

Show Me Energy Cooperative

Developing Energy Today for America's Tomorrow

Show Me Energy Creating Economic Development for Rural Missouri



Where is Centerview, Missouri?



SMEC Vision

• VISION STATEMENT

- Show Me Energy Cooperative has as its guiding vision a commitment to establish an innovative, profitable, leading model for production of 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.

What is Biomass?

- **Biomass** refers to living and recently dead biological material that can be used as fuel or for industrial production. Most commonly, biomass refers to plant matter grown for use as BioFuels.
- SMEC will use crop residues such as native and grass hay, corn stalks, Milo and soybean stubble, cereal straw (wheat, oats), and seed tailings, as well as industrial biomass sources such as saw dust, paper fluff, tea and coffee grounds.
- SMEC Members harvest (bale) cellulose from perennial C4 plants.

Energy Crops Utilized



*Crop Residue
and Native
Grasses are
harvested by
SMEC to
Produce
Renewable
Energy Fuel*



Crop Residue

30% Residue left on the field after harvest



Baled Corn Stalks



Delivery of Biomass to Centerview



Weight, Moisture, and BTU

Small Scale Works Too



Grinding Biomass Bales



SMEC Warehouse



Biomass Residue



Pellet Mills at SMEC



Master Control Center



Biomass Energy Pellets



Bulk Pellet Delivery to Power Plant



Show Me Energy Partnership with KCP&L - Sibley, MO



Co-firing Biomass



NWMSU Bulk Pellet



Retail Bagging Operation



Retail Bags to Ship



Home Heating



*Each ton of biomass pellets has the equivalent of
190 gallons of propane heat output*

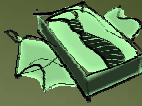
Environmental Impact

- For each ton of biomass co-fired, KCP&L will avoid emitting:
 - -1.69 tons of CO₂
 - -1.45 ounces of Mercury per year
 - SOX and NOX benefits to be determined



Benefits to the State of Missouri

- 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



Questions?

