



## INNOVATIVE NATURAL RESOURCE SOLUTIONS LLC

*IN BRIEF...*

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### BIOMASS PROVISIONS IN THE 2005 ENERGY BILL

*The following, prepared by Innovative Natural Resource Solutions LLC, serves as a non-technical summary of the key provisions in the 2005 Energy Bill that relate directly to biomass. This summary serves an introduction to each provision only; further research may be necessary to fully understand the implication of a provision to a particular project or company.*

#### **PRODUCTION TAX CREDIT FOR RENEWABLE ELECTRICITY GENERATION**

Section 1301. This provision extends the existing tax credit for electricity generation for “open-loop” biomass (wood or other biomass derived from forestry, logging, land clearing) from for two years; facilities must now be placed in service (operating) by December 31, 2007 in order to qualify for the tax credit. The tax credit is for \$0.0075 per kWh in 1993 dollars, or roughly \$0.0090 in today’s dollars. New facilities may utilize the tax credit for ten years; though facilities in operation prior to October 22, 2004 may use the tax credit for only five years. Facilities co-firing with fossil fuels are not eligible for this tax credit.

Other renewables such as wind, closed-loop biomass (dedicated energy crops), geothermal facilities, small irrigation, and landfill gas also qualify for this tax credit. The rate for these other facilities is \$0.015 per kWh in 1993 dollars.

#### **BIOMASS RESEARCH AND DEVELOPMENT**

Section 941. The purpose of this act is to facilitate the research and development of bio-based fuels and bio-products that are competitive with fossil fuels. The authorization amount is increased from \$54 million to \$200 million; this is subject to future appropriations. (Congress can authorize a fund at a certain level but actually provide significantly less money for the task. An authorization should be considered a funding ceiling.)

#### **CONVERSION ASSISTANCE FOR CELLULOSIC BIOMASS, WASTE-DERIVED ETHANOL AND APPROVED RENEWABLE FUELS**

Section 942. Grants are provided under this provision for the building of facilities that produce renewable fuels using cellulosic ethanol (for example, wood or mill-residue based ethanol) or other biofuels. The bill authorized \$250 million in grants over three years; this is subject to future appropriations.



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Antrim, NH – 603/588-3272, Portland, ME – 207/772-5440, Concord, NH 603/226-0012

[www.inrsllc.com](http://www.inrsllc.com)

## **GRANTS TO IMPROVE THE COMMERCIAL VALUE OF FOREST BIOMASS FOR ELECTRIC ENERGY, USEFUL HEAT, TRANSPORTATION FUELS, AND OTHER COMMERCIAL PURPOSES**

Section 210. This section establishes two programs, one for commercial use and one for research and development. These programs have a combined annual authorization of \$50 million for ten years, subject to appropriations.

Biomass Commercial Use Grant. Grants are provided in this section to offset a facility's cost of purchasing biomass, up to \$20 per green ton. There is no limit on the amount any facility can receive. Important restriction apply, including:

- Only for non-merchantable biomass (in other words, wood that could not be used for a higher value product) or pre-commercial thinnings that are used to reduce fuel load, reduce or contain an insect and disease infestation, or restore forest health;
- For use in "preferred communities", located in or near federal (or tribal) land with serious fire or forest health concerns and with populations of less than 5,000; and
- Applicable to facilities that use biomass to produce electricity, sensible heat or transportation fuels.

Improved Biomass Use Grants. This program is designed to defray costs associated with research and development of improved uses of biomass. Projects in "preferred communities", as defined above, are given preference, though projects outside of this geographic area may qualify as well. Grants of up to \$500,000 will be evaluated based upon:

- Anticipated public benefit of the project;
- Opportunities for job creation;
- Opportunities to encourage cleaner technologies or improve efficiency of biomass utilization;
- Potential for the creation or expansion of small businesses and micro-businesses; and
- Potential for the project to reduce hazardous fuel loads in areas in greatest need of treatment.

## **CELLULOSIC BIOMASS ETHANOL AND MUNICIPAL SOLID WASTE LOAN GUARANTEE PROGRAM**

Section 1511. This provision allows the Secretary of Energy to provide loan guarantees to carry out up to four demonstration projects for cellulosic biomass, with each project producing at least 30 million gallons of cellulosic ethanol a year.

## **CELLULOSIC ETHANOL PREFERENCE IN THE RENEWABLE FUEL STANDARD**

In the Renewable Fuels Standard, which requires 4 billion gallons of ethanol or biodiesel be used in 2006, ramping up to 7.5 billion gallons by 2012, cellulosic ethanol is given significant preference. In a complicated trading mechanism, a gallon of cellulosic ethanol receives 2.5 credits for every credit a gallon of corn-based ethanol receives.

*This is a summary of the key provisions only. A number of other provisions may be of interest for particular projects. Please don't hesitate to contact us with further questions.*



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