

Report

**Community
Manure
Management
Feasibility Study**

Dane County, WI

February 2008

Report for
Dane County, Wisconsin

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Feasibility Study

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SECTION 6
POTENTIAL FINANCIAL ASSISTANCE

This section presents a discussion of a range of financial assistance opportunities for manure management projects. It should be noted that available financial assistance programs change regularly. Therefore, the information presented in this section should be considered as a starting point.

6.01 INTRODUCTION

Financial assistance for manure management projects is dependent on several factors, particularly the type of ownership, financial need, and type of project. For example, farmer-owned facilities may be more eligible for certain grants than a venture capital investment firm-owned facility. Likewise, a renewable energy project (e.g., anaerobic digestion, manure combustion) is likely to be more eligible for grants than a project that simply separates solids to improve nutrient management.

It is important to realize that financial assistance programs for manure management projects are constantly evolving and new programs are being developed. In addition, the existing programs may be modified, expanded, or discontinued in the future. The following paragraphs present a summary of programs currently available from known local, state, and federal sources.

6.02 LOCAL SOURCES

A. Governmental Bonding or Tax Increment Financing (TIF) Districts

If the project is owned by the County or a local municipality, traditional methods of governmental financing may be available, including bonding or TIF districting. Traditional county or municipal bonding could be used to finance the project in the same manner that most other capital projects are financed by such governmental entities.

TIF districts utilize future gains in taxes to finance current improvements that will create tax gains. The increased tax revenues are the tax increment, and that increased revenue is used to pay the finance debt that was issued to pay for the project in question. TIF districts are designed to channel funding toward improvements in distressed or underdeveloped areas where development would not otherwise occur. Therefore, prior to considering TIF district opportunities to finance a manure management project, legal and financial consultation would be needed to determine whether TIF district financing is a viable alternative.

B. Utility Companies and Related Organizations

Local utility companies may be interested in providing financial assistance for projects that use renewable fuels such as manure to generate energy. Alliant Energy and Madison Gas and Electric Company have expressed interest in a community digester or similar project. Grants from these companies may be available regardless of the project ownership structure selected.

Wisconsin Public Power Inc. administers a Renewable Energy Incentive Program for customers served by its 48 municipal utility members in Wisconsin, Iowa, and Michigan. This incentive is in lieu of the Wisconsin Focus on Energy Incentive for those municipal utilities served by WPPI that offer their own

Commitment to Community program. The incentive has been updated for 2007 to include some commercial customers.

6.03 STATE OF WISCONSIN SOURCES

A. Focus on Energy

Focus on Energy, Wisconsin's energy efficiency and renewable energy initiative, is offering a new grant for dairy farms, wastewater treatment plants, and food processing plants. Businesses and organizations are eligible for Focus Grants if they purchase natural gas or electricity from a participating Wisconsin utility. Recipients can receive up to \$250,000 in implementation grants to finance and install an anaerobic digester that produces heat and/or electricity from organic material such as manure. These grants provide financial support for developing large renewable energy systems with a capacity greater than 20 kW or 5,000 therms per year.

Feasibility Study Grants are also available. They are intended to increase the ability of businesses and organizations to make informed decisions about using renewable energy systems by understanding and solving technical uncertainties. Focus on Energy can fund up to 50 percent of these study costs up to a maximum of \$10,000.

Development Grants are also available to provide financial support for large projects that are not eligible for Implementation Grants. These grants cofund complex feasibility studies, environmental permitting, financing, and other developmental activities. Focus on Energy can fund up to 50 percent of the project costs, up to a maximum of \$50,000.

B. Lake Protection Grants

If the project is owned by the County, a lake protection district, or a local municipality, the project or a portion of it may be eligible for the DNR's Lake Protection Grant program. Potential eligible projects include the following:

1. Development of local regulations or ordinances to protect lakes and the education activities necessary for them to be implemented (these grants are limited to \$50,000).
2. Lake management plan implementation projects recommended in a plan and approved by the DNR. These projects may include watershed management projects, lake restoration, diagnostic feasibility studies, or any other projects that will protect or improve lakes.

