
Digester Project Funding Guide for USDA Programs

**Presented by:
Innovation Center for U.S. Dairy[®]**

Digester 101

- Useful resource is FarmWare – FarmWare is a free analytical tool designed to provide a preliminary assessment of the benefits of integrating anaerobic digestion into an existing or planned dairy or swine manure management system. <http://www.epa.gov/agstar/tools/project-dev/farmware.html>
- The following link to evaluation forms compile all of the information needed to complete a FarmWare assessment for a dairy facility. http://www.epa.gov/agstar/documents/farmware_dairy.pdf
- FarmWare is a great source to become familiar with information and the different types of technology.
- Do site visits of existing digesters in your area.

Getting started: What will be needed to be successful?

- Data Collection
- Technical Information
- Financial Information
- Executive Summary
- Documents to Gather Bids and Quotes
- Additional Resources

Data Collection

■ General Dairy Operation Information

- Bedding material
- Manure collection system
- Potential other waste to be added to digester
- Man-hours available for digester management, administration, O and M

Data Collection (Continued)

■ Nutrient Management Plan

- Liquid waste management
- Solid waste management
- Regulatory issues

Data Collection (Continued)

■ Required Waste Data

- Manure data for milking cows, dry cows and heifers
- Manure data adjustment for various types of housing systems
- Parlor waste data for the various types of parlors
- Holding pen waste
- Wash pen waste data
- Other waste data
- Back-end technology

Data Collection (Continued)

- Required Construction Information
- Required Waste Collection Data
- Required Front-end Technology Data
- Renewable Energy Technical Data
- Required Back-end Technical Data

Financial Information

- General Information

- Financial

- Interest rate
- Labor costs
- Depreciation desired

Financial Information (Continued)

- Construction Information
- Waste Collection Data
- Front-end Technical Data
- Digester Technical Data
- Renewable Energy Technical Data
- Back-end Data

Request for Proposal Documents

■ Gather Quotes From Contractors and Vendors

- Building
- Concrete
- Electrical
- Plumbing and piping
- Excavation and dirt work
- Pumps
- Mixing equipment
- Back-end technology

Develop Executive Summary

- Summary of Technical and Financial Information
- Create Pro Forma From Inputs Derived From Technical and Financial Information
- Know Your IRR or Payback

What programs meet my needs?

- Rural Development Programs
- Natural Resources Conservation Service Programs
- Farm Service Agency Programs

Rural Development Programs

■ USDA Rural Development Programs — <http://www.rurdev.usda.gov/Home.html>

- Rural Energy for America Program (REAP) Grant — The Rural Energy for America Program (REAP) provides assistance to agricultural producers and rural small businesses to complete a variety of projects. Offering both loan guarantees and grants, REAP helps eligible applicants install renewable energy systems such as solar panels or anaerobic digesters, make energy efficiency improvements such as installing irrigation pumps or replacing ventilation systems, and conduct energy audits and feasibility studies. The REAP programs most suited for digesters are:
 - **The Renewable Energy System and Energy Efficiency Improvement Guaranteed Loan and Grant Program** — provides financial assistance to agricultural producers and rural small businesses to purchase, install and construct renewable energy systems; make energy efficiency improvements; use renewable technologies that reduce energy consumption; and participate in energy audits, renewable energy development assistance and feasibility studies. http://www.rurdev.usda.gov/BCP_ReapResEei.html
 - **The Feasibility Study Grant Program** financially assists applicants who need to complete a feasibility study, which are required in applications for many of USDA's and other government agencies' energy programs. http://www.rurdev.usda.gov/BCP_Reap_FeasibilityStudies.html

Rural Development Programs (Continued)

- **Rural Energy for America Program Guaranteed Loan Program (REAP Loans)** — The REAP Guaranteed Loan Program encourages the commercial financing of renewable energy (bioenergy, geothermal, hydrogen, solar, wind and hydropower) and energy efficiency projects. Under the program, project developers will work with local lenders, who in turn can apply to USDA Rural Development for a loan guarantee up to 85 percent of the loan amount. http://www.rurdev.usda.gov/BCP_ReapLoans.html
- **Loan limits**
 - Loans up to 75% of the project's cost
 - Maximum of \$25 million, minimum of \$5,000
- **Maximum percentage of guarantee (applies to whole loan):**
 - 85% for loan of \$600,000 or less
 - 80% for loans greater than \$600,000 but \$5 million or less
 - 70% for loans greater than \$5 million up to \$10 million
 - 60% for loans greater than \$10 million up to \$25 million
- **Fees and interest rates**
 - Lender customary interest rate, fixed or variable, negotiated by lender and business lender customary fees, negotiated by lender and business
 - One-time guarantee fee equal to 1% of guaranteed amount
 - Annual renewal fee

To apply for funding for the Guaranteed Loan Program, please contact your Rural Development State Office.
http://www.rurdev.usda.gov/recd_map.html

Rural Development Programs (Continued)

- Business and Industry (B&I) Guaranteed Loans — The purpose of the B&I Guaranteed Loan Program is to improve, develop or finance business, industry and employment and improve the economic and environmental climate in rural communities.

http://www.rurdev.usda.gov/BCP_gar.html

- The maximum percentage of guarantee is 80 percent for loans of \$5 million or less, 70 percent for loans between \$5 and \$10 million, and 60 percent for loans exceeding \$10 million.
- The total amount of agency loans to one borrower must not exceed \$10 million (with some exceptions) — visit link above for more information).
- Complete applications should be sent to the USDA Rural Development State Office for the project location. A list of offices and additional information can be obtained at http://www.rurdev.usda.gov/recd_map.html.

