

An Efficient, Renewable, and Biobased Economy



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EMERGING ISSUES FORUM

APRIL 10TH, 2014

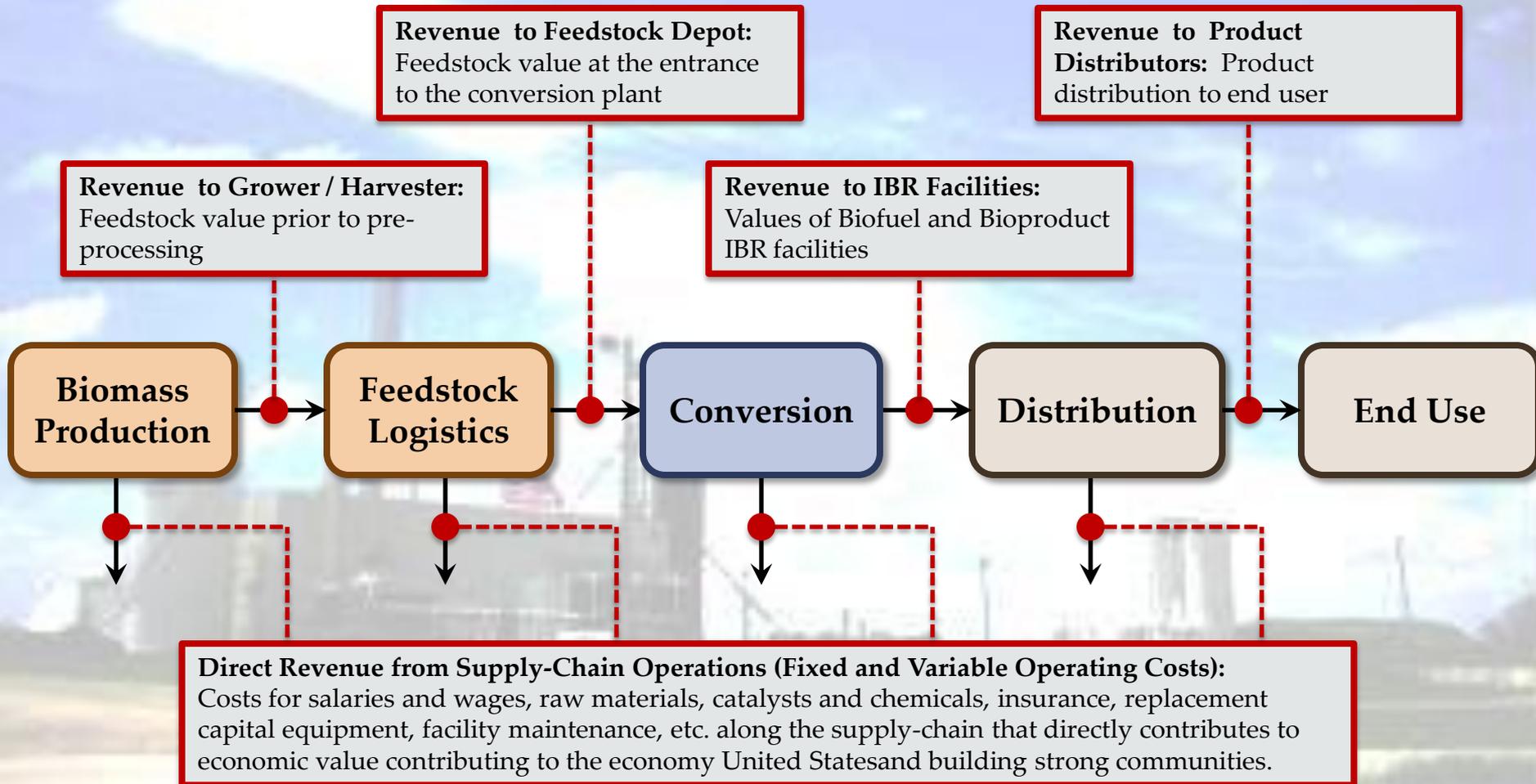


Defend, Expand Access, Export

- **The RVO are EPA's decision, but USDA is making sure they are fully informed about that decision.**
- **RFS is under attack, need to defend the standard against being eliminated. Highlight job creation and stable incomes, more affordable fuel for consumers, reductions in foreign oil imports, lower emissions and better air quality.**
- **Farm Bill eliminated our ability to use REAP for blender pump funding. We will continue to use business development programs and explore other opportunities which can help expand access to higher blends domestically.**
- **We are also exploring international opportunity and creating additional markets for this industry overseas.**