Awards may fund up to 75 percent of project costs (maximum grant amount of \$200,000 unless otherwise specified above). The application deadline is May 1 of each year. Maintenance and operation of facilities are not eligible for grants.

The DNR recommends a preapplication meeting because of the size, complexity, and technical nature of these projects, especially if the project requires plan or permit approvals. This will ensure the application will be complete and can be evaluated and considered for funding.

C. Department of Agriculture, Trade, and Consumer Protection (DATCP) Grants

1. Agricultural Development and Diversification (ADD)

DATCP administers grant programs related to agricultural development and renewable energy and sustainability projects. One of these is the ADD Grant Program. The ADD program solicits proposals for projects that are likely to stimulate Wisconsin's agricultural economy through the development and exploration of new value-added products, new markets, or new technologies in agriculture. ADD grants are awarded each year and the deadline for submissions is normally in mid-March. In 2007, the ADD program had approximately \$380,000 available with a maximum grant amount of \$50,000. Grant applicants must provide at least 25 percent of eligible project expenses. Additional information can be found on the Internet at:

<http://www.datcp.state.wi.us/mktg/business/marketing/val-add/add/index.jsp>.

2. Grow Wisconsin

For farms that produce specialty dairy products, the Grow Wisconsin Dairy Team is a team of Wisconsin interagency members that coordinates and focuses resources for dairy farmers modernizing their businesses and for processors streamlining the supply chain. Since 2004, the team has administered more than \$1.5 million in grants to the dairy industry and provided technical assistance to nearly 500 farms. This assistance is acting as a catalyst for reinvestment and innovation in the dairy sector. The Dairy Business Innovation Center of Wisconsin also assists specialty producers. The Internet site address for these programs is:

<http://www.datcp.state.wi.us/mktg/business/marketing/val-add/initiative/index.jsp>.

3. Alternative Fuels

DATCP is also promoting and supporting use of alternative fuels including biofuels (such as those produced in a manure digester), ethanol, and biodiesel.

<http://power.wisconsin.gov/section.asp?linkid=1124&locid=131>.

4. Biobased Industry

DATCP's Biobased Industry Opportunity Grant Program is intended to create new enterprises and opportunities through biobased industry initiatives. Biobased industries include energy, fuels, or value-added chemicals and materials generated from plant, agricultural, forestry, or other biological materials. Proposals were solicited in March 2006. Currently (2007) there is no funding available in this program.

5. DATCP Soil and Water Resource Management Grants

DATCP awards annual grants to eligible county Land Conservation Committees and others to pay for county conservation staff and to finance landowner cost-sharing. To be eligible for grant funds, the county must have a DATCP-approved land and water resource management plan. DATCP awards grant funds as part of an allocation process working with the DNR. The allocation process involves several steps. Grant funds must be spent in the year allocated, except DATCP may extend cost-share funds for an additional year for specific projects.

6. Summary

DATCP's overall summary of agricultural grant and loan funding sources, *Got Moo-la*, may be found on the Internet at:

http://www.datcp.state.wi.us/mktg/business/business_resources/pdf/Wisconsin_Business_Resources.pdf.

6.04 FEDERAL SOURCES

A. The Environmental Quality Incentives Program (EQIP)

The EQIP was reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill) to provide a voluntary conservation program for farmers and ranchers that promotes agricultural production and environmental quality as compatible national goals.

EQIP offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land. EQIP offers contracts with a minimum term that ends one year after the implementation of the last scheduled practices and a maximum term of ten years. These contracts provide incentive payments and cost-shares to implement conservation practices.

Persons who are engaged in livestock or agricultural production on eligible land may participate in the EQIP program. EQIP activities are carried out according to an environmental quality incentives program plan of operations developed in conjunction with the producer that identifies the appropriate conservation practice or practices to address the resource concerns.

