

# Show Me Energy Cooperative Developing Energy Today for America's Tomorrow



# Developing Partnerships



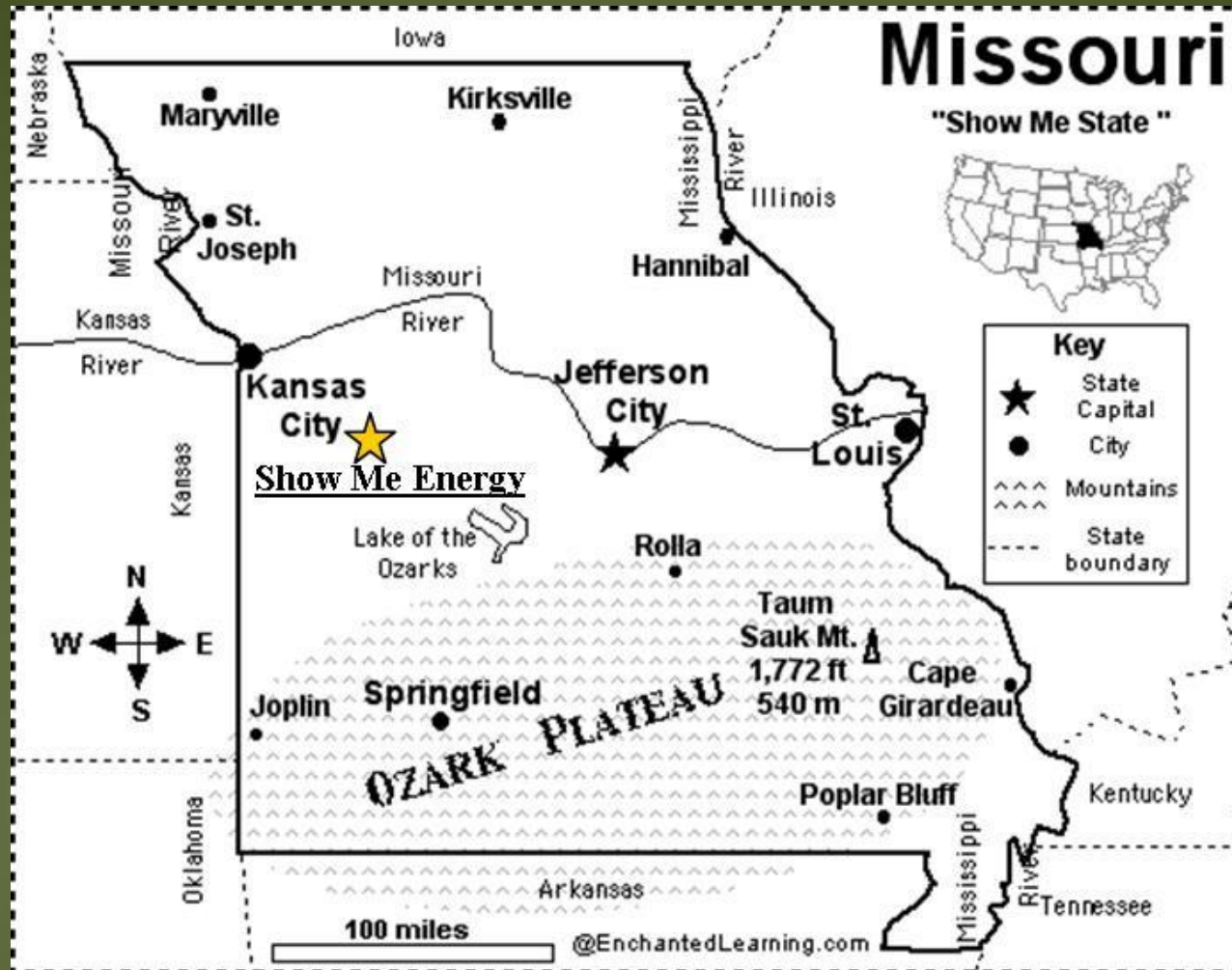
# SMEC Vision

- Show Me Energy Cooperative has as its guiding vision a commitment to establish an innovative, profitable, leading model for production of advanced biomass based fuels which may be replicated across the country by small producer owned cooperatives that will provide a positive economic impact on the regions where they are located.

