

USDA Update on the Biobased Economy



Todd Campbell

Energy Policy Advisor

BIOMASS RESEARCH AND DEVELOPMENT
TECHNICAL ADVISORY COMMITTEE MEETING
NOVEMBER 20, 2014

USDA Update on the Biobased Economy



Todd Campbell

Energy Policy Advisor

BIOMASS RESEARCH AND DEVELOPMENT
TECHNICAL ADVISORY COMMITTEE MEETING
NOVEMBER 20, 2014



USDA Update

- Farm Bill Programs
 - BioPreferred, Why BioBased?
 - Rural Energy for America Program
 - Biorefinery Assistance Program
 - Biomass Research and Development Initiative
- www.USDA.gov/energy



Why Biobased?

- Comprehensive report synthesizing current literature exploring opportunities in emerging bioeconomy, precursor for a more comprehensive study by the USDA BioPreferred program on economic impacts of biobased products industry
- Estimated 40,000 jobs in 2011, which represents 3%-4% of all chemical sales, will raise to over 237,000 jobs by 2025 with 20%
- Biobased chemicals are expected to constitute over 10 percent of the chemical market by 2015
- Potential to produce two-thirds of the total volume of chemicals from biobased materials, representing over 50,000 products, a \$1 trillion annual global market.
- To access the *Why Biobased?* report, visit <http://www.biopREFERRED.gov/files/WhyBiobased.pdf>



Rural Energy for America Program

- Announced \$68 Million for 540 renewable energy and energy efficiency projects on Sept. 18, multiple biomass
- Full list of awardees can be found [HERE](#).
- Since the start of the Obama Administration, REAP has supported more than 8,800 renewable energy and energy efficiency projects nationwide.
- During this period, USDA has provided more than \$276 million in grants and \$268 million in loan guarantees to agricultural producers and rural small business owners.
- Currently completing regulation for 2014 Farm Bill updates, expect \$80M Grants and \$200M Loan in 2015



Biorefinery Assistance Program

- **Currently updating regulation, program to open soon**

New award:

- **Announced award to finance Cool Planet, an innovative biofuel plant in Rapides Parish, Louisiana on Oct. 3**
- **Will produce approximately 8 million to 10 million gallons per year at full capacity of reformat, an ingredient in gasoline and jet fuel; also biochar**
- **Company contributing \$50 million in equity, private investment from numerous companies, Google Ventures, BP, ConocoPhillips, GE, Exelon and NRG Energy**
- **Pine chips will be the feedstock source for the facility, but company can use almost any cellulosic material.**



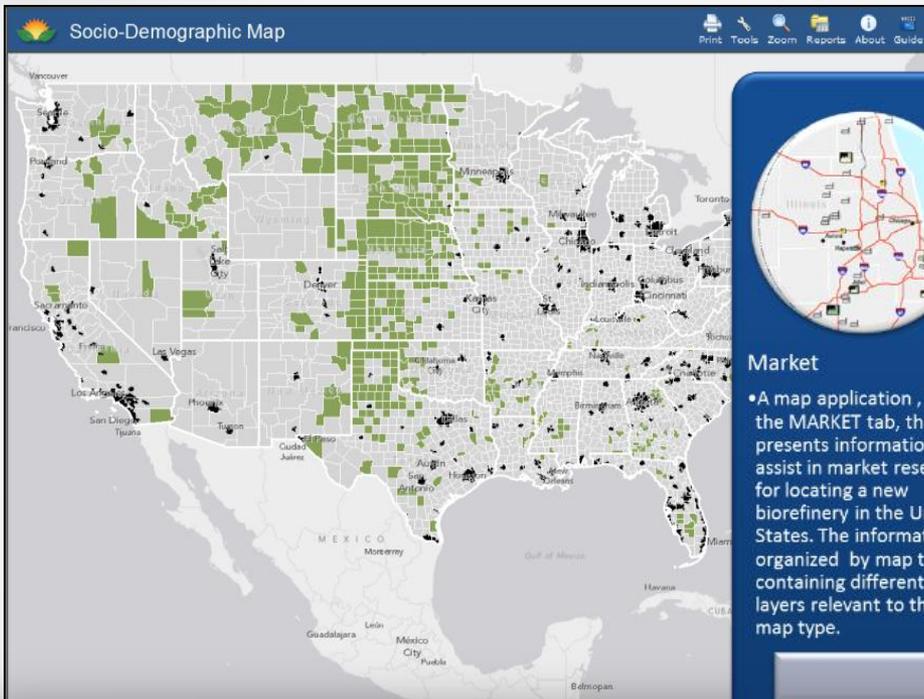
Biomass Research and Development Initiative

- Published “Notice of Intent to Issue Fiscal Year 15 Biomass Research and Development Initiative” on Oct 21
- For 2015, BRDI will require that projects address only one of the three legislatively mandated technical areas:
 - Feedstocks development
 - Biofuels and biobased products development
 - Biofuels development analysis
- For more information, see the [full solicitation](#) when published



USDA Energy Web Portal

Biorefinery Stakeholder Information System (BioSIS)



Market

- A map application, under the MARKET tab, that presents information to assist in market research for locating a new biorefinery in the United States. The information is organized by map type containing different data layers relevant to that map type.



Economic

- The ECONOMIC tab provides hypothetical calculated values based on input values and economic/market assumptions.



Sustainability

- The SUSTAINABILITY tab provides a calculator to estimate the amount of fossil fuel displaced and the amount of green house gas savings from different renewable fuels and feed stock.



