Developing State Policies Supportive of Bioenergy Development

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Abstract

Working within the context of the Southern States Biobased Alliance (SSBA) and with officials in each state, the Southern States Energy Board (SSEB) is identifying bioenergy-related policies and programs within each state to determine their impact on the development, deployment or use of bioenergy. In addition, SSEB will determine which policies have impacted industry's efforts to develop, deploy or use biobased technologies or products. As a result, SSEB will work with the Southern States Biobased Alliance to determine how policy changes might address any negative impacts or enhance positive impacts.

In addition to analysis of domestic policies and programs, this project will include the development of a U.S.-Brazil Biodiesel Pilot Project. The purpose of this effort is to promote and facilitate the commercialization of biodiesel and bioenergy production and demand in Brazil.

Introduction

The Southern States Energy Board (SSEB) is an interstate compact that includes 16 southeastern states and Puerto Rico and the U.S. Virgin Islands. One of the Southern States Energy Board's goals over its 40-year life is to ". . . develop, promote, and recommend policies and programs on energy and environment that encourage economic development." The Board accomplishes this goal primarily through a number of task forces comprised of members from its states, the private sector, non-profits and others.

Southern States Biobased Alliance (Tasks 1-3)

SSEB's Southern States Biobased Alliance works closely with the Southeast Biomass State/Regional Partnership which SSEB hosts. Activities of the Southern States Biobased Alliance are focused on creating awareness and providing information and education for its members. During this reporting period, SSEB focused on completing the compilation of bioenergy and bio-based related government policies and programs in the United States and to determine the effectiveness of these policies.

While awareness of existing policies and programs needs further development, state legislatures are moving forward with new policies and incentives that should create more favorable attraction to the bioenergy industry. During the 2005 legislative sessions, states in the southern region will pass new legislation that foster the growth of bioenergy investment. This report includes a summary of legislation related to biomass that passed in the SSEB member states for their 2005 sessions. However, all states had not completed their sessions during this reporting period. Therefore, the summaries are not inclusive but examples of how states in the southern regional are establishing policy that supports the use of biomass.

On the federal level, Congress has moved forward with the passage of a comprehensive energy bill. One area of contention between the House and the Senate is related to the legal protection for producers of MTBE, a gasoline additive. The House bill includes language that prohibits defective-product lawsuits against MTBE manufacturers. The Senate bill doesn't include any language. Another component of the federal legislation could have a huge impact on the production of ethanol, creating a renewable fuel standard. The house bill requires five billion gallons used by 2012, while the Senate version is requiring eight billion gallons used by 2012. These issues, among others, will be dealt with in committee conference. At the same time, energy bill tax-related provisions will be addressed under a separate committee.

U.S.-Brazil Biodiesel Pilot Project

On June 19, 2003, Energy Secretary Spencer Abraham and Brazilian Mines and Energy Dilma Rousseff signed a Memorandum of Understanding (MOU) to conduct a Ministerial Summit in energy issues by January 2004 in Brazil. Pursuit of joint objectives in clean energy and biofuels were specifically addressed in the MOU. In support of this collaboration, U.S. DOE modified this cooperative agreement DE-FC26-01NT41128 to include a U.S.-Brazil Biodiesel Pilot Project as a bilateral effort to enhance the prospects for success in developing biodiesel use in Brazil.

This project involves continuous monitoring of any developments affecting biodiesel production in Brazil. In addition, U.S. Secretary of Energy Abraham and Brazil's Minister of Mines and Energy, Dilma Rouseff, signed another MOU for cooperation in energy in April 2004.

During this reporting period, no significant activity occurred relevant to this task. Changes in the Brazilian Energy Ministry and lack of national policy in Brazil have limited further progress for this task.

Executive Summary

Goal

The goal of this project is to have state and international policies positively impact the development, deployment, or use of bioenergy and are consistent among states.

Statement of Work

Southern States Biobased Alliance (Tasks 1-3)
Working within the context of the Southern States Bio-Based Alliance and with officials in each state, a staff member and/or contractor will identify bioenergy-related policies and programs within each state and determine their impact (in any way) on the development, deployment, or use of bioenergy. The staff member and/or contractor will be asked to determine as quantitatively as possible how this impact occurs, and how the legislation originally came to be promulgated.

Additionally and simultaneously, the staff member and/or contractor will be interviewing bio-based industry officials to determine what policies (or lack of policies) have impacted their efforts to develop, deploy, or use biobased technologies or products. The staff member and/or contractor will also try to determine the nature of these impacts and how policy changes might address any negative impacts or increase positive impacts.