Revenues Generated Across the BioEconomy Supply Chain





Agriculture Act of 2014 -Title IX Authorization

- **BioPreferred Program: \$3 million each year FY 2014-18**
- **Biorefinery Assistance Program: (\$100MFY14, \$50M in each FY15,16)**
- **Repowering Assistance: \$12 million available until expended**
- **Bioenergy Program for Advance Biofuels: \$15 million each year FY 2014-18**
- **Rural Energy for America Program: \$50 million each year**
- **Biomass Research and Development Initiative: \$3 million each year FY 2014-18**
- **Biomass Crop Assistance Program: \$25 million each year FY 2014-18**



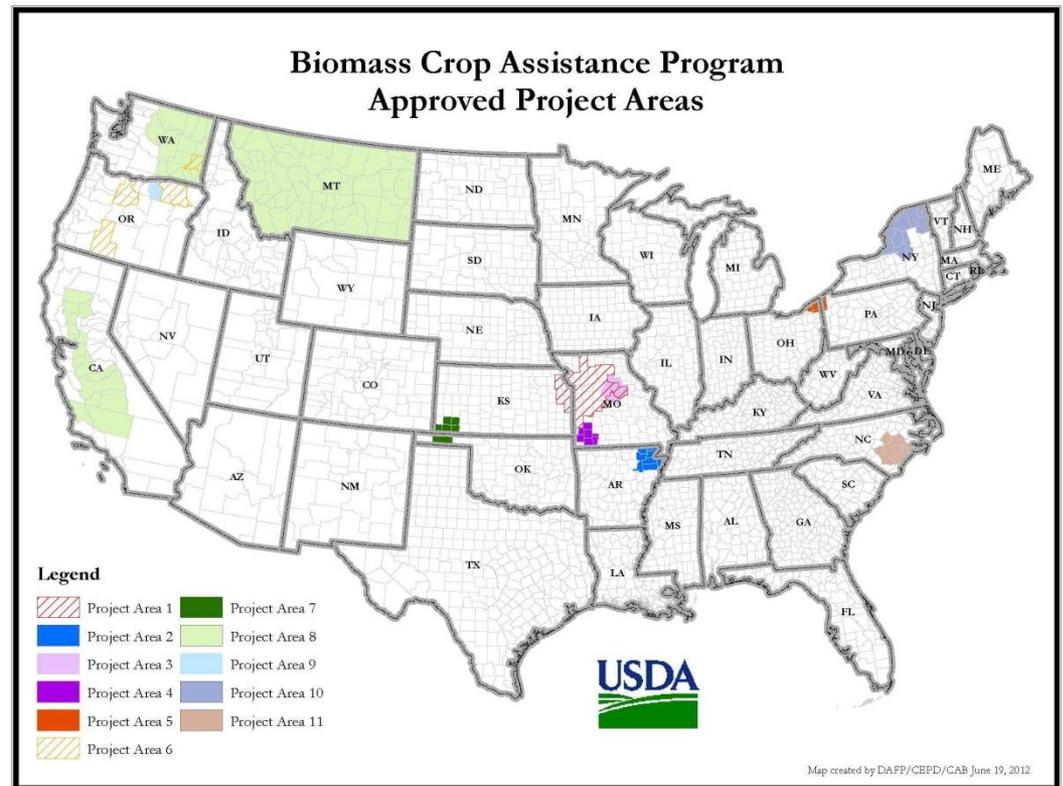
Biomass Crop Assistance Program

- \$25 million for each fiscal year 2014 -2018
- Provides financial assistance to establish, grow and deliver biomass for energy or bio-based products
- For establishment payments,
 - capped rate for perennial crops at \$500 per acre (\$750 for SSD)
- For matching payments,
 - provides range of not less than 10%, not more than 50% per year
 - \$1 for \$1 per dry ton is lowered from a maximum of \$45 down to a maximum of \$20 when biomass is collected, harvested, stored and transported to a conversion facility for bioenergy production



