

To: Forestry Colleagues

From: Amie Brown

Date: August 11, 2005

RE: 2005 Energy Bill Provisions of Relevance to Forestry

On August 8, 2005, President Bush signed the Energy Policy Act of 2005 at New Mexico's Sandia National Laboratories. The Act is 1,724 pages and contains 18 titles. I have identified 18 items that are germane to the woody biomass industry's production of biofuels, biopower, and bioproducts.¹ These items have been organized into 7 categories based upon the type of financial incentives provided.

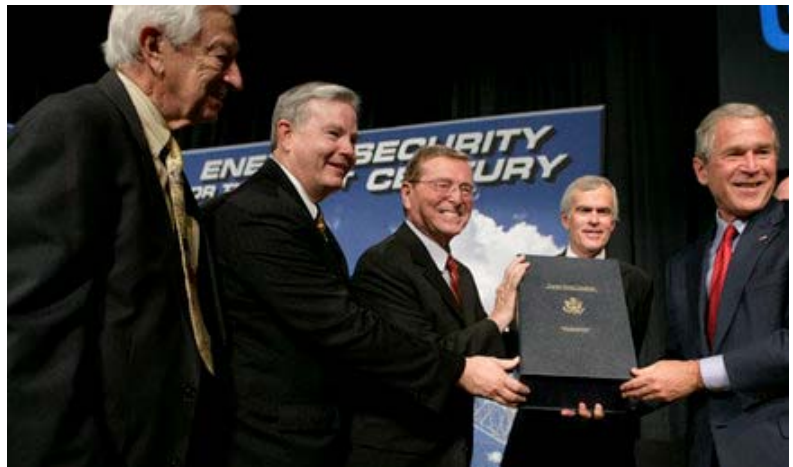
Grants

This is free money.

- Grants to improve the commercial value of forest biomass for electric energy, useful heat, transportation fuels, and other commercial purposes. (Sec. 210)

Biomass Commercial Use Grants may be made to any person in a preferred community that owns or operates a facility that uses biomass as a raw material to produce electric energy, sensible heat, or transportation fuels. To help offset the purchase cost of biomass, a qualified entity may receive up to a \$20 per green ton for biomass delivered.

President Signs the Energy Policy Act



President George W. Bush holds the box containing the energy bill after signing the H.R. 6, The Energy Policy Act of 2005 at Sandia National Laboratory in Albuquerque, New Mexico, Monday, Aug. 8, 2005. Also on stage from left are Congressman Ralph Hall (R, TX), Congressman Joe Barton (R, TX), Senator Pete Domenici (R, NM) and Senator Jeff Bingaman (D, NM). White House photo by Eric Draper [full story](#)

¹ Biofuels - Converting biomass into liquid fuels for transportation.

Biopower - Burning biomass directly, or converting it into a gaseous fuel or oil, to generate electricity.

Bioproducts - Converting biomass into chemicals for making products that typically are made from petroleum.

The Improved Biomass Use Grants are available to entities in preferred communities to offset the cost of projects to develop or research opportunities to improve the use of, or add value to, biomass. Criteria for awarding the grants include: (1) the anticipated public benefits of the project; (2) opportunities for the creation or expansion of small businesses and micro-businesses; (3) the potential for new job creation; (4) the potential for the project to improve efficiency or develop cleaner technologies for biomass utilization; and (5) the potential for the project to reduce the hazardous fuels from the areas in greatest need of treatment.

The definition of preferred community is what is important here. Essentially for a project to qualify the location must be in a community that is near public lands.

- Integrated biorefinery demonstration projects program and the university biodiesel program (Sec. 932)

Section 932 establishes two grants programs, the Integrated Biorefinery Demonstration Projects Program and the University Biodiesel Program. Each program focuses on the production of biofuels and bioproducts. It also specifies the type of technologies that should be pursued such as advanced biochemical and thermochemical conversion technologies, biorefinery technologies using enzyme-based processing systems, and increase energy production from lignocellulosic feedstocks. Of special interest to forestry are items that have been included in the definitions section. For example the term `biomass' is any organic material grown for the purpose of being converted to energy. Forest-related resources are specifically mentioned to include mill residues, precommercial thinnings, slash, brush, or otherwise nonmerchantable material. Paper that is commonly recycled is explicitly excluded.

- Amendments to the Biomass Research and Development Act of 2000 (Sec. 941)

The Biomass Research and Development Act of 2000 is amended to direct the Biomass Research and Development Board, and the Biomass Research and Development Technical Advisory Committee to ensure that solicitations are open and competitive with awards made annually. The amendment also provides extensive direction for the prioritization of biomass projects.