In addition to attaining the project goal, this project approach will facilitate information sharing and education on state policies and their ramifications, create peer reaction, and ultimately provide more uniform regulations across the region that are supportive of bioenergy development, deployment, and use.

U.S.-Brazil Biodiesel Pilot Project (Task 4)
Task 4 is to develop a U.S.-Brazil Biodiesel Pilot Project to promote the commercialization of biodiesel and bioenergy production, technologies, and usage in Brazil. This task will consist of three primary components: Policy and Program Development; Feasibility Study and Technical Analysis; and bioenergy meeting design and execution to meet the U.S. Department of Energy goals.

Experimental

Due to the nature of the project, no experimental methods, materials or equipment are necessary.

Results and Discussion

Task 1-3 Activities

The SSEB, through the Alliance, is assisting the U.S. Department of Energy to determine the effectiveness of relevant government policies and programs. The **goal of this project** is to identify and compile into one document bioenergy and biobased-related government policies and programs in the US and to determine the effectiveness of these policies and programs. The draft document is included below. Appendices to the document are included in the appendices of this report.

Assessment of Biomass-Related State Programs and Policies

Biomass is generally defined as current or recently grown vegetable matter. As such, it is usually associated with forestry and agricultural industries—two sectors of the U.S. economy that have struggled in recent years due to a variety of reasons. Part of this struggle pertains to growing global competition and the need to develop and maintain domestic markets for agricultural and forestry products. Making biomass a viable industry would decrease the need for tax-supported agricultural and forestry support payments, generate jobs and tax revenues in rural communities, create cash flow back into rural areas, and in general revitalize rural economies.

Achieving these benefits sometimes takes government policies and incentives to direct, guide, or lead people in the desired direction. The goal of this project is to identify and compile into one document bioenergy and biobased-related government policies and programs in the U.S. and to determine the effectiveness of these policies and programs. This final document is meant to serve as a resource for industry that has interest in and need for this specific information, and for government officials contemplating modification of existing legislation or creation of new legislation, policies, or programs. As a result, government officials will be able to learn from the experiences of others and efficiently create new model legislation for their states.

To conduct this project, SSEB consulted the listing of state policies and incentives located in the (DSIRE) database at www.dsireusa.org, as of January 13, 2005. In general, this database contains biomass-related policies and incentives that are *not* related to alternative fuel vehicles (AFVs) or alternative fuels (AF). Policies and incentives related to AFVs and AFs are in a separate database under the U.S. Department of Energy Clean Cities Program at http://www.eere.energy.gov/afdc/laws/incen_laws.html.

The analysis is completed and the document is in final preparation for distribution. Key legislators as well as other stakeholders in the region have evaluated the document to be useful and pertinent to their understanding of policies and incentives related to biomass. SSEB will be submitting the final report as a deliverable for this project during the next quarter. In addition, the analysis will be made available to a number of stakeholders through CD versions and/or web access.

As a complement to the analysis, the Southern States Biobased Alliance began planning a regional policy makers briefing and dialogue. The meeting, co-sponsored by a number of regional and national organizations, will be in Hebron, Kentucky on July 12, 2005. The goal of the regional forum is to stimulate discussion among state government policy makers and other biomass stakeholders to collaborate on the development and implementation of biomass-related incentives. One-on-one interviews and questionnaires were used to determine the best format for the briefing. The briefing will be constructed to address specific areas related to biopower but also will include briefings covering biofuels and biobased products. The expected outcome of this exercise is to develop a better understanding of effective policies and incentives through practical application and implementation.

In addition to these activities, SSEB also tracked 2005 state legislation in the southern states that was related to biomass. At the time of this report, all states in the SSEB region had not completed their 2005 legislative sessions. The bills summarized below are not all-inclusive for legislation impacting biomass and is intended only to represent how the SSEB member states are moving forward in building a biomass industry. We expect that even more biomass-related legislation will pass in other SSEB member states during 2005.

ARKANSAS

The Biobased Products Act of 2005 (HB1543)
Enacts the Biobased Products Act of 2005. The Act promotes the economic development of biobased products in Arkansas and requires state agencies to consider purchasing biobased products. A biobased product is defined as determined by the U.S. Secretary of Agriculture to be a commercial or industrial product, other than food or feed, that is composed in whole or in significant part of biological products or renewable domestic agricultural materials, including plant, animal, marine or forestry materials. Biomass is defined as any organic material that is available on a renewable or recurring basis, including agricultural crops, trees grown for energy production, wood waste and wood residues. Biomass does not include paper that commonly is recycled or unsegregated solid waste. Further, each state agency that procures items designated as biobased products qualifying for preferred procurement as authorized by section 9002 of the U.S. Farm Security and Rural Investment Act of 2002, U.S.C. § 8102, must give preference in making procurement decisions to the items composed of the highest percentage of biobased products that are practicable and consistent with maintaining a satisfactory level of competition.

