



# Renewable Energy Programs in the 2008 Farm Bill

## Introduction

The 2008 Farm Bill extends and expands many of the renewable energy programs originally authorized in the 2002 Farm Bill. The bill also continues and increases the emphasis on the research and development of advanced and cellulosic bioenergy.

Title IX, the energy title of the Farm Bill, authorizes mandatory funds of \$1.1 billion and discretionary funds (subject to appropriations) totaling \$1.0 billion for the FY2008-FY2012 period. Energy grants and loans provided through initiatives such as the Bioenergy Program for Advanced Biofuels promote the development of cellulosic biorefinery capacity. The Repowering Assistance Program supports increasing efficiencies in existing refineries. Programs such as the Rural Energy for America Program (REAP) assist rural communities and businesses in becoming more energy efficient and self-sufficient, with an emphasis on small operations. The Biomass Crop Assistance and Development Program, the Biorefinery Assistance Program and Forest Biomass for Energy Program provide support to develop alternative feedstock resources and the infrastructure to support the production, harvest, storage and processing of cellulosic biomass

feedstocks. Switchgrass, woody biomass and other cellulosic feedstocks are given high priority both in research and funding.

Title XV of the 2008 Farm Bill contains tax and trade provisions. It continues current biofuels tax incentives. It also reduces credits for corn-based ethanol but expands tax credits for cellulosic ethanol. The Farm Bill also extends the tariff on ethanol imports.

The information provided in this publication has been developed to assist you in answering questions about the energy components of the 2008 Farm Bill. Each program is listed along with the purpose, program specifics, funding available and eligible applicants. There is also a section containing contact information for each of the programs. Finally there is a short discussion on tax provisions and other provisions related to the energy title of the Farm Bill. For more information about the energy programs in the 2008 Farm Bill, go to [www.usda.gov/farmbill](http://www.usda.gov/farmbill).

For questions about the information in this publication or help in obtaining more detailed information about the programs, please contact John Payne at [jpayne@uaex.edu](mailto:jpayne@uaex.edu) or call 479-754-2240.

## Highlights of the Energy Section of the 2008 Farm Bill

	Grant Funding	Loan Guarantees	Eligible Applicants
<b>Rural Energy for America Program (REAP)</b>			
<b>Purpose: To promote energy efficiency and renewable energy development for ag producers and rural small businesses.</b>	Total REAP funding increased to \$255 M. \$100 M in discretionary funding authorized over 5 years (pending appropriations)		
1. Technical assistance to provide energy audits, renewable energy development assistance, energy efficiency improvements and renewable energy systems for ag producers and rural small businesses.	Competitive grants \$10.2 M over 4 years		State and local governments, higher education institutions, public power utilities, tribes and other similar entities.
2. To make energy efficiency improvements and utilize renewable energy systems.		Max of \$25 M per project or 75% of costs	Agriculture producers, including greenhouses and other small rural businesses.
<b>Biorefinery Assistance</b>			
<b>Purpose: To assist in the development of new and emerging technologies for the development of advanced biofuels.</b>	\$75 M in 2009 – Mandatory \$245 M in 2010 – Mandatory \$600 M in discretionary funds over 4 years – 2009-2012 (Max of \$250 M in loan guarantees per plant or 80% of costs)		
1. Provides competitive grants for development/construction of <b>demonstration</b> biorefineries for the production of advanced biofuels.	Up to 30% of cost		A wide variety of public, private and cooperative institutions qualify for funding. The program is for advanced biofuel production such as cellulosic ethanol or butanol. Corn starch ethanol is not eligible for assistance under this program.
2. Loan guarantees for development, construction or retrofitting of <b>commercial</b> biorefineries.		Max of \$250 M in loan guarantees per plant or 80% of costs	

