Minnesota NextGen Biomass Thermal Energy Grant Program

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Minnesota NextGen Energy Grant Program, FY14

- NextGen Energy allotment through MDA’s AGRI fund, FY14
- 35 applicants with 11 projects related to biomass thermal energy
- Five projects funded (1 biomass thermal) at ~ $1.7 million and remainder of available funds dedicated to a follow-up biomass thermal energy RFP
- Biomass Thermal RFP requirements:
  - Max award $150,000 for $300+ project
  - Project off natural gas line
  - Project outside metro “statistical” area (11 counties)
  - 20/100 evaluation points about emissions profile of project

Koda Energy, Shakopee – biomass staging site funded through NextGen 2011 grant
Minnesota NextGen Biomass Thermal Energy Grant Program

- Five applicants with 4 projects awarded funds
- ~$385K awarded for the 4 projects; 3 of the projects actual boiler/furnace installations at $335K
- Another $138K allotted to Minnesota State University at Mankato for an emissions testing program
- Total awards for grant round of $522,135.
Goals of Biomass Thermal Grant Program (late 2014)

- Displace fossil fuel use (propane specifically)
- Create example supply-chain opportunities for logging industry
- Try biomass thermal in new sectors that may experience tangential benefits (e.g., poultry barn).
- Collect fuel use and price data to compare wood with propane use.
Whitewater Gardens Farm

- Log Boiler, 2.5 mmBtu hydronic heating system
- Sold by The Log Boiler, Hudsonville, Michigan, [www.thelogboiler.com](http://www.thelogboiler.com)
- Plans to heat 4 greenhouses, this past winter (first year in operation) heating 1 greenhouse
- Total award: $34,600.00
Fond du Lac Band of Lake Superior Chippewa, Sawyer

- 1.7 MMBtu wood chip boiler from Woodmaster ([http://www.woodmaster.com/](http://www.woodmaster.com/))
- Part of FDL’s overall sustainability efforts
- Delays have brought construction to this spring, so no data regarding fuel usage to date.
- Total award: $150,000.
Viking Company, Albany

- EvenTemp 1.65 MMBtu Forced Air furnace (through Becker Fireplace [http://www.beckerfireplacecenter.com/])
- Installed and running before the 2015-16 winter, so two years heating data
- Biomass project running side-by-side with identical chicken fryer barn
- Initial issues with obtaining insurance for poultry industry
- Total award: $149,535.
• Mankato State had previously housed IRETI* which had equipment to measure pellet stove emissions
• Equipment from IRETI plus new equipment and graduate seminar used to train students
• Measurements to be made in the field for the three biomass thermal projects in the grant program.

* IRETI=International Renewable Energy and Technology Institute
• Part of state program to incentivize new biofuel/renewable chemical/biomass thermal energy production
• $5 per MMBtu production biomass thermal production
• Minimum 250 MMBtu production per quarter to make a claim
• Must be able to measure and document production.
• Participation in program last 10 years from first reimbursement
• Sawyer Community Center project expected to be able to make claims to program.
Thank you/questions?

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Orville L. Freeman Building, Switchgrass field