Biodiesel Fuel Mixture - Tax Refund (HB2657)
Issues a tax refund to suppliers on the sale of biodiesel fuel that is to be used in producing a biodiesel fuel mixture. The refund will be fifty cents for each gallon of biodiesel fuel that is used by the supplier to produce a biodiesel mixture that contains no more than two percent biodiesel and that is sold for use in a trade or business.

The refund will be available to a supplier when one or more biodiesel producers:

- sign a financial incentive agreement with the Arkansas Department of Economic Development;
- are approved by the Alternative Fuels Commission as a biodiesel producer with biodiesel fuel production capacity to produce at least one million gallons in a 12-month period;
- certify they will produce biodiesel fuel meeting federal and state standards; and
- begin production and are approved as biodiesel suppliers by the Director of the Arkansas Department of Finance and Administration in accordance with the rules promulgated by its Director.

Also, suppliers may file a refund claim for the sale or use of biodiesel mixture that occurred on or after the date that all of the requirements of this measure have been met. A claim for refund must be filed quarterly, and in no event will a claim be filed later than one year after the sale of the biodiesel mixture. The total amount of refunds paid to a supplier during a calendar year may not exceed the tax liability of the supplier during that year.

Finally, a refund claim under this measure is subject to the provisions of the Arkansas Tax Procedure Act. The Director of the Arkansas Department of Finance and Administration will promulgate rules for the administration and enforcement of the provisions of the measure.

Vehicle Purchasing Plans - Annual Petroleum Consumption Reduction (HB2670)
Directs all state agencies and entities to develop and implement a plan for acquiring vehicles that will reduce their overall annual consumption of petroleum by at least 10 percent by January 1, 2009. This is to be accomplished by: the use of alternative fuels as defined by 42 U.S.C. § 13211 as it existed on January 1, 2005; the acquisition of vehicles with higher fuel economy, such as hybrid vehicles operating on electricity and gasoline or diesel or biodiesel fuel; and the substitution of cars for light trucks.

By January 30 of each year, the State Procurement Director must submit a report to the Legislative Council which evaluates the progress of the plan toward achieving the goal set in the legislation. The report must include:

- the number and type of alternative fueled vehicles procured, as defined by 42 U.S.C. § 13211 as it existed on January 1, 2005;
- the total number of alternative fueled vehicles used by each state agency;

- the difference between the cost of the purchase, maintenance and operation of alternative fueled vehicles and comparable conventionally fueled vehicles, as defined by 42 U.S.C. § 13211 as it existed on January 1, 2005;
- an evaluation of the plan's success; and
- suggestions for modifying the plan.

Rice Straw Tax Credit (HB2842)
Creates a state income tax credit for persons who purchase and use rice straw for processing, manufacturing, generating energy or producing ethanol. The credit is set at $15 for each ton of rice straw over 500 tons that is purchased. The amount of credit used by the taxpayer for a taxable year may not exceed 50 percent of the amount of income tax due. Any unused credit may be carried forward for 10 consecutive tax years following the year the credit was earned. A taxpayer who claims a credit under this legislation may not claim any other state tax credit or deduction for the purchase of rice straw.

MARYLAND

Biomass Electric Generating - Net Energy Metering (HB1331)
Adds biomass electric generating facilities to the systems eligible for net energy metering. The legislation also increases the eligible generating capacity for all net energy metering systems from 80 to 200 kilowatts or up to 500 kilowatts, on petition, to the Maryland Public Service Commission.

Agricultural and Resource Based Industry Development Corporation (HB1594)
Authorizes the Governor to include in each year's budget bill an appropriation to the Maryland Agricultural and Resource Based Industry Development Corporation (MARBIDCO) of up to $5 million in order to capitalize it, provided the state has provided $12 million or less from fiscal years 2006 through 2010. This amount will increase to $6.5 million beginning in fiscal year 2011 if certain conditions are met. The measure also modifies the stated purpose of MARBIDCO to include the temporary purchase of land and easements in accordance with state or local critical farm acquisition programs.