Biomass Crop Assistance Program Results

- Impact on more than 50,000 acres
- Helped over 1,000 producers establish 7 varieties of dedicated energy crops, including:
 - fast growing trees
 - energy grasses
 - oilseeds
- 11 approved Project Areas





Biorefinery Assistance Program

- **Biorefinery Assistance Program - \$200 million (\$100M FY14, \$50M in each FY15,16)**
 - **Loan guarantees for first-of-a-kind, commercial-scale projects**
 - **Includes renewable chemical & biobased product manufacturing (up to 15%)**



Concentrated algae, ready for extraction at Sapphire Energy, Columbus, New Mexico. (photo credit: Sapphire Energy)



INEOS New Planet BioEnergy facility, Vero Beach, Florida (photo credit: INEOS Bio)



Fully operational community digester, Freemont, Michigan (USDA photo)



2009 – 2012 BAP Awardees

Loan Note Guarantees issued:

- **Sapphire Energy, Inc., New Mexico: \$54.5 million (paid in full)**
- **INEOS New Planet BioEnergy, Florida: \$75 million**
- **Fremont Community Digester, Michigan: \$12.8 million**

Conditional Commitments awarded:

- **Zechem, Oregon: \$232.5 million**
- **Fiberight, Iowa: \$25 million**
- **Fulcrum Sierra Biofuels, Nevada: \$105 million**
- **Chemtex, North Carolina: \$99 million**



FY 2013 RBS Bioeconomy Performance

Area	Number of Projects	Number of States	Investment (millions)
Energy Programs	264	46	\$64.7
Business and Industry Program	12	11	\$48.8
Cooperative Programs	17	12	\$2.2
Specialty Programs	18	16	\$2.1
Total	311	48	\$117.8

2014 Agency Goal:
Provide at least 3 percent of available funds to support companies involved with biobased products and bioenergy.



