

# Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program Fact Sheet



**October 2014**

The Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program (formerly the Biorefinery Assistance Program), administered by the U.S. Department of Agriculture's (USDA) Rural Development office, is intended to provide grants and loan guarantees to producers of advanced biofuels or heat and power from various bioenergy crops and feedstocks. Companies can use the taxpayer-backed loans to develop, construct, or retrofit biorefineries or energy systems. As of the 2014 farm bill, the program also provides taxpayer dollars to renewable chemical and biobased product manufacturers.<sup>1</sup> Feedstocks eligible for taxpayer support include the following: cellulosic materials (like perennial grasses or agricultural residues, for instance), sugar and starches (other than corn starch), waste materials, vegetable oil, animal fats, and biogas (from landfill gas or sewage treatment plants). Though the program was designed to spur the development of biofuels and bioenergy produced from non-food, "second generation" crops, funding data suggests that at least one biodiesel facility utilizing corn and soybean oil as feedstocks has been considered for a loan guarantee. In addition, several types of biofuels crops are being subsidized by taxpayers even though commercial production of cellulosic biofuels is unproven and unlikely to meet federal mandates set in the 2007 energy bill.

The 2008 farm bill energy title provided \$75 million in mandatory funding for FY2009 and \$245 million in FY2010 for the Biorefinery Assistance Program; additional funding of \$600 million was available through annual appropriations bills.<sup>2</sup> The 2008 farm bill expired Sept. 30, 2012, but a one-year retroactive extension passed as part of the Jan. 2013 "fiscal cliff" deal allowed farm bill programs, including the Biorefinery Assistance Program, to be funded through September 30, 2013 (the end of FY13). The 2014 farm bill, enacted in February, provided mandatory funding for the newly-named program of \$100 million in FY2014, \$50 million in FY2015 and FY2016, and discretionary (optional) funding of \$75 million for each year FY2014-18.<sup>3</sup>

## **Background**

The Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program is funded through the energy title of the farm bill. The farm bill, renewed approximately every five years, is a wide ranging piece of legislation that funds everything from nutrition assistance programs and broadband internet to agricultural subsidies for the production of crops such as corn and soybeans. More specifically, the energy title of the farm bill, first introduced in 2002, provides grants, loans, and other subsidies to energy efficiency, biofuels, and bioenergy (heat and power) projects. In total, the 2014 farm bill energy title's programs are projected to cost taxpayers \$879 million over the next ten years (FY14-23).<sup>4</sup>

Facilities that receive taxpayer support from energy title programs range from universities receiving research and development grants to investigate new uses for biomass sources such as wood and agricultural residues to large, established corn ethanol companies receiving grants for annual production of biofuel. Other energy title projects funded by taxpayers include the collection, storage, harvest, and transportation of biomass sources to bioenergy or biofuels facilities; anaerobic digesters that create heat and power from animal waste; grants and loans to individuals or companies installing wind, solar, and geothermal systems; and federally backed loan guarantees for so-called next generation biofuels facilities that produce biofuels other than corn ethanol (through the Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program). While intended to support the next generation of biofuels derived from non-food sources and other renewable forms of energy, the farm bill energy title has also spent taxpayer dollars on the mature corn ethanol industry, supporting biomass sources with numerous unintended consequences, and even paying for updates to farmers' irrigation equipment and grain dryers.

### Taxpayer-Backed Loans for Biofuels Companies

Since 2009, about \$1.~~1202~~ billion in treasury-backed loan guarantees for ten companies were finalized or conditionally approved. Some loan guarantee recipients have filed for bankruptcy since then, leaving taxpayers holding the bag for millions in losses. For instance, after receiving an \$80 million government-backed loan guarantee, Range Fuels, a cellulosic ethanol facility planning to use woody biomass as a feedstock, shut down in Jan. 2011 without producing any fuel. Taxpayers lost millions of dollars when Range Fuels went into bankruptcy. Table 1 includes a list of companies receiving a final loan guarantee or a conditional commitment from USDA.

<b>Table 1: Recipients and Conditional Offers for Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program Loan Guarantees</b>					
<b>Name</b>	<b>Loan Guarantee Amount</b>	<b>Feedstock</b>	<b>State</b>	<b>Date Announced</b>	<b>Notes</b>
Coskata	\$250,000,000	Woody biomass	AL	Jan-11	Finalized
ZeaChem Boardman Biorefinery, LLC	\$232,500,000	Wheat straw, corn stover, woody biomass from poplar trees	OR	Jan-12	Conditional loan; laid off staff in Mar. 2013 waiting on an additional loan <sup>5</sup>
Fulcrum Sierra BioFuels, LLC	\$105,000,000	Municipal solid waste	NV	Aug-12	Finalized
Chemtex International, Inc.	\$99,000,000	Miscanthus and switchgrass	NC	Aug-12	Finalized
<u>Cool Planet</u>	<u>\$91,000,000</u>	<u>Woody biomass</u>	<u>LA</u>	<u>Oct-2014</u>	<u>USDA reached an agreement with Cool Planet</u>
Range Fuels, Inc	\$80,000,000	Woody biomass	GA	Mar-10	Finalized but project failed, costing

