

Sustainable energy, one town at a time.

DELTA BIOENERGY



Arkansas Delta: Landscape of Contrasts

- Rich with entrepreneurial spirit and fertile farmland
- 870,000 acres of land fallow during winter season
- Excellent network of two-year colleges
- Culture: living off the land - farming, hunting, fishing



- Poverty rate > 22%
- Extractive agricultural economy based on commodity crops
- Many minority farmers and small scale farmers struggle to stay on land
- Two-year college training programs can't place graduates due to lack of jobs
- Communities struggle with population loss and deteriorating infrastructure

City of DeWitt: Anchor demand

- Landfill closed, creating sudden mileage increase for hauling waste
- No room in city budget for fuel price increases; need for stable pricing
- City vehicles utilize **10,000 gallons** per year
- One of longest school bus routes in the state; utilizes **30,000 gallons** per year
- Farmers in Arkansas County utilize upwards of **6 million gallons** per year for crop production



Waste Vegetable Oil Recycling

- Addition to successful recycling program in DeWitt
- WVO another **opportunity to turn waste into revenue** for city
- Cost savings for city water, sewage systems
- City purchased truck and equipment with General Improvement Funds
- Sources of WVO
 - Jail -Hospital -Schools -Campgrounds -Lodges -Fried Fish Caterers
 - Restaurants -Convenience Stores



Southeast Arkansas Economic Development District investing in replication using recycling funds

Communities Unlimited Solid Waste Technical Assistance grants for replication

Community scaled biodiesel processing

- 200,000 gallon annual capacity
- Based on ASU small scale processing developed by Dr Kevin Humphrey
- Generates ASTM standard fuel that can be blended with petroleum diesel or used alone (B100) in any diesel engine
- Low capital investment for refinery installation



Camelina

- Camelina research on ASU and PCCUA test plots since 2011
- Farmer field testing 2013-2016
- Winter oilseed crop for Delta
- Crushed into oil and Omega 3-rich meal for feed
- GIS Data Collection for optimal production
- Lessons learned driving new production practices



Delta Bioenergy, Inc

- 501c12 Mutual Benefit Nonprofit
- Innovative multi-stakeholder cooperative model
- Drive operations of the value chain
- Collective marketing, better service
- Allows farmers, entrepreneurs, restaurants new opportunity, manage risk
- Grow business, replication in other communities
- Assistance, capital from Communities Unlimited



For More Information

DELTA BIOENERGY

www.deltabioenergy.org

COMMUNITIES
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