Support for Existing Capacity Retrofits, Efficiency, Co-products

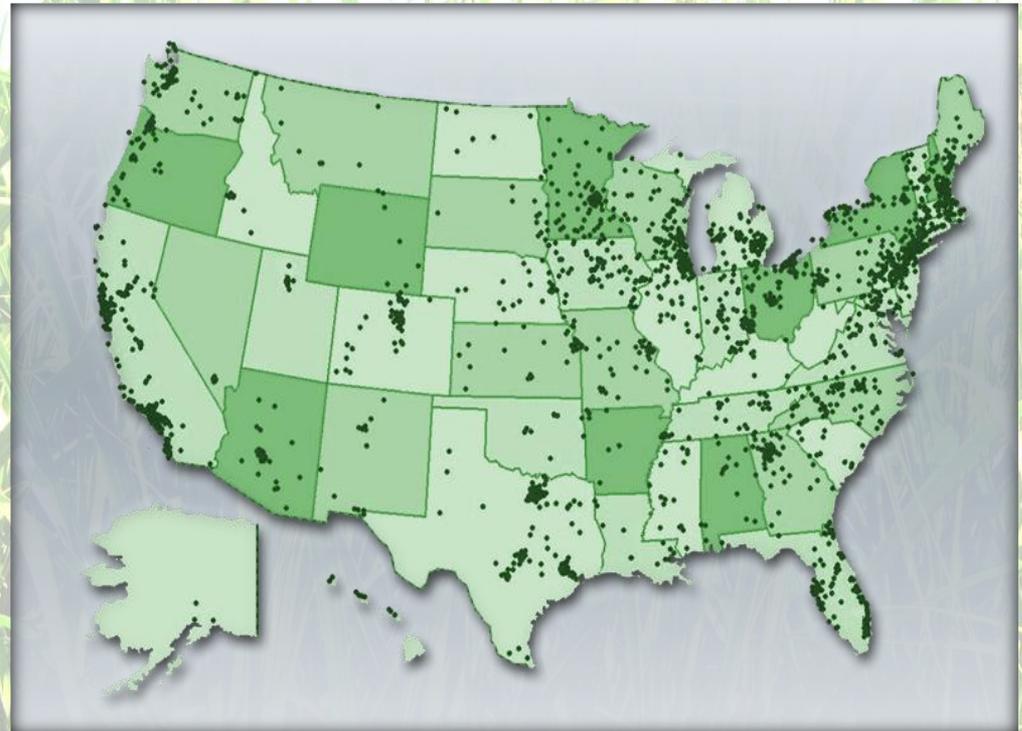


- Three Rivers Energy received \$9M loan to restart plant and add oil extraction and “Cellunator” technology for process efficiency, possible 2nd gen. opportunities
- \$5M payment to Western Plains Energy, LLC for biogas system
- \$4.25M grant and ~\$22M loan to Quad County Corn Processors’ Adding Cellulosic Ethanol bolt-on; increased yield/corn oil extraction, higher protein feed product
- Laurel Biocomposites received \$5M loan to convert distillers grain into biobased resin that replaces/enhances traditional resins in various plastics.



