	05/2000	\$16,249,986	window closed - 02/2005	45,000,000	\$0	\$16,254,517
Golden Triangle - Craig	02/2001	\$15,261,064	window closed - 01/2006	20,000,000	\$0	\$15,265,719
Mid-Missouri Energy - Malta Bend	02/2005	\$12,076,171	01/2010	45,000,000	\$6,250,000	\$18,326,171
Missouri Ethanol - Laddonia	10/2006	\$6,250,000	09/2011	45,000,000	\$11,625,000	\$17,875,000
Lifeline Foods - St. Joseph	10/2007	\$2,816,648	09/2012	45,000,000	\$14,000,000	\$16,816,648
Show Me Ethanol - Carrollton	05/2008	\$125,258	04/2013	50,000,000	\$15,625,000	\$15,750,258
<b>TOTALS</b>		<b>\$52,779,126</b>		<b>250,000,000</b>	<b>\$47,500,000</b>	<b>\$100,288,313</b>

Other potential ethanol plants may be constructed and qualify for the program. MDA listed two potential future plants; Mississippi Valley Bioenergy in Hannibal and Ozark Ethanol in Liberal. The Missouri Corn Growers Association listed a potential future ethanol plant in Sikeston named Bootheel Agri-Energy. The expansion of the program in 2008 (SB 931) to include wood-derived biomass also may induce other ethanol plants to open operations and utilize the program.

Based upon current operating facilities, MDA's estimated ethanol incentive payments per fiscal year are \$12.5 million in FY 2009, \$12.5 million in FY 2010, \$9.375 million in FY 2011, \$8.5 million in FY 2012, \$4.625 million in FY 2013 and \$0 in FY 2014

Source: Missouri Department of Agriculture

Appendix H

Total estimated future Biodiesel incentive payments

Facility / Location	Start Date	Incentives paid through FY '08	60 months end**	Annual capacity (gal)	Estimated future payments	Total estimated incentive payments
Missouri Bio-Products - Bethel	07/06	\$ 34,744	06/11	2,500,000	\$ 0	\$34,744
Mid-America Biofuels. - Mexico	12/06	\$ 9,895,958	11/11	30,000,000	\$ 21,750,000	\$31,645,958
Global Fuels - Dexter	04/07	\$ 767,938	03/12	3,000,000	\$ 2,700,000	\$3,467,938
Natural Biodiesel - Hayti	04/07	\$ 1,341,916	03/12	5,000,000	\$ 5,475,000	\$6,816,916
Northwest Biodiesel - St. Joseph	04/07	\$ 1,526,348	03/12	15,000,000	\$ 15,629,954	\$17,156,302
High Hill Biodiesel - High Hill	09/07	\$ 47,258	08/12	5,000,000	\$ 2,763,482	\$2,810,740
AG Processing - St. Joseph	09/07	\$ 5,021,714	08/12	30,000,000	\$ 26,250,000	\$31,271,714
MO Better Bean - Bunceton	10/07	\$ 54,135	09/12	5,000,000	\$ 1,434,957	\$1,489,092
Great River Soy - Libourn	10/07	\$ 27,976	09/12	5,000,000	\$ 7,250,000	\$7,277,976
Prairie Pride - Deerfield	12/07	\$ 1,717,711	11/12	30,000,000	\$ 26,389,707	\$28,107,418
Pasco - Kansas City	04/08	\$ 1,005,120	03/13	30,000,000	\$ 27,750,000	\$28,755,120
American Green Holdings - Crane #1	09/08*	\$ 0	08/13	7,000,000	\$ 9,012,500	\$9,012,500
American Green Holdings - Crane #2	09/08*	\$ 0	08/13	7,000,000	\$ 9,662,500	\$9,662,500
Terra Bioenergy - St. Joseph	12/08*	\$ 0	11/13	15,000,000	\$ 21,375,000	\$21,375,000
Producers Choice - Moberly	01/09*	\$ 0	12/13	5,000,000	\$ 7,375,000	\$7,375,000
American Energy - Carrollton	02/09*	\$ 0	12/13	50,000,000	\$ 31,166,667	\$31,166,667
<b>TOTALS</b>		\$21,440,818		244,500,000	\$215,984,767	\$237,425,585