# Objectives

- Innovation
- Creating Jobs
- Economic Development

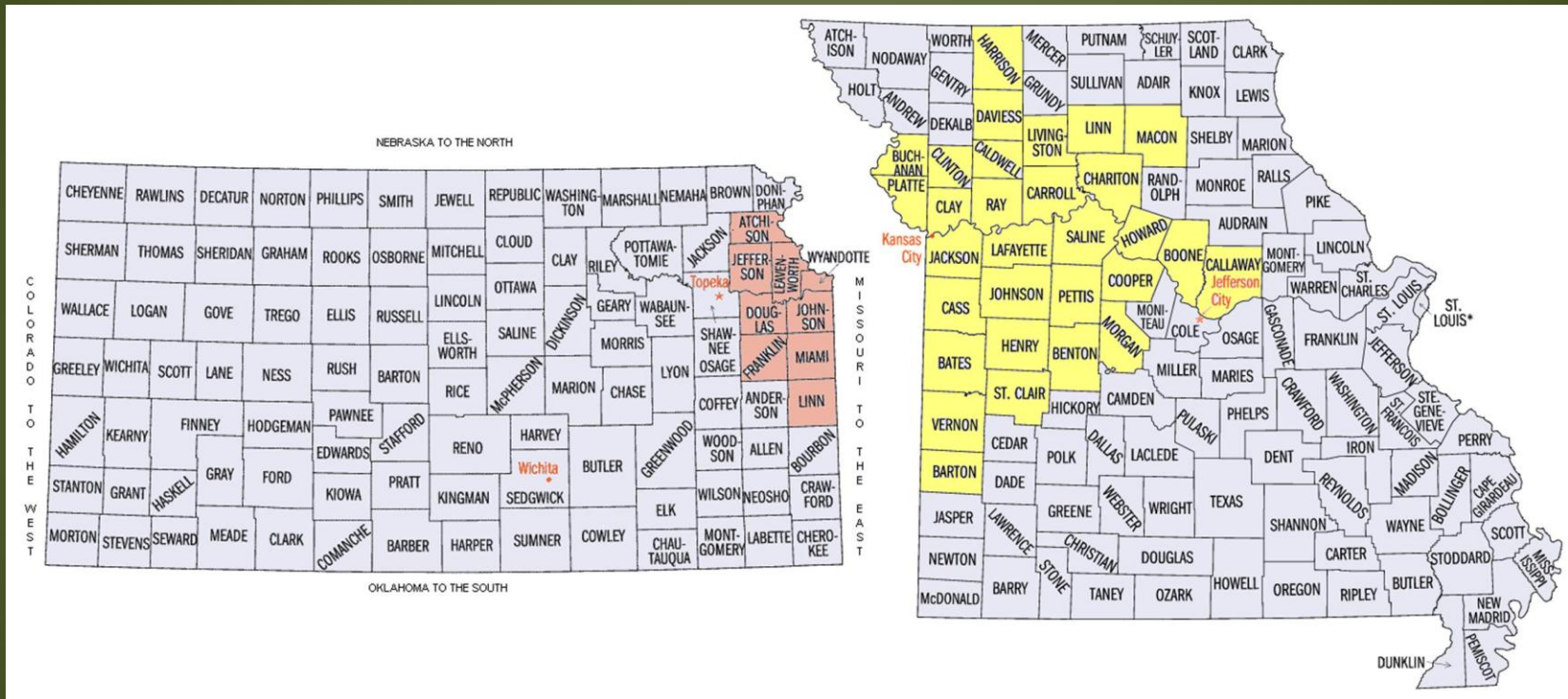
# Where is Centerview, Missouri?





# BCAP = Biomass Crop Assistance Program

- 20,000 acres signed up in 7 weeks!