Resources

- The RESOURCES tab provides a list of resources related to renewable energy incentives, financing, research, tools, and other information.

<http://www.usda.gov/energy/maps/maps/biosis.htm>



USDA Energy Web Portal

Bioeconomy Tool Shed



Market

•A map application, under the MARKET tab, that presents information to assist in market for locating a refinery in the States. The information is organized by containing different layers relevant map type.



Economic

•The ECONOMIC tab provides hypothetical calculated values based



Sustainability

•The SUSTAINABILITY tab provides a calculator to estimate the amount of



Resources

•The RESOURCES tab provides a list of resources related to

The screenshot shows the USDA Energy Web Portal interface. At the top, there is a navigation bar with 'USDA United States Department of Agriculture' and a search box. Below the navigation bar, there are tabs for 'Introduction', 'Market', 'Economic', and 'Resources'. The 'Economic' tab is selected, and the 'Crop Production Value Calculator' tool is displayed. The tool includes a table with columns for 'Baseline', 'Adjusted', and 'Custom' values, and rows for 'Primary Product, Yield', 'Primary Product, Price', 'Secondary Product', 'Total Gross Value of Production', 'Operating Costs', and 'Seed'. The table is currently empty, with '0' values in the 'Custom' column.

	Baseline	Adjusted	Custom
Primary Product, Yield (units vary, hover over value to display units)			0
Primary Product, Price (units vary, hover over value to display units)			0
Secondary Product			0
Total Gross Value of Production			
Operating Costs, \$/Planted Acre			
Seed			0

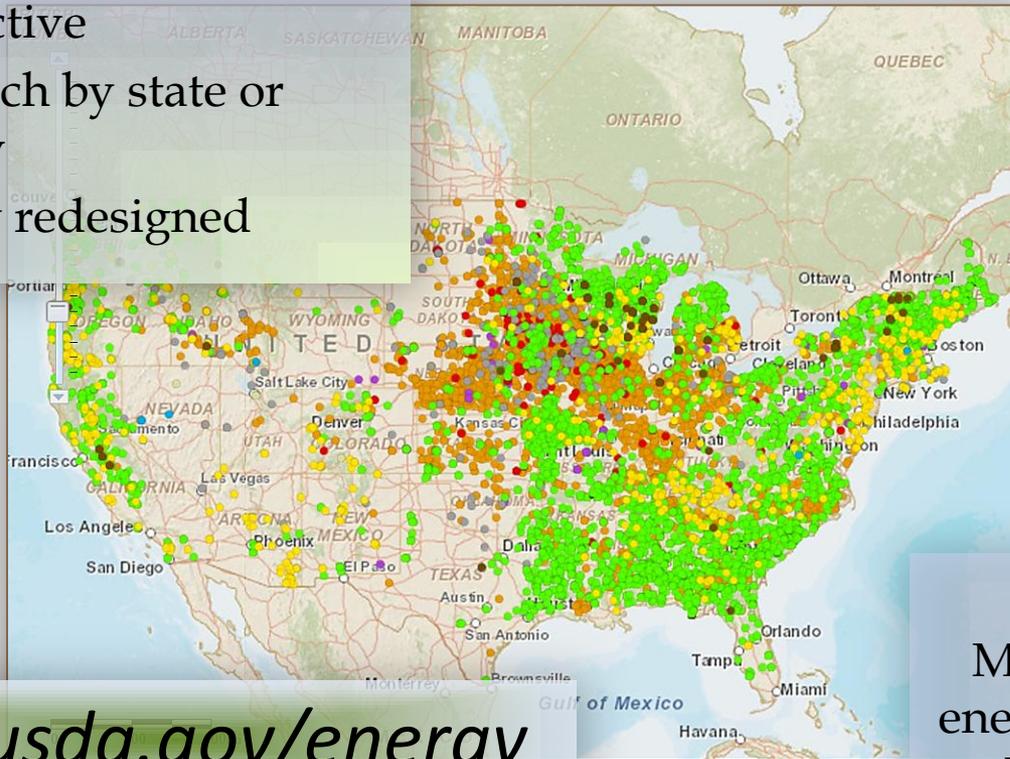
- Portal to enable users to access a complement of web-based products and information, statistical data and other resources regarding the bioeconomy.
- Interactive tools intended to help users identify at the National, state, and county level the logistics, environmental linkages, and economic linkages across feedstock production.
- USDA will host webinar on topic in the near future



USDA Energy Web Portal

Energy Investments Map 2.0

- Interactive
- Research by state or county
- Newly redesigned



www.usda.gov/energy

More than 14,000 visible energy projects from across USDA Mission Areas



USDA Energy Web Portal

A screenshot of a video player showing the USDA Energy Web Portal. The video content features the USDA logo, the text 'United States Department of Agriculture Welcome to the USDA Energy Investment Report Tool Tutorial', and a stylized sun and leaf logo. Below the video is a navigation bar with a play button, a progress bar, and a timestamp of '0:00 / 6:56'. The URL 'www.usda.gov/energy' is displayed at the bottom of the video player.

USDA
United States Department of Agriculture
Welcome to the USDA
Energy Investment Report Tool Tutorial

www.usda.gov/energy

0:00 / 6:56

www.usda.gov/energy





Thank you!

For more information on USDA Energy
and Bioeconomy Programs, visit:

www.usda.gov/energy