<b>Biomass Crop Assistance Program (BCAP)</b>			
<p><b>Purpose: To establish and produce crops for conversion to bioenergy in specific project areas and to assist with collection, harvest, storage and transportation of eligible material for use in a biomass conversion facility. The program excludes commodity crops, food and wastes and algae.</b></p>	<p>Program is funded with uncapped mandatory CCC funding. Congress estimates its cost to be \$70 M over 5 years.</p>		
<p>1. This program pays producers up to 75% of costs for establishing and planting crops (i.e., seeds, stock, planting, site prep and tree planting) plus annual payments (amounts to be determined) to help compensate for lost opportunity costs until crops are established.</p>	<p>75% of costs for establishing and planting crops, and annual payments to compensate for lost opportunity costs until crops are established.</p>		<p>Producers</p>
<p>2. The program also provides cost-share payments for collection, harvesting, storage and transportation costs at a rate to match the biomass sale price, up to \$45 per dry ton. All projects must follow conservation or forest stewardship plans.</p>	<p>Provides cost-share payments on a \$1 to \$1 match for collection, harvesting, storage and transportation costs, up to \$45 per dry ton.</p>		<p>Producers</p>
<b>Repowering Assistance</b>			
<p><b>Purpose: To provide payments to encourage existing biorefineries to convert from fossil fuel to renewable energy power sources.</b></p> <p><b>This program provides grants or other payments to existing biorefineries to modify their fossil fuel boilers to use renewable biomass. The results: a lower carbon footprint and new markets for energy crops.</b></p>	<p>\$35 M in mandatory funding, beginning in FY09.</p> <p>Additional \$60 M in discretionary funding over 4 years, FY09-12.</p>		<p>Existing biorefineries</p>

	<b>Grant Funding</b>	<b>Loan Guarantees</b>	<b>Eligible Applicants</b>
<b>Bioenergy Program for Advanced Biofuels</b>			
Purpose: To encourage production of advanced biofuels. It excludes cornstarch ethanol from eligibility.			
1. Pays advanced biofuel producers for production of biofuels based on several factors to be determined by USDA.	Funded at \$300 M over 4 years, beginning in FY09. Additional \$100 M in discretionary funding over 4 years.		Biofuel producers. Large facilities limited to no more than 5% of total payments where refining capacity is over 150 million gallons per year.
<b>Biomass Research and Development</b>			
<p>Purpose: To diversify the economically and environmentally sustainable domestic sources of renewable biomass.</p> <p>The focus of the research and development programs includes three areas:  (1) feedstock development; (2) biofuels and biobased products development; and  (3) biofuels development analysis.</p>	<p>Funding is \$118 M over 4 years.</p> <p>An additional \$140 M in discretionary funding is allowed over 4 years.</p>		
1. The legislation provides for coordination of biomass research and development of biofuels, including life cycle analysis, between USDA and DOE. It establishes a biomass research and development board and technical advisory committee.			USDA, DOE
2. Competitive grants, contracts and financial assistance for researching and developing technologies for commercial, competitive biofuel production.	The minimum cost-share requirement increased to 50% for demonstration projects and 20% for research projects.		Institutions of higher education, national laboratories, federal research agencies, state research agencies, private sector entities and nonprofit organizations.

<b>Biobased Markets Program</b>			
<b>Purpose: To require federal agencies to establish a program and specifications for procuring biobased products (excluding motor vehicle fuels, heating oil or electricity).</b>	Mandatory funding is \$9 M over 5 years plus \$8 M in discretionary funding over 4 years subject to appropriations.		Federal agencies that procure products which are available as biobased products.
1. Establishes the voluntary labeling program: "USDA Certified Biobased Product."			
2. Requires USDA to establish a national registry of biobased testing centers and a report on implementation.			
<b>Biodiesel Fuel Education Program</b>			
<b>Purpose: To extend the Biodiesel Fuel Education Program through 2012.</b>	Mandatory funding of \$5 M over 5 years.		Nonprofits and higher education institutions with the demonstrated knowledge of biodiesel fuel production, use and distribution and the demonstrated ability to conduct educational/technical support programs.
1. Provides competitive grants to educate those with vehicle fleets and others about biodiesel benefits.	\$1 M each year from FY08 to FY12.		
<b>Biofuels Infrastructure Study</b>			
<b>Purpose: To direct USDA, DOE, EPA and DOT to jointly assess the infrastructure needs and development approaches for expanding the domestic production, transport and distribution of biofuels.</b>  The study is intended to be comprehensive and includes water requirements, alternative transportation, adequacy of rural roads, impacts on safety of transportation systems and resource conservation through 2025.	Authority to appropriate: \$1 M for FY2008 \$1 M for FY2009		USDA, DOE, EPA and DOT