# Dedicated Energy Crops

## Polycultures – Native Grass

### BCAP Approved Mixes

#### Mix # 1-Spring Seeded Upland

Cost per acre \$98.41

Pure Live Seed (PLS) Rates for seed drilled into residue or a tilled field:

Big Bluestem, Roundtree	3.0 pounds/acre x \$7.80 = \$23.40
Indiangrass, Rumsy	3.0 pounds/acre x \$7.90 = \$23.70
*Switchgrass, Blackwell	1.8 pounds/acre x \$6.90 = \$12.51
Illinois Bundleflower, Native	0.9 pounds/acre x \$22.00 = \$19.80
Purple Prairie Clover, Native	1.0 pounds/acre x \$19.00 = \$19.00

#### Mix # 2-Fall Seeded Upland

Cost per acre \$148.58

Pure Live Seed (PLS) Rates for seed broadcast and then rolled:

Big Bluestem, Roundtree	4.5 pounds/acre x \$7.80 = \$35.10
Indiangrass, Rumsy	4.5 pounds/acre x \$7.90 = 35.55
*Switchgrass, Blackwell	2.7 pounds/acre x \$6.90 = \$18.63
Illinois Bundleflower, Native	1.4 pounds/acre x \$22.00 = \$30.80
Purple Prairie Clover, Native	1.5 pounds/acre x \$19.00 = \$28.50

#### Mix # 3 Spring Seeded Lowland

Cost per acre \$114.83

Pure Live Seed (PLS) Rates for seed drilled into residu/tilled field in lowland sites:

Canada/Virginia Wild Rye	8.2 pounds/acre x \$7.00 = \$57.40
*Switchgrass, Blackwell	2.7 pounds/acre x \$6.90 = \$18.63
Illinois Bundleflower, Native	0.9 pounds/acre x \$22.00 = \$19.80
Purple Prairie Clover, Native	1.0 pounds/acre x \$19.00 = \$19.00

#### Mix # 4-Fall Seeded Lowland

Cost per acre \$164.19

Pure Live Seed (PLS) Rates for Seed Broadcast and then rolled:

Canada/Virginia Wild Rye	12.3 pounds/acre x \$7.00 = \$86.10
*Switchgrass, Blackwell	4.1 pounds/acre x \$6.90 = \$28.29
Illinois Bundleflower, Native	1.4 pounds/acre x \$22.00 = \$30.80
Purple Prairie Clover, Native	1.0 pounds/acre x \$19.00 = \$19.00

