



United States
Department of
Agriculture

Renewable Energy Programs

Biomass R&D Board
Technical Advisory Committee Meeting
August 23, 2011

Champaign, Illinois

William (Bill) F. Hagy III
Director of Alternative Energy Policy- USDA

USDA is an equal opportunity provider, employer, and lender.



United States
Department of
Agriculture

Renewable Energy Programs

Agenda

1. Brief Update on USDA Energy Programs
2. National Bioenergy/Biofuels Action Plan
3. Recent Announcements at Rural Summit:
 1. Navy/USDA/DOE MOU
 1. <http://www.rurdev.usda.gov/SupportDocuments/DPASignedMOUEnergyNavyUSDA.pdf>
 2. Rural Economic Jobs Report
 1. http://www.whitehouse.gov/sites/default/files/jobs_economic_security_rural_america.pdf



Title IX Program Update

- Biomass Crop Assistance Program
- Biorefinery Assistance Program
- Repowering Assistance Program
- Advanced Biofuel Payment Program
- Rural Energy for America Program
- Biobased Markets Program



United States
Department of
Agriculture

Renewable Energy Programs



2008 Farm Bill Title IX

Section 9002- Biobased Markets Program

- To date we have designated 64 product categories that represent an estimated 9,000 individual products.
- As of July 22nd we had certified 517 products for the labeling program.



United States
Department of
Agriculture

Renewable Energy Programs



2008 Farm Bill Title IX *cont.*

- **Section 9003: Biorefinery Assistance Program –**
 - \$463 million of program level available in FY 11
 - 13 applications totaling \$1.3 Billion of applications received
 - Applications under review
 - No additional funding anticipated in FY 12
- **Section 9004: Repowering Assistance –**
 - \$25 million available In FY 11
 - 2 applications totaling \$5.5 million received and under review



United States
Department of
Agriculture

Renewable Energy Programs



2008 Farm Bill Title IX *cont.*

- **Section 9005: Bioenergy Program for Advanced Biofuels**
 - To date \$30 million has been distributed (141 producers)
 - FY 10 NOCP- \$80 million – 163 applications under review
 - FY 11 NOCP - \$85 million - 160 applications under review
 - Target dates for payments- FY 10- Late Aug. 08-early Sept.: FY 11- late Sept.-early Nov.
- **Section 9007: Rural Energy For America Program**
 - FY 11 RES/EEI awards: 1431 awardees totaling \$38.9 million to date
 - FY 11 applications outstanding: 2078 totaling over \$176 million
 - FY 11 Feasibility Studies applications : 40 applications totaling \$1.24 million
 - Energy audit applications: 28 applications totaling over \$2.4 million



United States
Department of
Agriculture

Renewable Energy Programs

Energy Division Investments Fiscal Years 2003-10, *with Performance Measures*

Fiscal Year	Projects	Loans	Combinations	Grants	Total Investments	Jobs Saved-Created	Businesses Assisted	Energy Saved - Generated	Btu Equivalent*	GHG Reduced**
		Millions of Dollars	Millions of Dollars	Millions of Dollars				1,000 kWh	1,000 Btu	Metric tons of CO2
2003	114			\$ 21.7	\$ 21,707,233	736	108	974,320	3,324,517	979,408
2004	163			\$ 22.6	\$ 22,692,325	411	186	503,645	1,718,507	642,599
2005	158	\$ 10.1		\$ 22.2	\$ 32,337,267	289	103	589,771	2,012,381	611,455
2006	412	\$ 24.2		\$ 21.2	\$ 45,368,317	1,357	285	997,133	3,402,359	1,303,951
2007	436	\$ 47.5	\$ 18.1	\$ 10.7	\$ 76,396,864	2,122	331	1,956,390	6,675,479	1,968,525
2008	764	\$ -	\$ 30.1	\$ 19.6	\$ 49,805,805	1,797	537	2,438,378	8,320,092	2,642,665
2009	1,559	\$ 113.5	\$ 76.7	\$ 26.6	\$ 216,859,240	5,981	2,924	3,006,432	10,258,372	3,085,300
2010	2,609	\$ 64.2	\$ 98.3	\$ 73.1	\$ 235,718,430	2,371	5,250	4,676,194	15,284,679	7,793,654
TOTAL	6,215	\$ 259.4	\$ 223.4	\$ 218.03	\$ 700,885,481	15,064	9,724	15,142,262	50,996,386	19,027,557



