The 2013 Forum on Anaerobic Digester Production of Energy:

NEW OPPORTUNITIES FOR PROJECTS IN MICHIGAN

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GreenStone FCS Project Financing
GreenStone Farm Credit Services

- www.greenstonefcs.com
- Largest Ag Lender in Michigan 77% Market Share
- 23,800 Customers Served
- 6th Largest FCS with $6.6 Billion Assets
Diversification - Industries We Understand

- Dairy is Largest Sector at 22% of Portfolio
- Poultry, Swine & Other Livestock represent an additional 9% of Portfolio
- Approximately 1/3 of Loan Portfolio (by volume) is Concentrated in the Livestock Sectors
- Significant Potential for More Digesters and Other Alternative Energy Projects
GreenStone Digester Experience

❖ A few operations employed digester technology in the 1980’s and 1990’s with limited success (mostly failures)

❖ As a result, subsequent interest in anaerobic digesters was almost non-existent until 2004

❖ Improved Technology and Renewable Energy Focus created Opportunities again

❖ As of September 2012 – 29 Operating Manure Digesters in Wisconsin and 6 in Michigan
(http://www.usdairy.com/Sustainability/Pages/Home.aspx)
GreenStone Digester Experience

➳ First Digester with GreenStone Financing in Wisconsin was operational in 2006

➳ Since then GreenStone has financed 6 digester projects in WI and 3 in MI. All are selling electricity to local utilities

➳ Contracts were driven by Wisconsin Law requiring 10% energy to be produced by green systems

➳ USDA Grants and Guarantees (EQUIP, REAP, B&I, etc.) have been of key importance (nearly 25% of initial project) provide equity, reduce borrowing requirements, improve ROI, improve the feasibility of the projects and reduce the overall risk to the borrower and lender
Financing Considerations

- Capital costs are significant making it more feasible for larger scale operations and still a relatively long payback.

- Operations considering anaerobic digester should have a sound financial position and free cash flow (prior to adding digester) that can support the extra cost or debt associated with these additional capital costs.

- Operation of an anaerobic digester (and energy equipment) requires time, maintenance, and significant management.

- Technology of the planned equipment should be proven. Several “turn key” companies have proven technology and have been successful in the field.
Financing Considerations

- Is the existing operation well managed and does management have the depth to assume the additional requirements of the digester and related equipment.

- The operation must be of a sufficient size and scope to match up with the capital cost and volume of feedstock needed to optimally operate the digester.

- Capital cost must be offset by lower operating costs (internal utilities, bedding, waste handling).

- Capital cost must be offset by added revenue from external energy sales and carbon credits. Sales should be supported by contractual arrangements (volume / price).
Planning & Documentation

- Detailed construction costs (firm bids or turn key proposal)
- Business Plan / Feasibility Study
- Equity Source (Grants-Cash-Real Estate). Appraisals have supported approximately 65% “market value” on initial investment (income based value as no sales)
- Getting Assistance (Consultants-Academia-Peers)
- Timing (Grants, Start-Up)
- Power Purchase Agreement
Planning & Documentation

- 2 Years Projected Financial Statements including Balance Sheets and Income Statements
- Cash Flow & Debt Service Analysis
- Cost Benefits / ROI Analysis
- Documentation is consistent with Grant and/or Guarantee requirements by USDA
GreenStone Farm Credit Services is in the Agricultural Financing Business. We view these renewable energy projects as providing new opportunities to finance an exciting new industry.
Thank You!