

NextGen Energy Program 2012 Update

Kevin Hennessy
Biofuels Specialist
Minnesota Renewable Energy Roundtable
March 16, 2012



Brief History- NextGen Energy Board

- Formed in 2007 (M.S. §41A-105).
- Twenty members – 8 appointed by the governor.
- Charged with exploring policy and opportunities to
 - most efficiently achieve energy independence,
 - agricultural and natural resources sustainability,
 - rural economic vitality.



Three High-Level Goals/Objectives

- Decrease reliance on fossil fuels – increase bioenergy resources.
- Encourage energy self-reliance and security.
- Promote environmental and economic sustainability in the production of homegrown renewable fuels.



2008 NextGen Energy Grants

- Minnesota Session Laws 2007, Chapter 45, Sec. 3, Subd. 4: \$3 million allocated for bioenergy projects.
- 2008: Eight projects awarded \$2.7 million in total.
- All projects completed or withdrawn by June, 2011.
- 65.1% of grant funds paid – remainder returned to general fund.



2011 NextGen Energy Grant Selection Process

- Minnesota Session Laws 2011, Chapter 14, Sec. 3, Subd. 4: \$2.5 million allocated for bioenergy projects.
- Summer 2011 – Board developed grant objectives and criteria.
- Results of summer discussion and survey led to RFP document.
- September – RFP issued by MDA with applications due Nov. 4th.
- Technical Review Team (TRT - Reps from MDA, MPCA, Commerce, DEED and DNR) spent two weeks scoring proposals individually.
- TRT spent 3 days reaching consensus on final group score for each proposal.
- Late November – TRT provided summary to Board which then had one week to request full proposals for further review.
- December 8 – Board met to make recommendations to Commissioner Frederickson.



2011 NextGen Projects



- Board voted to recommend 8 projects (of 18 eligible proposals).
- Board also voted to allow Commissioner Frederickson authority to fund subsequent project(s) should funds be available following contract negotiations.
- As a result of contract negotiations, a 9th project was added.



Koda Energy, Shakopee


\$480,000

- Construction of biofuels staging and processing facility.
- Aggregate and process (drying and size reduction) of fuel stocks.
- Fuel stocks to include:
 - Urban wood waste (City of Minneapolis)
 - Agri-byproducts
 - Potentially energy crops.


West Central Renewable Ammonia Development

\$450,000



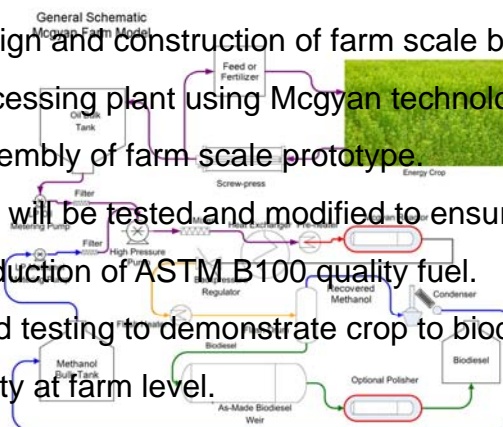
West Central Renewable Ammonia Development LLC

- Second stage feasibility study.
- Public/private collaboration to develop biomass to anhydrous ammonia project in Willmar/Kandiyohi County Region.
- Study to cover
 - Development of biomass supply of 100,000 tons per year.
 - Engineering unified conversion process using commercially available technologies.
 - Estimating capital & operating costs of proposed plant.
 - Preparing financing plan for construction & operations.

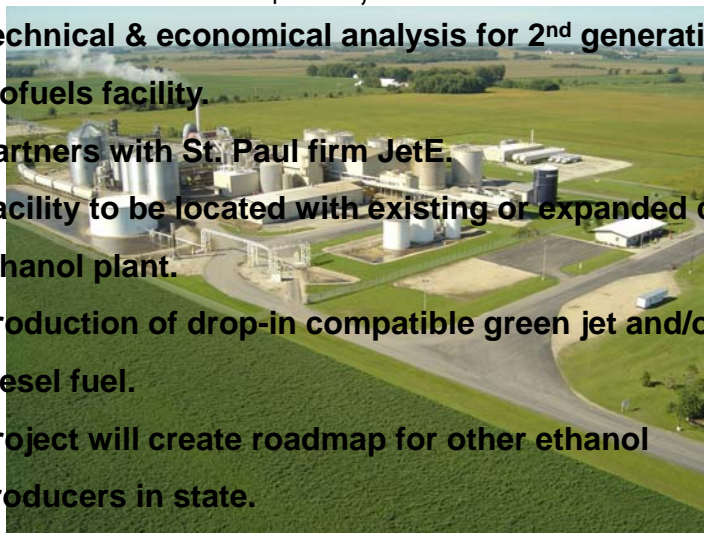
SarTec Corporation, Anoka \$400,000

- Design and construction of farm scale biodiesel processing plant using Mcgyan technology.
- Assembly of farm scale prototype.
- Unit will be tested and modified to ensure production of ASTM B100 quality fuel.
- Field testing to demonstrate crop to biodiesel ability at farm level.



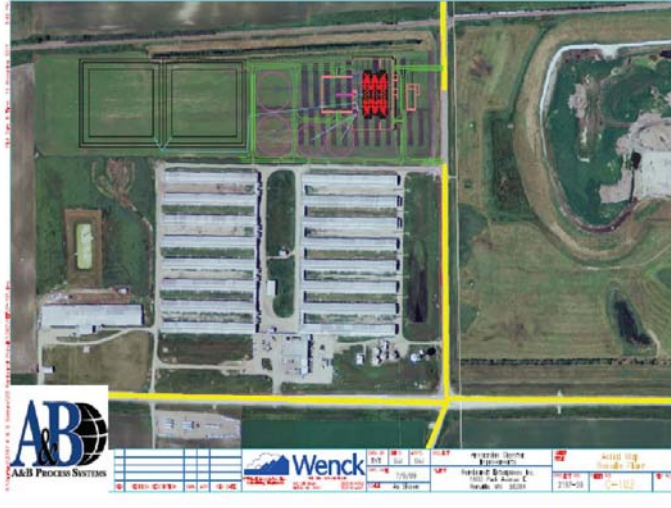
Al-Corn Clean Fuel, Claremont \$248,000

- **Technical & economical analysis for 2nd generation biofuels facility.**
- **Partners with St. Paul firm JetE.**
- **Facility to be located with existing or expanded corn ethanol plant.**
- **Production of drop-in compatible green jet and/or diesel fuel.**
- **Project will create roadmap for other ethanol producers in state.**



Renville Renewable Energy LLC., Olivia \$220,000

- Pl
- R
- A
- U
- R
- by



on



Northern Excellence Seed LLC, Williams \$200,000

- Im
- ga
- G
- sc
- Sy
- gri



eed

y for



Central Lakes College & Ag Center, Staples \$193,000

Continuation of previous work with

- Growing various oilseed crops
 - Camelina
 - Spring canola
 - Winter canola
 - High Oil Soybeans
 - Sunflowers
- Use of various planting methods such as camelina/soybean double cropping
- Oil converted to biodiesel using small-scale processing technology.
- Feed trials conducted using meal products from oil extraction.
- Commercial planting of miscanthus.



Jer-Lindy Dairy, Brooten \$137,000

- Improve operation of current anaerobic digestion system:
 - Use of additional substrate for gas production.
 - Innovative genset design for improved efficiency.
 - Improved coproduct cattle bedding from digester solids.



Rural Advantage, Fairmont \$72,000

- Ph...
 - pla...
 - De...
 - me...
 - co...
 - Fo...
 - Ma...
- 