Renewable Fuels Incentive Board (SB740)
Authorizes production credit payments to qualifying producers of ethanol and biodiesel. The measure creates a Renewable Fuels Incentive Board within the Maryland Department of Agriculture to review credit certification applications from producers and make production credit payments to qualifying producers over a 10-year period. For fiscal year 2008 and each succeeding year, the Governor must include sufficient funds in the state budget to implement the credit program.

Limits are set on the number of gallons of production which can be certified to receive production credit payments by the Board. Production credit payments can be made for up to 15 million gallons of ethanol a year, of which 10 million must be made from small grains. Up to five million gallons of biodiesel may be certified, of which at least two million must be made from soybean oil. Production payments are 20 cents a gallon for biodiesel made from

soybean oil and ethanol made from small grains and five cents per gallon for biofuel made from other qualifying feedstocks. Producers may receive payments for up to 10 years beginning December 31, 2007 through December 31, 2017.

The legislation also authorizes the Board to pay credits to certified producers for ethanol or biodiesel produced on or after December 31, 2007. A credit may not exceed the maximum amount certified by the Board. The legislation establishes specified credit amounts depending on the production inputs, and it establishes the maximum amount of credits that can be paid per calendar year. The Board is prohibited from paying a credit for ethanol or biodiesel produced after December 31, 2017. To receive a credit payment after February 1, 2008, a certified ethanol or biodiesel producer must file a quarterly claim with the Board. The legislation also sets forth provisions governing such claims, including review by an independent certified public accountant.

MISSISSIPPI

Biodiesel - State Incentive Payments (HB960)
Updates existing law by clarifying that producers of biodiesel are allowed the same incentive cash payments made by the Mississippi Commissioner of Agriculture and Commerce to in-state producers of ethanol, anhydrous alcohol and wet alcohol located.

MISSOURI

Missouri Qualified Ethanol Producer Incentive Fund - Extension (SB355)
Extends the Missouri Qualified Ethanol Producer Incentive Fund to expire in 2015. The measure clarifies that eligibility for a grant exists for 60 months unless such producers fail within that time frame, due to a lack of appropriations, to receive the full amount from the Fund for which they were eligible. In such cases, the producer will continue to be eligible for up to an additional 24 months or until they have received the maximum amount of funding for which they were originally eligible.

Also, the amount each eligible producer can receive is modified to a total grant equal to 30 cents per gallon for the first 15 million gallons plus 10 cents per gallon for the next 15 million gallons of qualified biodiesel. All biodiesel produced in excess of 30 million gallons will not be applied to the computation of the grant.

The circumstances when motor fuel is exempt from the fuel tax also is revised by adding the bulk sales of 100 gallons or more of gas delivered to a farmer for agricultural purposes only, provided the farmer provides an exemption certificate.

Additionally, the measure:

- adds natural gas, propane and electricity used by an eligible new generation cooperative or processing entity as well as field drain tile to the list of exemptions from sale and use taxes;

- provides that any drainage district, levee district or drainage and levee district will have five years after the lapse of the corporate charter to reinstate and extend the time of its corporate existence; and
- extends the period of time in which school districts can contract with eligible new generation cooperatives to purchase biodiesel fuel from the 2011 school year to 2012.

OKLAHOMA

Biodiesel Production (HB1398)
Provides a 20 cents per gallon tax credit as an incentive for biodiesel production in Oklahoma. The tax credit is available only to facilities built after the legislation's effective date and only to those that are producing at least 25 percent of their design capacity. The credit is capped at 25 million gallons annually and 125 million gallons per 60-month period per facility. Also, biodiesel and B20, a product which requires absolutely no change in the storage or dispensing hardware that handles petroleum diesel fuel, are added to the definition of alternative fuels for purposes of the Oklahoma Alternative Fuels Conversion Act. Finally, biodiesel is added to the list of other alternative fuels that cannot be regulated by a governmental entity of the state.

Ethanol Production (HB1556)
Expands an existing 20 cents per gallon incentive tax credit for ethanol production in Oklahoma to December 31, 2008. The tax credit is available only to facilities built after the legislation's effective date and only to those that are producing at least 25 percent of their design capacity. Further, the credit is capped at 25 million gallons annually and 125 million gallons per 60-month period per facility. However, the bill caps the annual tax credit at 75 million gallons for all eligible facilities combined. Finally, this legislation provides an additional 1.6 cent credit against motor fuel excise taxes for every gallon of ethanol fuel sold by a retailer in the state.