	<b>Grant Funding</b>	<b>Loan Guarantees</b>	<b>Eligible Applicants</b>
<b>Feedstock Flexibility Program for Bioenergy Producers</b>			
<p>Purpose: To require USDA to establish and administer a sugar-for-ethanol program using sugar intended for food use but deemed to be in surplus.</p> <p>USDA would implement the program only in those years in which purchases are determined to be necessary to ensure the sugar program operated at no cost.</p>	<p>Funds appropriated as necessary to carry out the program for the 2008 to 2012 crop years.</p> <p>CCC funds and facilities to be used to purchase sugar at loan levels.</p>		USDA
<b>ENERGY TITLE PROGRAMS WITH DISCRETIONARY FUNDING</b>			
<b>Rural Energy Self-Sufficiency Initiative</b>			
<p>Purpose: To assist rural communities with community-wide energy systems that reduce conventional energy use and increase the use of energy from renewable sources.</p>	Discretionary funding of \$20 M over 4 years.		
<p>1. Grants are available to assess energy use in a rural community, evaluate ideas for reducing energy use and develop and install integrated renewable energy systems.</p>	Cost-share grants up to 50% of cost for rural communities to assess energy usage, develop plans and install energy-efficient and integrated renewable energy systems.		Rural communities
<b>Forest Biomass for Energy</b>			
<p>Purpose: To encourage the use of forest biomass for energy.</p>			
<p>1. Competitive grants for research and development to promote the use of low-value biomass for energy. Priority is given to projects that use low-value forest biomass in existing biorefineries and manufacturing streams and develop new transportation fuels and improve the production of trees for renewable energy.</p>	Discretionary funding of \$60 M over 4 years, FY09-FY12.		Federal agencies, state and local governments, tribes, land-grant colleges and private entities.

<b>Community Wood Energy Program</b>			
<b>Purpose: To provide funding to help communities develop wood energy plans and acquire or upgrade their wood energy systems.</b>	Authorized total of \$20 M over 4 years, FY09-FY12.		State and local governments.
1. Provides grants to develop community wood energy plans.			State and local governments.
2. Provides grants to acquire or upgrade community wood energy systems.			State and local governments.
<b>Renewable Fertilizer Study</b>			
<b>Purpose: To direct the USDA Secretary to conduct a study to assess the potential to produce nitrogen fertilizer from renewable resources in rural areas.</b>	\$1 M is appropriated for FY09.		USDA Secretary
1. The report must identify challenges to commercialization of rural fertilizer production, processes and technologies, and the potential impacts of renewable fertilizer on fossil fuel use and the environment.			
<b>Tax Credit Provisions</b>			
The only energy tax credit provision that survived the Conference Committee process is a new cellulosic biofuels production tax credit for up to \$1.01 per gallon, available through 2012. This credit will be available for cellulosic biofuels produced from agricultural waste, wood chips, perennial energy crops and other non-food feedstocks. This credit is worth approximately \$400 million over 10 years. To help pay for this credit and other tax credits in the Farm Bill, the legislation reduces the volumetric ethanol excise tax credit ("VEETC" or blenders credit) from 51 cents to 45 cents per gallon, subject to some limitations. This provision may raise up to \$1.203 billion over 5 years.			
<b>Other Provisions</b>			
Several other provisions in the 2008 Farm Bill either directly or indirectly encourage more farm-based energy production and energy efficiency. For example, Title II of the bill significantly increases the size of the Conservation Stewardship Program (formerly the Conservation Security Program), which, among other things, encourages farmers to use on-farm best practices that save energy. A new Sun Grant program in the Research Title encourages new biobased energy technology development (although this program did not receive any mandatory funding). Other programs focus on clean energy development.			