BioPreferred/Biobased Product Marketing

Nearly 1,000 individual products registered



www.biopreferred.gov

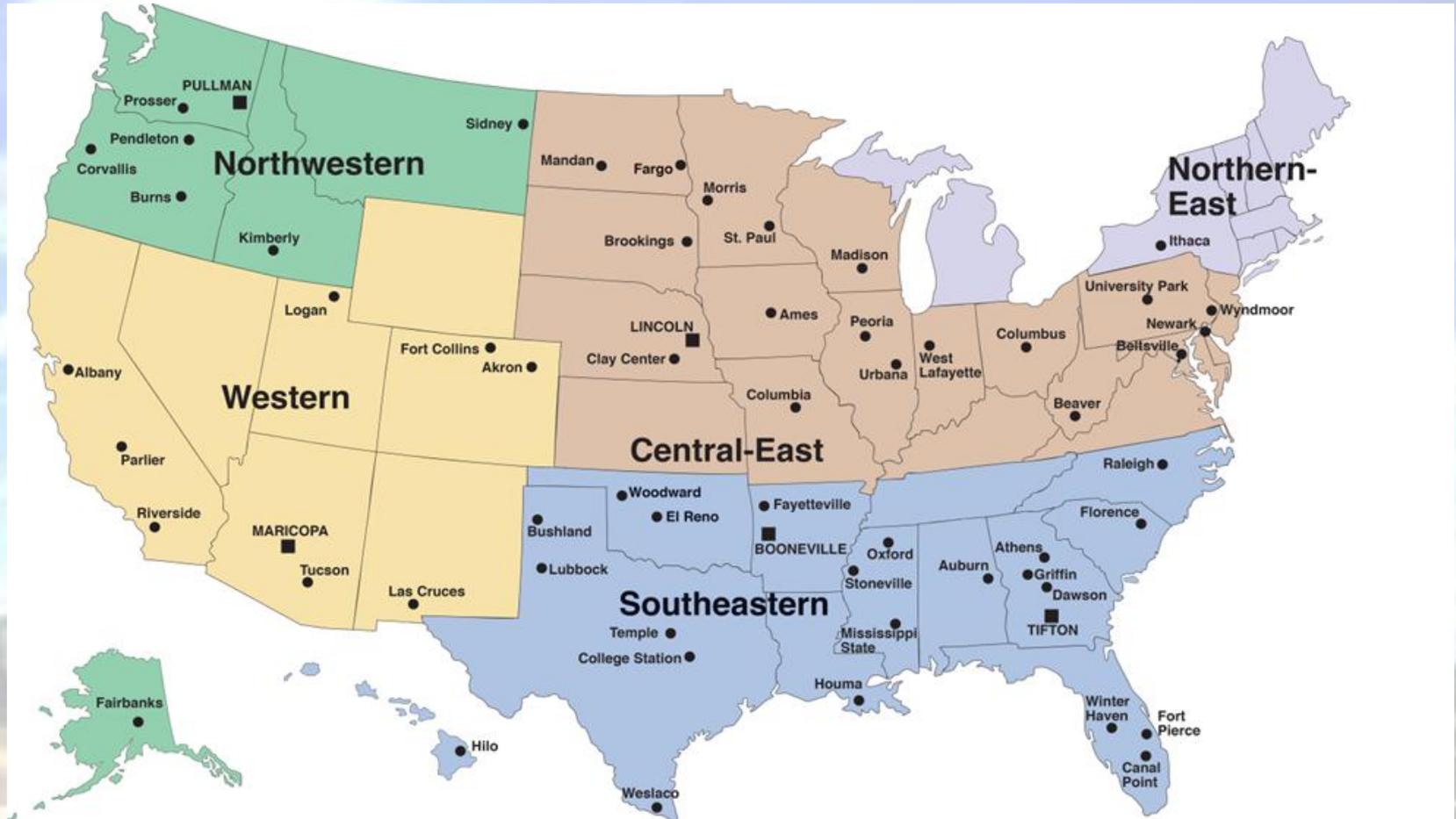


FY2014 BioPreferred/Biobased Product Goals

- Begin including biobased clauses in **all** new janitorial/custodial and operations and maintenance procurements immediately.
- Expand this requirement to include all USDA construction, food service, and vehicle maintenance contracts in the next three months.
- Purchase biobased products valued at \$1,000,000 Department-wide during FY 2014.
- Support Federal government goal of \$10,000,000 in biobased product purchases during FY 2014.