Oklahoma Biofuels Development Act (SB363)
Creates the Oklahoma Biofuels Development Act to provide for the expanded use of Oklahoma agricultural products by encouraging the processing, market development, promotion, distribution and research of various biofuels and their byproducts in the state. The Act establishes the 11-member Oklahoma Biofuels Development Advisory Committee. The Committee will, among other things:

- conduct a systematic review and study of the ethanol and biodiesel industry in Oklahoma and other states;
- study the feasibility of developing and enhancing the ethanol and biodiesel industry in Oklahoma;
- study processing, market development, promotion, distribution and research on products derived from grain, ethanol or ethanol components and biobased products, co-products or byproducts;
- develop methodologies to best cooperate with private industry to establish ethanol and biodiesel related production facilities in Oklahoma to create demand for agricultural products;

- recommend policies or programs to enhance the ability of Oklahoma agricultural landowners to participate in ethanol and biobased oils development and production;
- encourage the production of educational and advisory materials regarding ethanol and biobased production on agricultural lands and participation in systems of carbon or greenhouse emissions trading; and
- study methods of funding or supporting ethanol and biodiesel production, development and marketing including, but not limited to, the levy of assessments on the sale of certain grains, tax credits or other economic and revenue enhancements.

The Committee may prepare a report of recommendations as it deems necessary. Any such report will be distributed to the Governor, the President Pro Tempore of the Senate and the Speaker of the House of Representatives. Any member of the Oklahoma Ethanol Development Advisory Committee is eligible, if appointed, to serve as a member of the Oklahoma Biofuels Development Advisory Committee.

TENNESSEE

Biodisel Dispensing Facilities Network (HB1740/SB2061)
Authorize the Tennessee Department of Transportation (DOT) to establish public-private partnerships with fuel companies in order to develop a network of refueling facilities dedicated to dispensing biofuels. Specifically, this measure creates a grant program to pay part of the cost of tanks and pumps that are dedicated for biofuel at non-governmental fuel stations. The grant program may include any federal assistance that DOT can secure and appropriations made by the General Assembly from any source other than the state Highway Fund. The Tennessee Department of Agriculture is authorized to inspect and test biofuels pursuant to the Kerosene and Motor Fuels Quality Inspection Act of 1989.

Landfill Methane Development Act (HB802/SB1190)
Create the Landfill Methane Development Act which encourages the use of methane produced from landfills as a substitute for natural gas. Any person in the state is authorized to finance, acquire, own, operate, lease and dispose of rights, titles and interest in facilities to produce and treat methane from landfills in Tennessee. The legislation authorizes the contractual purchase of landfill methane gas by pipeline within or outside the state, and it allows pipeline corporations to transport landfill methane gas alone or mixed with natural gas. Several regulatory exemptions to persons and corporations involved in methane production and distribution are provided in the legislation as well.

VIRGINIA

Biodiesel Fuel Study (HJR598)
Requests the Virginia Secretary of Agriculture and Forestry to study the use and production of biodiesel fuel in Virginia.

Hydrogen Energy Plan (HJR711/SJR406)
Express the General Assembly's support for the Virginia Hydrogen Energy Plan.

Task 4 Activities

No significant activity occurred during this reporting for this task. The final economic pre-feasibility report will be submitted as a deliverable during the next quarter. Political changes in Brazil precluded further expansion of activities under this task.

Conclusion

Beyond the potential economic development benefits, states gain the opportunity to strengthen and integrate the work of energy, agriculture, forestry, environmental and other state agencies. Where issues are the same among several states, strategies can be developed to address these issues without regard to state borders. Examples include the development of similar legislative actions, working with the private sector with multi-state locations, and multi-state training and outreach to economize resources.

Notably, several southern states have long-standing policies and programs that support the use of bioenergy. Therefore, some states have a more developed bioenergy economy than others. However, all states in the southern region have significant biomass resources. SSEB will report these findings in the final report.

During the 2005 state legislative sessions, SSEB member states are enacting additional policies and implementing programs that will support the use of biomass and biobased products and boost rural economies. During this reporting period, the study on policies and incentives is completed and will be submitted to DOE/NETL as a deliverable during the next quarter. The final analysis is being used to support a regional policy makers briefing and discussion that will be held in Hebron, Kentucky on July 12, 2005.

The SSEB Southern States Biobased Alliance will sponsor the forum and a diverse group of stakeholders is invited to participate. We anticipate that the outcome of this activity will provide immediate results that are useful to SSEB member states. Experts, as well as interested stakeholders, will set the dynamics for discussing practical experience in implementing policies and providing incentives to foster the use of biomass. Key leaders in the industry will explain how specific policies, incentives, strategies and programs affected investment and economic development at the state and local level.