The Natural Resources Conservation Service (NRCS) approves the plan. The Dane County contact for this program is located at the Madison Service Center for NRCS [1 Fen Oak Court, Madison, Wisconsin, 53718-8812; (608) 224-3767]. The guidelines for Wisconsin for 2008 may be found at:

<ftp://ftp-fc.sc.egov.usda.gov/WI/eqip/2008/cookbook08.pdf>.

EQIP may cost-share up to 75 percent of the costs of certain conservation practices. Incentive payments may be provided for up to three years to encourage producers to carry out management

practices they may not otherwise use without the incentive. However, limited resource producers and beginning farmers and ranchers may be eligible for cost-shares up to 90 percent. Farmers and ranchers may elect to use a certified third-party provider for technical assistance. An individual or entity may not receive, directly or indirectly, cost-share or incentive payments that, in the aggregate, exceed \$450,000 for all EQIP contracts entered during the term of the Farm Bill.

The ability to use EQIP funds from the U.S. Farm Program will also play a major role in determining the ideal ownership structure and financing alternatives. The Farm Bill designates that 60 percent of the total EQIP monies be used for livestock waste projects, but, even so, demand for the funds will likely outstrip the supply. Active intervention by the state NRCS office could be decisive in determining the availability of such funding for this project. Potential EQIP funding is so important that its availability might dictate the recommended ownership structure.

B. Energy Policy Act of 2005

The final version of the energy bill was signed by the President on August 8, 2005. It included a wide range of tax breaks and incentives for traditional energy interests as well as alternative energy sources. Some of the renewable energy provisions include the following:

- A two-year extension of the Production Tax Credit (described in this section).
- A two-year extension of excise and income tax incentives for biodiesel.
- A mandate to increase ethanol consumption to 7.5 billion gallons by 2012.
- The creation of Clean Renewable Energy Bonds (the federal government pays a tax credit to the bondholder in lieu of the issuer paying interest to the bondholder). \$800 million has been authorized.
- A \$20/green ton credit for using biomass to produce energy, heat or transmission fuels (Section 210).
- Tax credits for hybrid vehicle purchases.
- Tax credits of 30 percent or up to \$2,000 for the purchase of residential solar panels or hot water heating.

C. Renewable Electricity Production Tax Credit

Under the new Energy Policy Act of 2005, the Production Tax Credit (PTC) was extended to cover facilities placed in service through the end of 2007. The duration of the PTC is 10 years. Hydropower and Indian coal were added as new qualifying resources. Other eligible resources include wind, closed-loop biomass, open-loop biomass, geothermal energy, solar energy, small irrigation power (150 kW to 5 MW), landfill gas, municipal solid waste, and refined coal. Taxpayers are allowed a credit of 1.5 ¢/kWh (adjusted annually for inflation or 1.9 ¢/kWh in 2005) for electricity generated from wind, solar, closed-loop biomass, and geothermal projects under

Section 45 of the Internal Revenue Code. Open-loop biomass, small irrigation, hydropower, and municipal solid waste receive .9¢/kWh. For more information, see:

<http://www.dsireusa.org>.

D. Executive Order 13123–Federal Green Power Purchasing Goal

Executive Order 13123 required federal agencies to increase their percentage of renewable energy use to 2.5 percent of total consumption by 2005. Individual agencies voluntarily chose to purchase renewable energy or Renewable Energy Certificates to support this goal. Based on its success, the goal was extended under the Energy Policy Act of 2005 to 5 percent in 2010-2012 and 7.5 percent in 2013 and thereafter.

E. Section 9006 of the 2002 Farm Bill

The Farm Security and Rural Investment Act of 2002 (Farm Bill) requires the United States Department of Agriculture (USDA) to implement a program of loans, loan guarantees, and grants to agricultural producers and rural businesses for renewable energy systems and energy efficiency. More details on these programs are provided under the “USDA Programs” section of this document.