					taxpayers millions
Enerkem	\$80,000,000	Municipal solid waste	MS	Jan-11	Finalized
INEOS New Plant Energy, LLC	\$75,000,000	Municipal solid waste	FL	Jan-11	Finalized
Sapphire Energy, Inc.	\$43,600,000	Algae	NM	Nov-11	Finalized
Fiberight, LLC	\$25,000,000	Municipal solid waste, seed corn waste	IA	Jan-12	Conditional loan
SoyMor	\$25,000,000	Corn or soybean oil	MN	Jun-09	Finalized
Fremont Community Digester	\$12,825,000	Organic waste, agricultural residues	MI	May-11	Finalized
<b>TOTAL</b>	<del>\$1,027,925,000</del> <b>\$1,118,925,000</b>				

### Types of Facilities Receiving Taxpayer-Backed Loans

About two-thirds of the Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program loans provide guarantees to just four facilities, three of which were announced in 2012. These biorefineries plan to use the following materials as biofuels feedstocks: woody biomass, municipal solid waste, agricultural residues (such as corn stalks and leaves), and perennial grasses. Six other facilities plan to process algae, municipal solid waste, or other organic waste into advanced biofuels and biogas. Table 2 includes a list of project types in USDA's Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program.

<b>Table 2: Types of Projects Guaranteed and Offered Conditional Loans in the Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program</b>			
<b>Types of Projects</b>	<b>Number of Projects</b>	<b>Loan Guarantee Amount</b>	<b>Pct. of Total</b>
Woody biomass	<del>3</del> 2	<del>\$446,000,000</del> \$355,000,000	<del>40</del> 35%
Municipal solid waste or other organic waste	5	\$241,425,000	<del>23</del> 23%
Agriculture residues (wheat straw, corn stover)	1	\$232,500,000	<del>21</del> 19%
Perennial grasses	1	\$99,000,000	<del>9</del> 9%
Algae	1	\$75,000,000	7%

Corn or soybean oil	1	\$25,000,000	2%
<b>TOTAL</b>	<b>121</b>	<b><del>\$1,027,925,000</del></b> <b>\$1,118,925,000</b>	

## Support for Corn Ethanol

As stated above, even though corn ethanol facilities are not eligible to receive taxpayer-backed loan guarantees through this program, a facility using corn and soybean oil for biodiesel production still received a \$25 million taxpayer-backed loan. This support is on top of an already expensive and generous list of taxpayer subsidies for corn ethanol and biodiesel production. Although the ethanol tax credit and tariff expired at the end of 2011, corn ethanol continues to receive special interest loan guarantees and subsidies through the tax code, several farm bill energy, crop insurance, and commodity programs. Subsidies are also available for the production of biodiesel from various sources, including corn and soybeans.

## Support for Woody Biomass

Wood residues, fast-growing trees, and other forms of woody biomass have received ~~over~~ ~~\$446350~~ million in taxpayer-backed loan guarantees through the energy title's Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program. But woody biomass is another biofuel and bioenergy feedstock that is eligible for generous subsidies through several other different government programs, including at least eight of the 15 farm bill energy title programs. As noted, one of the two loans for cellulosic biofuel derived from woody biomass was provided to Range Fuels, a failed project that left taxpayers on the hook for millions of dollars in losses. The same month that Range Fuels defaulted on their loan, the government awarded Coskata a loan guarantee of \$250 million, the largest sum of taxpayer money that had ever been promised to one company through this program. Based in nearby Georgia, Coskata plans to use the same technology and feedstock as Range Fuels.

## Conclusion

The Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program puts taxpayer dollars toward potentially risky projects that are unlikely to ever lead to commercial production of next-generation biofuels. The program has also considered putting taxpayer dollars toward corn-based biofuels, a mature industry that has received federal subsidies for more than 30 years. While the largest ethanol subsidy – the ethanol tax credit known as VEETC – expired at the end of 2011, corn ethanol production is still mandated through the federal RFS mandate and receives various other subsidies through the Dept. of Energy, USDA energy programs, and federal tax code. Since millions of taxpayer dollars were already lost with the failure of cellulosic ethanol producer Range Fuels, additional taxpayer dollars should not be put at risk toward future Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program projects.

*For more information, contact Taxpayers for Common Sense at 202-546-8500.*

## References in Tables 1 and 2:

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<sup>1</sup> <http://docs.house.gov/billsthisweek/20140127/CRPT-113hrpt-HR2642-SOM.pdf>

<sup>2</sup> <http://www.nationalaglawcenter.org/assets/crs/R41433.pdf>

<sup>3</sup> <http://docs.house.gov/billsthisweek/20140127/CRPT-113hrpt-HR2642-SOM.pdf>

<sup>4</sup> <http://cbo.gov/sites/default/files/cbofiles/attachments/hr2642LucasLtr.pdf>

<sup>5</sup> <http://www.bloomberg.com/news/2013-03-28/u-s-backed-zechem-reduces-staff-after-failing-to-get-financing.html>