Regional Biomass Research Centers

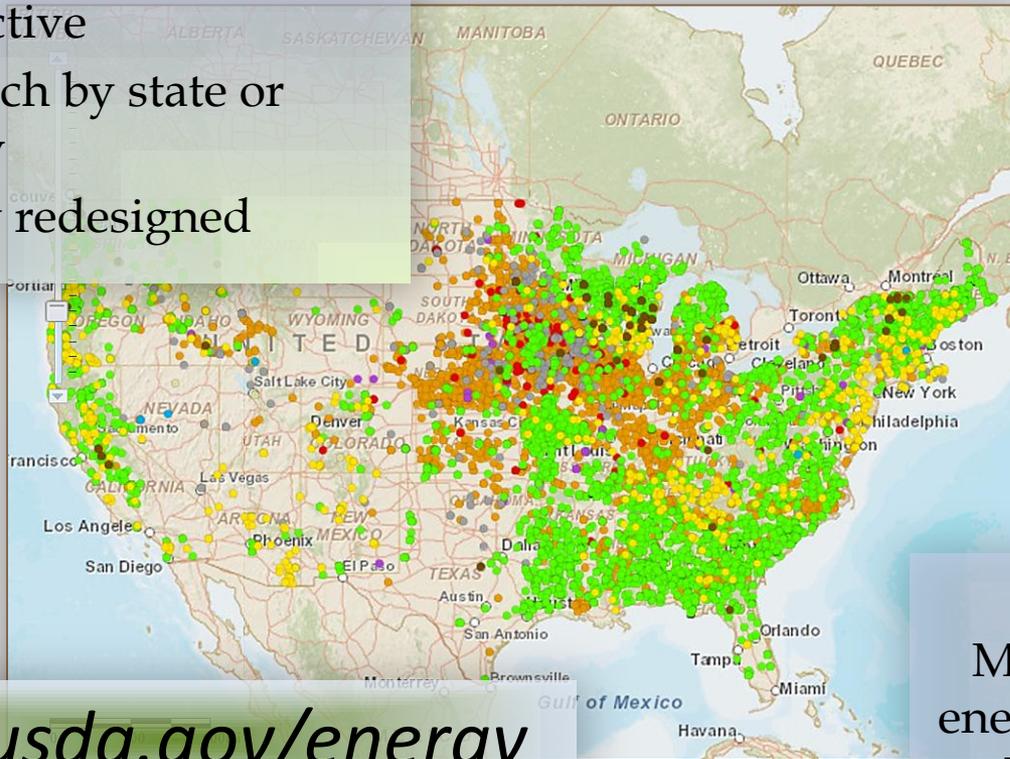




USDA Energy Web Portal

Energy Investments Map 2.0

- Interactive
- Research by state or county
- Newly redesigned



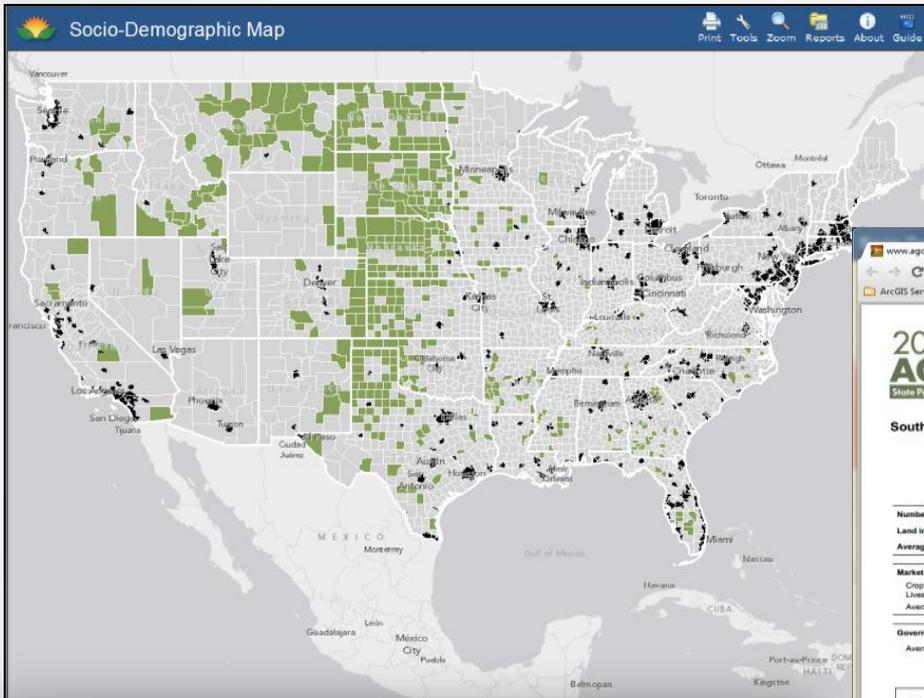
www.usda.gov/energy

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

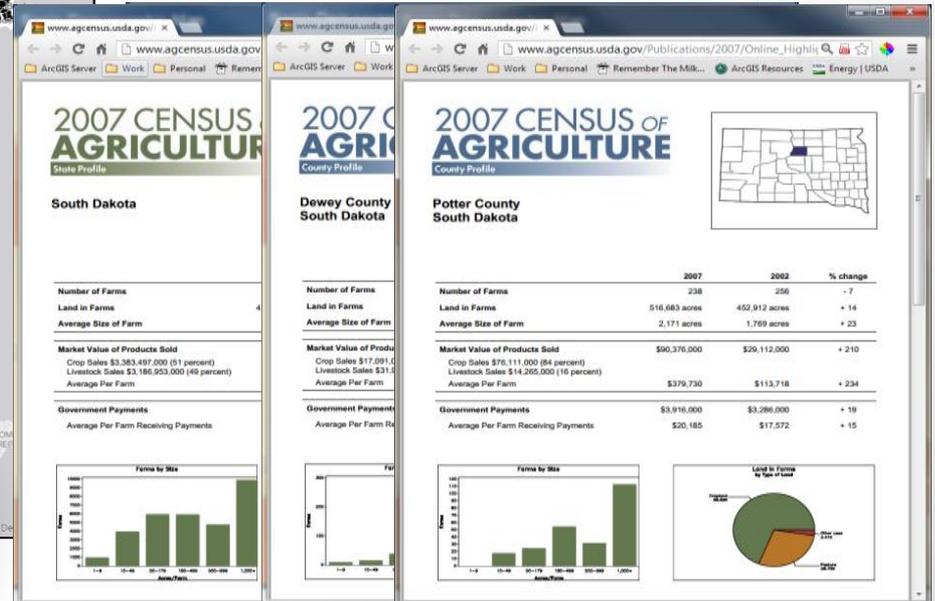


USDA Energy Web Portal

Renewable Energy Tool



www.usda.gov/energy





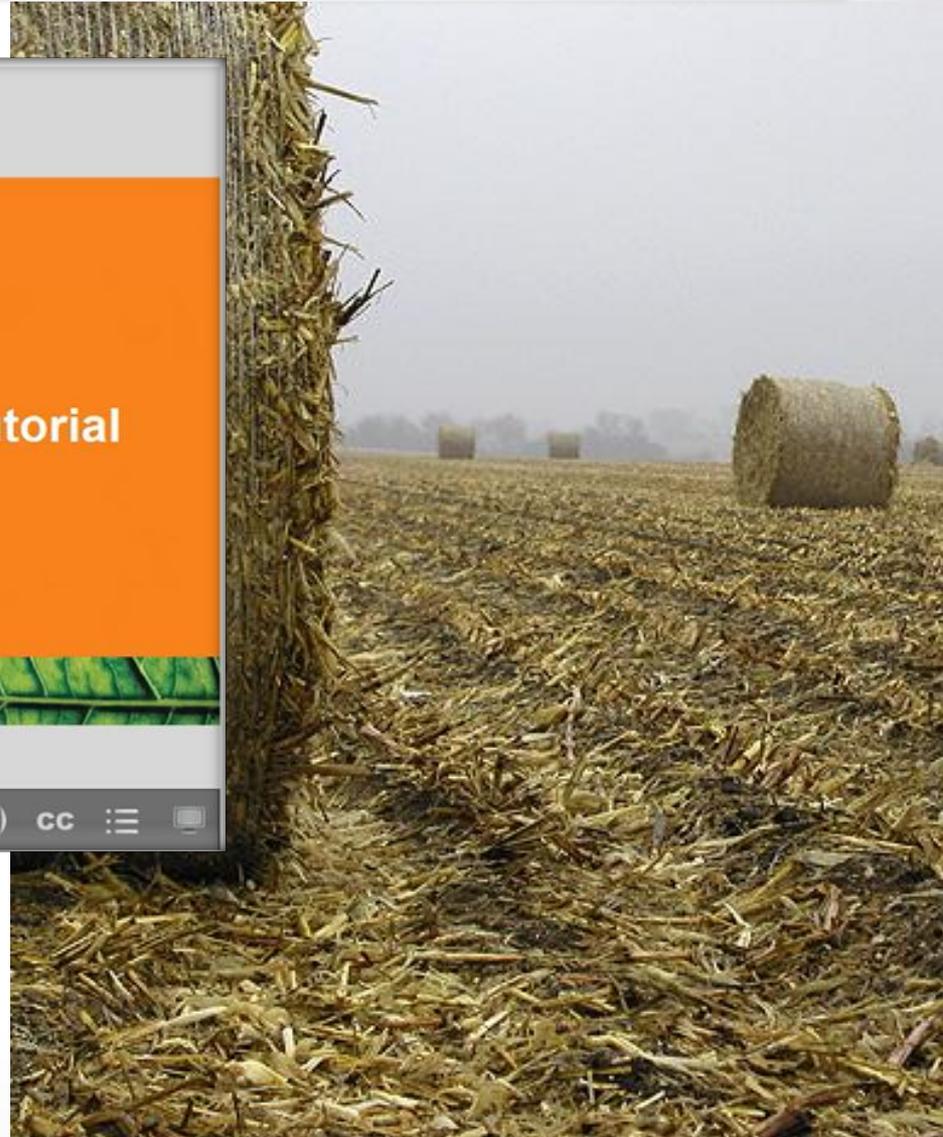
USDA Energy Web Portal

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

www.usda.gov/energy

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A rural landscape featuring a red barn with a white roof on the left, a dirt road leading into the distance, and several white wind turbines scattered across the horizon. The sky is overcast with grey clouds. The foreground shows green grass and a field of golden corn.

Thank you!

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

www.usda.gov/energy