United States
Department of
Agriculture

Renewable Energy Programs



FY '11 BRDI (9008) Solicitation

- Topics of interest same as FY 2010: advanced biofuels, biobased products, chemicals, small scale processing
- Integration of three technical areas
- New topic – demonstrate use of biodiesel in farming equipment and processing facility ops to produce ethanol



FY 2011 BRDI (9008) Solicitation

- FOA announced April 15
- DOE administers pre-application process
- USDA administers full application process
- USDA funding \$25M, DOE funding \$5M
- Pre-applications due May 31
 - 250 pre-applications reviewed
 - 51 pre-applications to be invited for full application
- Full applications invited week of August 22 (tentative)
- Awards anticipated early January 2012
- Next solicitation anticipated January/February



United States
Department of
Agriculture

Renewable Energy Programs

Biomass Crop Assistance Program

- **Section 9011: Biomass Crop Assistance Program**
 - Supports the establishment and production of crops for conversion to bio-energy in project areas and to assist with the collection, harvest, storage and transportation of eligible material for use in biomass conversion facilities.

FY 11- Nine establishment project areas have been identified



United States
Department of
Agriculture

Renewable Energy Programs

Biomass Crop Assistant Program

Project Area 1

Project Area 1

- Sponsor
 - Show-Me Energy of Missouri
- Location
 - Missouri and Kansas (39 counties total)
- Crop
 - Switchgrass and other prairie grasses
- Purpose
 - To pelletize for heat and power
- Acreage
 - Up to 20,000



BCAP Project Area 2

Project Area 2

- Sponsor
 - MFA Oil Biomass of Paragould, Arkansas
- Location
 - Arkansas
- Crop
 - *Miscanthus giganteus*
- Purpose
 - To pelletize for heat and power
- Acreage
 - Up to 5,900 acres



BCAP Project Area 3

Project Area 3

- Sponsor
 - MFA Oil Biomass of Columbia, Missouri
- Location
 - Missouri
- Crop
 - *Miscanthus giganteus*
- Purpose
 - To pelletize for heat and power
- Acreage
 - Up to 3,200 acres



BCAP Project Area 4

Project Area 4

- Sponsor
 - MFA Oil Biomass of Aurora, Missouri
- Location
 - Missouri
- Crop
 - *Miscanthus giganteus*
- Purpose
 - To pelletize for heat and power
- Acreage
 - Up to 5,600 acres



BCAP Project Area 5

Project Area 5

- Sponsor
 - Aloterra Energy of Ashabula, Ohio
- Location
 - Ohio and Pennsylvania
- Crop
 - *Miscanthus giganteus*
- Purpose
 - To pelletize for heat and power
- Acreage
 - Up to 5,700 acres



BCAP Project Area 6

Project Area 6

- Sponsor
 - Beaver Biodiesel of Oregon
- Location
 - Washington and Oregon (6 counties)
- Crop
 - Camelina
- Purpose
 - Biodiesel, up to 40,000 gallons annually in Albany, OR
- Acreage
 - Up to 1,000 acres



BCAP Project Area 7

Project Area 7

- Sponsor
 - Abengoa BioEnergy of Kansas
- Location
 - Kansas and Oklahoma
- Crop
 - Switchgrass
- Purpose
 - Cellulosic ethanol, up to 800,000 gallons annually in Hugoton KS
- Acreage
 - Up to 20,000 acres