\*Add \$7.00 per pound for Kanlow and /or Alamo Switchgrass

#### Discounts:

If you order and pay for before Oct 1, 2011 you get 5% off

If you order more than 20 acres you get 5% off





# Delivery of Biomass to Centerview



Weight, Moisture, BTU, and Sugars

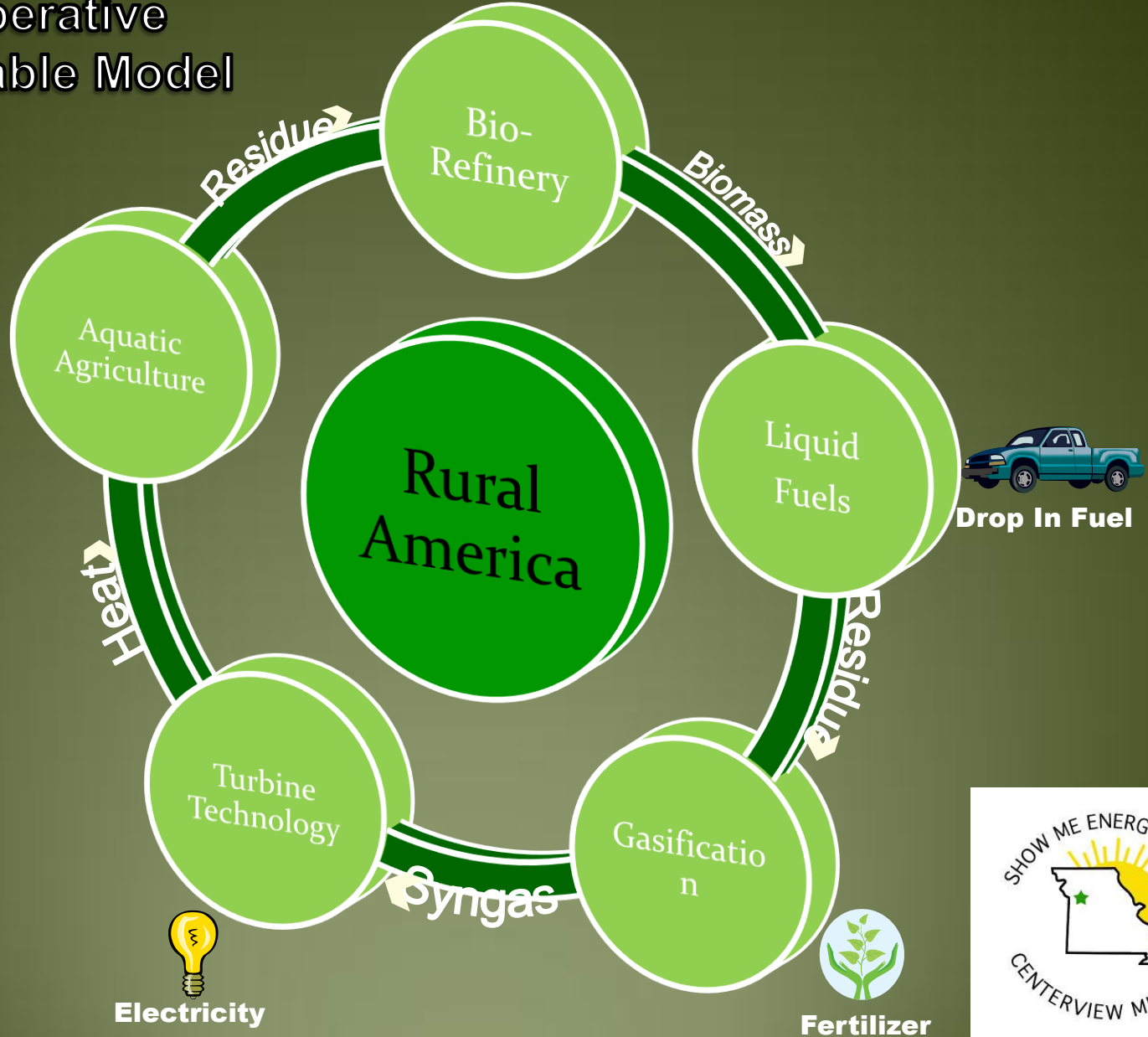


# Biomass Energy Pellets

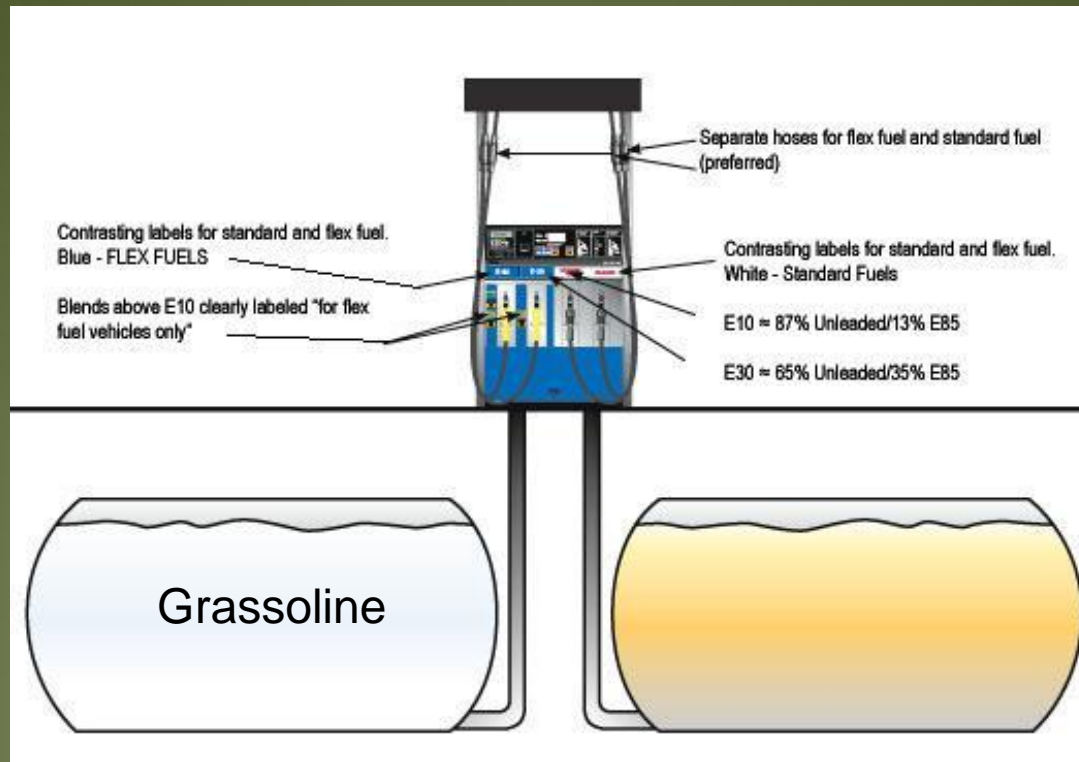


Show Me Energy Coop has developed an Advanced Biofuel  
Recognized by USDA

# Show Me Energy Cooperative Repeatable Model

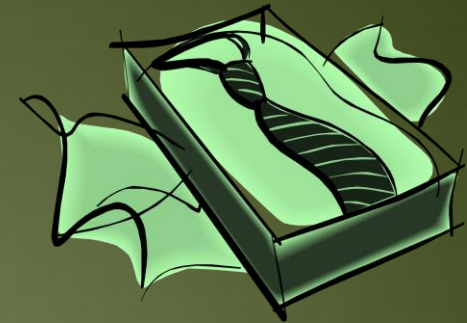


# DOE Approved Technology



# Benefits to the State of MO

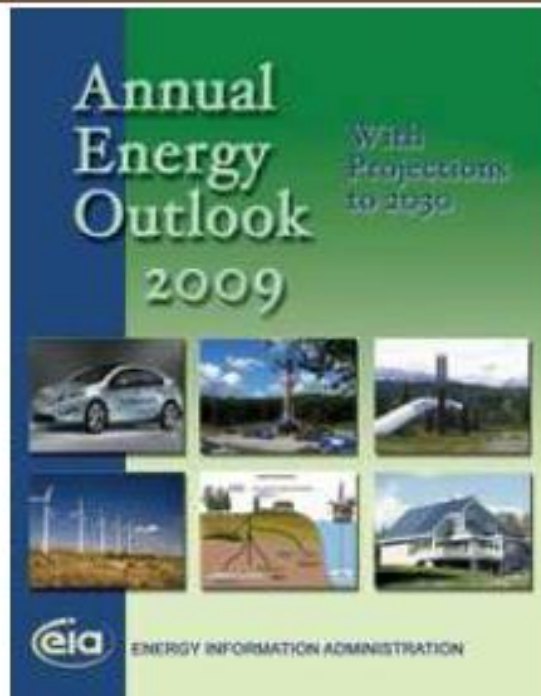
- Farmers' Income
  - Increase Value Added Income Per Acre
- Rural Community Development
  - Job Creation – Green Collar Jobs
- Renewable Energy Use through Utility Companies
  - Urban and Rural Utilities Benefit
- Cleaner Water with Renewable Energy Crop Growth
- Energy Production Without Effecting the Feedstock Supply for Animals or Humans





# Benefits to the United States

This presentation relies upon the USDOE  
EIA 2009 AEO Reference Case data ...



**U.S. Department of  
Energy (DOE)  
regularly publishes  
energy forecasts**

# The Challenge

## U.S. Electricity Supply Challenge

**How big is the effort to add by 2030  
200,000 MW to U.S. electric power  
generating capacity?**

# The Reality

... and, if the growth were satisfied with coal-fired projects ...

- 200,000 MW
- \$500 billion @ \$2,500 / kW
- 500 MW average plant size
- 400 projects
- Commission a ***new 500 MW plant every 3 weeks*** until 2030

# Diverse Portfolio Needed

... or, if the growth were satisfied with  
wind turbine projects

- 200,000 MW
- \$400 billion @ \$2,000 / kW
- 1.5 MW wind turbines
- 133,000 projects
- BUT, wind turbines operate only 40% of the time
- \$1,000 billion
- 333,000 projects
- Commission **40 new 1.5 MW wind turbines every day** until 2030



# Questions?



# Contact Information

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