Regional bio-economy development grants (Sec. 945)

These grants are available to any regional bio-economy development association, agricultural or energy trade association, or Land Grant institution that supports and promotes the growth and development of the bio-economy within the region served by the eligible entity, through coordination, education, outreach, and other endeavors and has not previously received a grant under this section.

- Renewable fuel production research and development grants (Sec. 1511)

Also authorized is the Renewable Fuel Production Research and Development Grant. The funds are for the research, development, and implementation of renewable fuel production technologies in reformulated gasoline (RFG) States that have low rates of ethanol production. This program is geared toward entities that are academic institutions in RFG States, a consortia made up of combinations of academic institutions, industry,

State government agencies, or local government agencies in RFG States, that have proven experience and capabilities with relevant technologies.

Although the following two grants are nearly identical they apply to two different sections of the U.S. Code.

- Cellulosic biomass ethanol conversion assistance grants (Sec. 1511 amends 26 USC 7411)

The Cellulosic Biomass Ethanol Conversion Assistance Grant program is authorized. Grants may be provided to producers of cellulosic biomass ethanol to assist in the building of production facilities. A production facility is eligible to receive a grant if the facility is located in the United States, and uses cellulosic biomass feedstocks derived from agricultural residues or municipal solid waste. This program is authorized at \$250,000,000 for fiscal year 2006 and \$400,000,000 for fiscal year 2007.

- Conversion assistance for cellulosic biomass, waste-derived ethanol, and approved renewable fuels (Sec. 1501 amends 26 USC 7545)

The Secretary of Energy may provide grants to producers of cellulosic biomass ethanol, waste-derived ethanol, and approved renewable fuels in the United States to assist the producers in building facilities for the production of ethanol or approved renewable fuels.

A production facility is eligible to receive a grant if the facility is located in the United States, and uses cellulosic or renewable biomass or waste-derived feedstocks derived from agricultural residues, wood residues, municipal solid waste, or agricultural byproducts.

The authorization is \$100,000,000 for fiscal year 2006, \$250,000,000 for fiscal year 2007, and \$400,000,000 for fiscal year 2008.

Credits

H.R. 6 expands three credit programs for renewable biomass by providing incentives to producers and consumers.

- Extension and modification of renewable electricity production credit (Sec. 1301)

This provision extends placed-in-service date by two years (through December 31, 2007) for qualifying facilities: wind facilities; closed-loop biomass facilities; open loop biomass facilities; geothermal facilities; small irrigation power facilities; landfill gas facilities; and trash combustion facilities. Qualifying facilities receive credits per kWh for electricity produced over a 10 year period.

In the case of open-loop biomass facilities (including agricultural livestock waste nutrient facilities), small irrigation power facilities, landfill gas facilities, and trash combustion facilities, the otherwise allowable credit amount is 0.75 cents per kilowatt-hour, indexed for inflation measured after 1992 (currently 0.9 cents per kilowatt-hour for 2005).

- Renewable diesel & small agri-biodiesel producer credit (Sec 1345 and Sec. 1346)

As amended by H.R. 6, 26 USC 40A provides the opportunity to receive the biodiesel fuels tax credit in three ways. A tax credit can be taken through the biodiesel mixture credit, the biodiesel credit, and the small agri-biodiesel producer credit. The rate of credit for the biodiesel mixture credit and the biodiesel credit has increased from \$0.50 to \$1.00.

The small agri-biodiesel producer credit is newly enacted by H.R. 6. An eligible small agri-biodiesel producer, a person who, at all times during the taxable year, has a productive capacity for agri-biodiesel not in excess of 60,000,000 gallons, is eligible for a 10 cents per gallon credit, but limited to 15,000,000 gallons (or \$150,000) of credit.

- Renewable content of gasoline (Sec. 1501)

Do you qualify as a small refinery? The term 'small refinery' means a refinery for which the average aggregate daily crude oil throughput for a calendar year (as determined by dividing the aggregate throughput for the calendar year by the number of days in the calendar year) does not exceed 75,000 barrels.

If so, H.R. 6 amends the Clean Air Act to establish a renewable fuels program for "small refineries." Renewable fuels is defined broadly and includes cellulosic biomass ethanol, waste derived ethanol, and other renewable fuels. Animal wastes are explicitly referred to in the definitions. For the purpose counting credits, 1 gallon of cellulosic biomass ethanol or waste derived ethanol is considered to be the equivalent of 2.5 gallons of renewable fuel.

Loan Guarantees

Loans secured by the Secretary may offer additional financing that was previously unavailable.