\* Not operational as of August 2008 - These are estimated start dates

\*\* FY 2014 will be the last year of biodiesel incentive payments since no new plants can begin production after 3/1/09. Other potential biodiesel plants may be constructed and qualify for the program. Based upon current operating facilities and anticipated future facilities, MDA estimates the biodiesel incentive payments per fiscal year could be as high as \$32.8 million in FY 2009, \$49.4 million in FY 2010, \$49.4 million in FY 2011, \$45.4 million in FY 2012, \$28.1 million in FY 2013 and \$10.9 million in FY 2014

Source: Missouri Department of Agriculture



DEPARTMENT of AGRICULTURE  
STATE OF MISSOURI  
JEFFERSON CITY

MATT BLUNT  
GOVERNOR

DON STEEN  
DIRECTOR

*Serving, promoting and protecting the agricultural producers, processors  
and consumers of Missouri's food, fuel and fiber products.*

November 20, 2008

Mr. Mickey Wilson  
Joint Committee on Legislative Research  
Oversight Division  
Room 132 State Capitol Building  
Jefferson City, MO 65101

RE: MDA's Response to the Oversight Division's Comments

Dear Mr. Wilson:

Below is the Missouri Department of Agriculture's (MDA) response to the Oversight Division's comments.

**Comment 4:**

MDA agrees with Oversight regarding the importance of annual audits of ethanol and biodiesel facilities participating in the producer incentive programs. As noted in the comment, MDA implemented a comprehensive audit program of biofuel grant recipients in the fall of 2007. Oversight points out that the audits have on occasion found discrepancies between the monthly biofuel grant applications and the audit results. The report also notes that in cases of over-reported production, MDA reduced future payments to recapture any overpayments that may have occurred. However, it should also be noted that the audits have identified instances of both under-reporting and over-reporting of actual biofuel production. In one example of underreporting, a facility based its production reports on an inaccurate flow meter which understated production by 57,465 gallons, resulting in an underpayment of \$17,242.50. In another example, a facility that had over-reported production in the initial audit period, under-reported production in the subsequent audit period, resulting in an underpayment of \$45,490.60. In total, audits have identified three instances of under-reported production, four instances of over-reported production, and six instances of error-free reporting.

As suggested by Oversight, MDA will consult with interested parties and consider requiring ethanol and biodiesel companies to have their monthly payment applications verified by an independent third party before being submitted to the department. It should be noted, however, that this would likely increase costs for participants and also increase MDA program costs in instances where production would have otherwise been underreported.

**Comment 5:**

In the last sentence of this comment, Oversight recommends MASBDA consider adopting a policy establishing a minimum time period between tax credit issuances for a single facility.

In the situation cited of producer members receiving tax credits in FY00 (2/18/2000) and then again in FY02 (4/10/2002), the MASBDA board did not believe that the project would purposely not produce ethanol just so the producer investors could receive an additional \$1.5 million in tax credits. Thus, the tax credits for the major expansion were approved and issued.

The lack of ethanol production for the period of April 2000 – February 2003 resulted in approximately 69,548,325 gallons\*\* not being produced, which also resulted in approximately \$1,675,568 less ethanol producer incentive payments being received for that period. Assuming an average \$1.15 per gallon ethanol at the plant, this lost production translates into an almost \$80,000,000 loss in gross revenue. The MASBDA board does not believe a facility would forego this amount of revenue just to provide the producer investors with an additional \$1.5 million in tax credits.

This real situation should reinforce the current MASBDA board policy with respect to evaluating applications for tax credits involving an expansion of a facility that has previously received tax credits. Current MASBDA board policy is to consider each application on the individual merits of the expansion to include, but not be limited to: expansion capital, job creation, physical capacity increase, product line increase, environmental requirements, and economic development impact.


\*\*Estimated loss of production is based on the first 35 months of production at an average monthly production of 1,552,665 gallons versus the next 35 months average production after expansion of 3,539,760 gallons.  $3,539,760 - 1,552,665 = 1,987,095 \times 35 \text{ months} = 69,548,325$  gallons. The 37<sup>th</sup> month was the first month at the increased capacity.

**Comment 6:**

MDA agrees with Oversight's suggested legislative changes.

Should you have questions, please feel free to contact me at 751-3359.

With kindest regards,



Don Steen  
Director

C: Matt Boatright  
Robin Perso  
Tony Stafford