BCAP Project Area 8

- Sponsor
 - AltAir Fuels
- Location
 - California, Washington, Oregon and Montana
- Crop
 - Camelina
- Purpose
 - Liquid jet fuels, up to 2 million gallons annually, starting in Bakerfield CA
- Acreage
 - Up to 50,000 acres



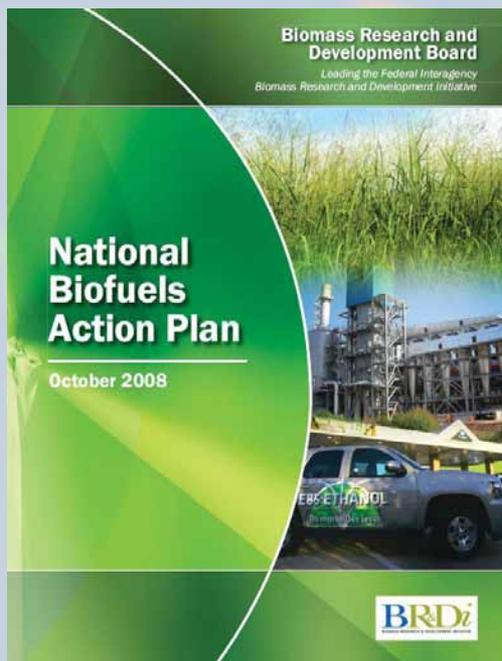
BCAP Project Area 9

Project Area 9

- Sponsor
 - ZeaChem
- Location
 - Oregon
- Crop
 - Hybrid poplar
- Purpose
 - Liquid biofuel and bio-based chemicals in Boardman OR
- Acreage
 - Up to 7,000 acres



**National Biofuels Action Plan
Version— October 2008**



National Biofuels Action Plan Summary

Board Action Area	Actions and Milestones
Sustainability	<ul style="list-style-type: none"> ▶ Develop key sustainability criteria and indicators ▶ Host internal and external workshops to inventory relevant research, models and gaps
Feedstock Production	<ul style="list-style-type: none"> ▶ Conduct feedstock availability and cost study ▶ Formulate long-term interagency research plan
Feedstock Logistics	<ul style="list-style-type: none"> ▶ Identify R&D needs to facilitate cellulosic feedstock logistics systems demonstrations and commercialization
Conversion Science and Technology	<ul style="list-style-type: none"> ▶ Inventory and coordinate interagency R&D activities ▶ Develop 10 year interagency research plan
Distribution Infrastructure	<ul style="list-style-type: none"> ▶ Assess feasibility of pipeline use for biofuels transport ▶ Integrate GIS mapping capabilities across federal agencies
Blending	<ul style="list-style-type: none"> ▶ Oversee intermediate blends testing ▶ Formulate blends policy statement
Environment, Health and Safety	<ul style="list-style-type: none"> ▶ Inventory Federal activities ▶ Identify supply chain risks & mitigation options

▶ The NBAP identified key research challenges and defines clear interagency actions critical to developing the science and technology needed to make advanced biofuels cost competitive in order to grow the nation's biofuels' industries in a sustainable manner.



National Bioenergy / Biofuels Action Plan

- **Biomass Board Initiative**
 - Two Phased Approach
 - Phase One- Update of the National Biofuels Action Plan released in October 2008
 - Phase Two – more comprehensive perspective
 - Peer Review by TAC



United States
Department of
Agriculture

Renewable Energy Programs

President's Rural Economic Jobs Summit

Rural Summit and Recent Events

- Title III MOU Announced (USDA, DOE, DON)
- White House Rural Council Report Released
 - “Jobs and Economic Security for Rural America”



United States
Department of
Agriculture

Renewable Energy Programs

How to Learn More About USDA Renewable Energy

USDA Websites

- **USDA Home Page:**

www.usda.gov

- **USDA Alternative Energy website:**

www.usda.gov/energy