- Commercial byproducts from municipal solid waste and cellulosic biomass loan guarantee program (Sec. 1510)

Loan guarantees are available to individuals or businesses if: (1) credit is not available to the applicant under reasonable terms; (2) the prospective earning power of the applicant provides reasonable assurance of repayment of the loan; and (3) the loan bears an interest rate determined by the Secretary to be reasonable. Recipients of loan guarantees must meet all applicable Federal and State permitting requirements, be likely to succeed, and be located in local markets that have the greatest need for the facility. The loan must be repaid within 20 years.

- Cellulosic Biomass Ethanol and Municipal Solid Waste Loan Guarantee (Sec. 1511)

The Cellulosic Biomass Ethanol and Municipal Solid Waste Loan Guarantee Program provides funds to carry out commercial demonstration projects for cellulosic biomass and sucrose-derived ethanol (not more than 4 projects). At least 1 project must use cereal straw as a feedstock and 1 project must use municipal solid waste as a feedstock. Each project must have a design capacity to produce at least 30,000,000 gallons of cellulosic biomass ethanol each year.

- Loan Guarantees for Innovative Technologies (Sec. 1701-1704)

Only projects that avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases and employ new or significantly improved technologies are eligible for

loan guarantees. In addition a project must fall into one of the categories listed below. It is likely that Timber would qualify for one or more of these categories.

- (1) Renewable energy systems.
- (2) Advanced fossil energy technology (including coal gasification)
- (3) Hydrogen fuel cell technology for residential, industrial, or transportation applications.
- (4) Advanced nuclear energy facilities.
- (5) Carbon capture and sequestration practices and technologies, including agricultural and forestry practices that store and sequester carbon.
- (6) Efficient electrical generation, transmission, and distribution technologies.
- (7) Efficient end-use energy technologies.
- (8) Production facilities for fuel efficient vehicles, including hybrid and advanced diesel vehicles.
- (9) Pollution control equipment.
- (10) Refineries, meaning facilities at which crude oil is refined into gasoline.

Incentive Payments

Incentive payments for renewable energy production are ranked below that of grants and credits because payments are dependent upon the availability of annual appropriations.

- Renewable energy production incentive. (Sec. 202)

The previously established incentive payment program for renewable energy production has been expanded to include a renewable energy facility that is owned by a State or any political subdivision of a State, by any corporation, by a nonprofit electrical cooperative, a not-for-profit electric cooperative, a public utility, an Indian tribal government, or a Native Corporation. It also adds a variety of methods which generates electric energy for sale in, or affecting, interstate commerce using solar, wind, biomass, landfill gas, livestock methane, ocean (including tidal, wave, current, and thermal), or geothermal energy. Should the Secretary not have the funds to pay all of those qualified he/she must notify Congress and a priority for payment plan is established. The payment is 1.5 cents per kilowatt hour.

Federal Direction

The mandated growth of this requirement should be of great interest to the forestry industry.

- Federal purchases.

Section 203 is very straight forward. It requires that to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be renewable energy: (1) Not less than 3 percent in fiscal years 2007 through 2009; (2) Not less than 5 percent in fiscal years 2010 through 2012; and (3) Not less than 7.5 percent in fiscal year 2013 and each fiscal year thereafter.

- Electricity from renewable energy resources on public lands.

Section 211 is the sense of the Congress that the Secretary of the Interior should, before the end of the 10-year period beginning on the date of enactment of this Act, seek to have approved non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity.

Technical Assistance And Outreach Programs

This section is useful if you want to provide technical assistance or education materials to the public.

- Education and outreach. (Sec. 203)

The Secretary of Agriculture shall establish a program of education and outreach on biobased fuels and biobased products consisting of training and technical assistance programs for feedstock producers to promote producer ownership, investment, and participation in the operation of processing facilities; and public education and outreach to familiarize consumers with the biobased fuels and biobased products.

- Advanced biofuel technologies program. (Sec. 1514)

The Advanced Biofuel Technologies Program is established. The purpose of the program is to support the demonstration of advanced technologies for the production of alternative transportation fuels. Priority will be given to projects that enhance the geographical diversity of alternative fuels production and utilize feedstocks that represent 10 percent or less of ethanol or biodiesel fuel production in the United States during the previous fiscal year.

The Administrator is directed to fund not less than 4 different conversion technologies demonstration projects that produce cellulosic biomass ethanol and not less than 5 technologies for co-producing value-added bio-products (such as fertilizers, herbicides, and pesticides) resulting from the production of biodiesel fuel.

The program is authorized at \$110,000,000 for each of fiscal years 2005 through 2009.