



Financing Renewable Energy

“No Pain, No Gain”



www.newresourcebank.com



New Resource Bank: A Radical Idea

Our mission is to promote sustainable living in our community with everything we do.

Where Does Your Money Spend The Night?



Renewable Energy Projects

Anaerobic Manure Digester

This anaerobic manure digester improves manure management and sustainability for partner dairies while generating renewable electricity for sale to a local public utility. Anaerobic digestion is a natural process that converts a portion of the organic carbon in manure (and other waste streams) into methane and carbon dioxide.

- Production of renewable energy (Biogas)
- Carbon offsets
- Reduction of greenhouse gas emissions
- Potential pathogen reduction in manure
- Heightened nitrogen content of effluent manure
- Substantial odor reduction
- Manure management
- Recycled fiber bedding

Sample Project

1 Megawatt Project in Dairy Rich Northwest

- Manure pumped in from three dairies located within one-half mile
- Sized for 1800 cows
- Plug-Flow Technology
- Facility can accept 10% non-manure substrates (food waste)
- Long term land lease with one of the farms (three acres)
- Manure Collection Pit
- Concrete Vessel (22 day cycle)
- 1MW Generator to convert methane to electricity (600-700 Residences)
- Interconnection to local utility
- Separator for solids (Fiber) and return of manure effluent back to dairies

Project Cost and Funding

- \$4.4MM Total Project Cost
- \$2,650M (60% Loan to Cost)
- 15% Borrower Equity
- 23% State Energy Grant
- 2% USDA Grant
- 80% USDA Loan Guaranty
- 9 Month Construction Loan (Non-Guarantied) USDA Energy Loan Limitation
- 10 Year Fully Amortized Term Loan
- Section 1603 US Treasury Grant

Underwriting Issues

- Long Term Power Purchase Agreement with local utility
 - ❖ Fixed price contract establishes predictable revenue stream
 - ❖ Strength of Utility
- Multiple Revenue Sources
 - ❖ Tipping Fees
 - ❖ Fiber Sales
 - ❖ Carbon Offset
- Input Issues
 - ❖ Manure contracts
 - ❖ Financial Strength of Dairies
- Technology Risk
 - ❖ Successful Track Record in US
 - ❖ Technical and Engineering Feasibility Study

Underwriting Issues (More)

- Regulatory Risk
 - ❖ Authority to Construct
 - ❖ Environmental Impact Report
 - ❖ Air/Water
- Appraisal Issues
 - ❖ Business Valuation versus CRE compliance
- USDA Issues
 - ❖ Funding/Scoring
 - ❖ Timing
 - ❖ No Guaranty during construction
- Management Experience
- Time/Cost Benefit

Documentation

- Assignment of all Contracts
- Assignment of Land Lease
- Payment Reserve
- Personal Guaranties
- Outside Counsel Documentation/Expensive
- Step-in Rights
- Inter-creditor Agreement

If You Qualify, You Don't Need a Loan



*"O.K., folks, let's move along. I'm sure you've all seen
someone qualify for a loan before."*

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