F. Federal Fiscal Incentives

1. Accelerated Depreciation

Solar, wind, and geothermal property placed in service after 1986 can be depreciated using the Modified Accelerated Cost-Recovery System (MACRS). The property class for most renewable energy equipment is five years. A seven-year tax life applies to property used in the conversion of solid waste and biomass into a solid, liquid, or gaseous fuel. See <http://www.ors.gov> for additional information.

2. Tax-Exempt Financing for Biomass

Assuming that the facility has more than 10 percent private business use, a biomass project can qualify for tax-exempt financing if it fits into one of two categories, (1) the project supplies gas or electricity to an area no larger than two contiguous counties or one city and a contiguous county or (2) the facility is a solid waste disposal facility.

3. Regional agricultural lenders affiliated with the Farm Credit Administration

The previously mentioned DATCP publication, *Got Moo-It*, includes a listing of banks and Farm Credit contacts who provide loans to small businesses including farms.

G. US Department of Agriculture (USDA)

1. Rural Utility Service (RUS)

The RUS supports rural utilities in keeping their technology up to date and expanding rural infrastructure. RUS provides loans and loan guarantees to utilities for system improvements and the construction of on-grid and off-grid renewable systems. Additional information on loans and grants is available on the Internet at:

<http://www.usda.gov/rus/electric/loans.htm>.

<http://www.usda.gov/rus/electric/hecgp/index.htm>.

USDA's Renewable Energy Systems and Energy Efficiency Improvements programs assist farmers, ranchers, and rural small businesses in developing renewable energy systems and making energy efficiency improvements to their operations. The USDA provides funding by issuing a Notice of Funds Availability. Renewable energy systems can receive up to \$500,000 but no more than 25 percent of the total project cost.

Eligible technologies include solar water heat, solar space heat, photovoltaics, wind, biomass, geothermal electric, geothermal heat pumps, hydrogen, anaerobic digestion, renewable fuels, fuel cells, and energy efficiency. See these Web sites:

<http://www.rurdev.usda.gov/rd/farmbill/9006resources.html>.

<http://www.dsireusa.org/documents/Incentives/US05F.htm>.

<http://www.dsireusa.org/documents/Incentives/US05Fa.pdf>.

2. Rural Cooperative Development Grant Program (RCDG)

Grants are available for the development of new cooperatives or improvement of existing cooperatives as part of USDA's mission to improve economic conditions in rural areas. Funding of up to \$300,000 per cooperative is available, and recipients must contribute at least 25 percent of the total project funds. Additional information can be found at:

<http://www.rurdev.usda.gov/rbs/coops/rcdg/rcdg.htm>.

3. 1890 and 1862 Land-Grant Institution Initiative

This program seeks to develop income-producing projects for underserved rural communities that are traditionally dependent on agriculture. The University of Wisconsin-Madison is classified as an eligible 1862 institution. Funding can be used to:

- Sponsor business conferences and workshops.
- Finance rural businesses.
- Provide technical assistance to new and existing businesses, including cooperatives.
- Assist communities in leveraging other resources via state, local, private, and/or public funding.

- Assist businesses through the application process.
- Offer courses in business development.
- Provide computer labs where community members can have access to other rural economic development sources on the Internet.
- Establish business incubator services.

See <http://www.rurdev.usda.gov/rbs/oa/1890.htm> for more information.

6.05 OTHER PROGRAMS

A. Carbon Offsets

In many countries around the world, carbon dioxide is being traded as a commodity—just like bushels of corn or barrels of oil. Based on an upper limit of allowable emissions, countries and companies trade “allowances” and “emissions reductions” as a way to comply with regulations. A company with high emissions can buy “emissions reduction units” or make reductions within its own operations. In many cases, it will be less expensive to buy the allowances on the market or make pollution reductions at another company in exchange for the pollution offsets. The concept of emissions trading originated in the United States Environmental Protection Agency (EPA), and many state and local governments in the United States support emissions trading as a compliance tool. In addition to reducing pollution, “sequestering” or trapping carbon can create tradable credits. For example, planting trees or using conservation practices in farming may qualify for credits.