## 2008 Farm Bill Energy Programs

<b>Program</b>	<b>Application Deadline</b>	<b>Agency Responsible</b>	<b>Application and Contact Information</b>
<b>Biobased Markets Program</b>	To Be Determined	USDA Rural Development	<a href="http://www.rurdev.usda.gov">www.rurdev.usda.gov</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Biorefinery Assistance Program</b>	Program Deadlines Set Annually	USDA Rural Development	<a href="http://www.rurdev.usda.gov/rbs/busp/baplg9003.htm">www.rurdev.usda.gov/rbs/busp/baplg9003.htm</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Repowering Assistance</b>	To Be Determined	USDA Rural Development	<a href="http://www.rurdev.usda.gov">www.rurdev.usda.gov</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Bioenergy Program for Advanced Biofuels</b>	Program Deadlines Set Annually	USDA Rural Development	<a href="http://www.rurdev.usda.gov">www.rurdev.usda.gov</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Biodiesel Fuel Education Program</b>	To Be Determined	USDA Rural Development	<a href="http://www.csrees.usda.gov/fo/biodieselfueeducationprogram.cfm">www.csrees.usda.gov/fo/biodieselfueeducationprogram.cfm</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Rural Energy for America Program</b>	Program Updates Announced Annually	USDA Rural Development	<a href="http://www.rurdev.usda.gov/rbs/farbill/index.html">www.rurdev.usda.gov/rbs/farbill/index.html</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Biomass Research and Development Initiative</b>	Program Details Announced Annually	USDA Rural Development	<a href="http://www.csrees.usda.gov/fo/biomassresearchanddevelopmentinitiative.cfm">www.csrees.usda.gov/fo/biomassresearchanddevelopmentinitiative.cfm</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Rural Energy Self-Sufficiency Initiative</b>	To Be Determined	USDA Rural Development	<a href="http://www.rurdev.usda.gov">www.rurdev.usda.gov</a> Arkansas contact: Timothy Smith, Program Director Phone: 501-301-3280
<b>Feedstock Flexibility Program for Bioenergy Producers</b>	To Be Determined	USDA Farm Service Agency	<a href="http://www.fsa.usda.gov">www.fsa.usda.gov</a> Arkansas FSA contact: Tony Franco Phone: 501-301-3052
<b>Biomass Crop Assistance Program</b>	To Be Determined	USDA Farm Service Agency	<a href="http://www.fsa.usda.gov">www.fsa.usda.gov</a> Arkansas FSA contact: Tony Franco Phone: 501-301-3052
<b>Forest Biomass for Energy</b>	To Be Determined	U.S. Forest Service	<a href="http://www.fs.fed.us/woodybiomass/opportunities.shtml">www.fs.fed.us/woodybiomass/opportunities.shtml</a> U.S. Forest Service contact: Marilyn Buford, mbuford@fs.fed.us
<b>Community Wood Energy Program</b>	To Be Determined	U.S. Forest Service	<a href="http://www.fs.fed.us/woodybiomass/opportunities.shtml">www.fs.fed.us/woodybiomass/opportunities.shtml</a> U.S. Forest Service contact: Marilyn Buford, mbuford@fs.fed.us

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Printed by University of Arkansas Cooperative Extension Service Printing Services

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SFSPC111-PD-5-09N