The Kyoto Protocol is the international treaty that governs global emissions trading. The United States is not a participant in the Kyoto Protocol. However, there are other methods and measures used to trade carbon credits. For example, in the United States the Chicago Climate Exchange (CEC) has a voluntary trading program for companies and organizations that want to gain experience with trading or are making reductions on a voluntary basis.

In California and several states in the Northeast, emissions registries are being developed that will support trading. More than 150 cities have made commitments to combat global warming, and it is likely that many will embrace the concept of carbon credits as a tool for reaching their environmental goals. It is also likely that new opportunities will appear for farmers and ranchers to obtain credit for the development of projects that reduce GHGs.

B. Programs in Other States

Other states have incentive programs for assisting producers who live in high phosphorus areas. These types of programs, if implemented in Wisconsin, could be beneficial to producers in high phosphorus areas such as those in Dane (and perhaps nearby counties). Some examples of assistance programs from other states (Maryland, Pennsylvania, and Iowa) are provided here.

1. Maryland Manure Management Programs

The Manure Transport Program helps poultry, dairy, beef, and other animal producers cover the costs of transporting excess manure off their farms. Animal producers with high soil P levels or inadequate land to spread their manure can receive cost-share assistance of up to \$20 per ton to transport excess manure to other farms or alternative use facilities that can use the product safely. To support Maryland’s goal of transporting 20 percent of the poultry litter produced on the Lower Eastern Shore to other regions, cost-share rates are 20 percent higher for farms located in Dorchester, Somerset, Wicomico or Worcester counties. In addition, new guidelines were adopted to streamline the program and to make it easier for dairy farmers and other nonpoultry animal producers to transport manure within their own operation, provided the manure is moved more than one mile from the manure production or storage site.

In FY 2004, Maryland’s Manure Transport Program provided farmers with \$295,356 in state grant payments to transport 44,292 tons of manure away from areas with high soil P levels, an increase of more than 25 percent over 2003. Cost-share funds to transport poultry litter—comprising the bulk of the manure transported—were matched by Delmarva poultry companies, bringing the total amount of financial support provided to \$581,162.

Maryland’s Manure Matching Service links farmers who have excess animal manure with nearby farmers or alternative use projects that can use the waste as a nutrient source. The goal of the service is to reduce the potential impact from animal waste runoff to Maryland’s streams, rivers, and the Chesapeake Bay by establishing a marketplace where farmers can sell their excess manure to buyers who need the valuable nutrients it contains for crop production or alternative use business ventures. The service is free and available to both sending and receiving operations.

Authorized by the Water Quality Improvement Act of 1998, Maryland’s Manure Matching Service is also designed to foster new markets for manure suppliers by encouraging the development of alternative animal waste management technologies such as waste-to-energy, fertilizer manufacturing, and composting.

2. Other Manure Matching Services

Other states have implemented manure matching programs similar to the Maryland program. For example, the Pennsylvania Small Business Development Centers worked jointly with the Pennsylvania State Conservation Commission to develop the Pennsylvania Manure Trader Web site. The Web site (www.manuretrader.org) is a free resource intended to facilitate the beneficial use of excess manure. Registered users can post both “manure wanted” listings as well as “manure available” listings. Manure listings can include details such as type, quantity, frequency of availability, geographic location, and date listed.

In Iowa, a similar manure matching program was developed on a more local level within the South Fork of the Maquoketa River Watershed. The South Fork Maquoketa Water Quality Project began in July 2004 with the goals of reducing sediment, bacteria, and nutrients delivered

to the Maquoketa River and ultimately to Backbone Lake. One aspect of the project included cooperation and a financial donation from Iowa Pork Producers Association (IPPA) to collect water monitoring samples as well as to develop a watershed directory for manure trading. The directory lists those in the watershed with excess agricultural manure and those who can use the manure in environmentally friendly end-uses. The directory is also intended to feature other useful information on water quality, nutrient credits, and local plot data.

There are numerous other programs in other states that have been developed and continue to be developed.