Visit the following link to compare the B&I and REAP Guaranteed Loan Programs to see which best fits your needs: http://www.rurdev.usda.gov/rbs/busp/b&i_gar.htm

Rural Development Programs (Continued)

- Value Added Producer Grants (VAPG) — The primary objective of the VAPG program is to help agricultural producers enter into value-added activities related to the processing and/or marketing of bio-based value-added products. Generating new products, creating and expanding marketing opportunities, and increasing producer income are the end goals of this program. You may receive priority if you are a beginning farmer or rancher, a socially disadvantaged farmer or rancher, a small- or medium-sized farm or ranch structured as a family farm, a farmer or rancher cooperative, or are proposing a midtier value chain, as defined in the Program Regulation. Grants are awarded on a competitive basis.

http://www.rurdev.usda.gov/BCP_VAPG.html

- Current Status – OPEN – application deadline is Oct. 15, 2013
- Maximum Grant Amount: \$100,000 for planning grants; \$300,000 for working capital grants
- Cost Sharing Requirement: Cash or eligible in-kind matching funds equal to at least the amount of grant funds being requested

Contact your USDA Rural Development State Office for help. Visit this link for State Office contact information: <http://www.rurdev.usda.gov/StateOfficeAddresses.html>

Natural Resources Conservation Service (NRCS) Programs

Originally established by Congress in 1935 as the Soil Conservation Service (SCS), NRCS has expanded to become a conservation leader for all natural resources, ensuring private lands are conserved, restored and more resilient to environmental challenges, such as climate change.

NRCS works with landowners through conservation planning and assistance designed to benefit the soil, water, air, plants and animals that result in productive lands and healthy ecosystems.

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/home>

NRCS Programs

- Environmental Quality Incentives Program (EQIP) — EQIP is a voluntary program that provides financial and technical assistance to agricultural producers through contracts up to a maximum term of 10 years in length. These contracts provide financial assistance to help plan and implement conservation practices that address natural resource concerns and for opportunities to improve soil, water, plant, animal, air and related resources on agricultural land and nonindustrial private forestland. In addition, a purpose of EQIP is to help producers meet federal, state, tribal and local environmental regulations.

Owners of land in agricultural or forest production or persons who are engaged in livestock, agricultural or forest production on eligible land and who have a natural resource concern on the land may participate in EQIP.

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip>

- Air Quality Initiative — The 2008 Farm Bill also included provisions for use of EQIP to provide financial opportunities for producers to address air quality concerns from agricultural operations and to help producers meet federal, state and local regulatory requirements. The NRCS EQIP Air Quality Initiative provides financial assistance to implement approved conservation practices to address significant air quality resource concerns for designated high-priority geographic locations throughout the nation. Each fiscal year, NRCS will focus financial and technical assistance through the EQIP Air Quality Initiative to specific states and counties designated as nonattainment according to Clean Air Act requirements.
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/air/?&cid=nrcs143_008546
 - 2012 Fact Sheet — http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046339.pdf
 - 2012 AQI Approved Stats and Counties List — http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045919.pdf
- On-Farm Energy Initiative — The EQIP On-Farm Energy Initiative enables the producer to identify ways to conserve energy on the farm through an Agricultural Energy Management Plan (AgEMP), also known as an on-farm energy audit; and by providing financial and technical assistance to help the producer implement various measures and practices recommended in an on-farm energy audit.
 - 2012 Fact Sheet — http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046337.pdf
 - Application — Contact your local NRCS Office - <http://offices.sc.egov.usda.gov/locator/app>

NRCS Programs (Continued)

- National Water Quality Initiative — The National Water Quality Initiative will work in priority watersheds to help farmers, ranchers and forest landowners improve water quality and aquatic habitats in impaired streams. NRCS will help producers implement conservation and management practices through a systems approach to control and trap nutrient and manure runoff. Qualified producers will receive assistance for installing conservation practices such as cover crops, filter strips and terraces.

<http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/eqip/?&cid=stelprdb1047761>

- Eligible watersheds

<http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/eqip/?&cid=stelprdb1047761>

- To apply or learn more, contact your local NRCS office:

<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>

Farm Service Agency (FSA) Programs

The Farm Service Agency's national administrative functions are managed in Washington, D.C. Computational and statistical work is done in Kansas City. Implementation of farm policy through FSA programs is the responsibility of field offices based in states, counties and territories.

The organizational structure of FSA is laid out by Congress and overseen by the secretary of agriculture. The FSA administrator reports to an undersecretary of agriculture for Farm and Foreign Agricultural Services (FFAS).

More than 2,346 state and county offices are the primary distributors of FSA programs in the 48 continental states. FSA is also represented in Hawaii and Puerto Rico.

<http://www.fsa.usda.gov/FSA/webapp?area=fsahome&subject=landing&topic=landing>

FSA Programs

- Biomass Crop Assistance Program (BCAP) —BCAP provides financial assistance to owners and operators of agricultural and nonindustrial private forest land who wish to establish, produce and deliver biomass feedstocks. BCAP fact sheet: http://www.fsa.usda.gov/Internet/FSA_File/bcap_update_may2011.pdf

BCAP provides two categories of assistance:

- Matching payments may be available for the delivery of eligible material to qualified biomass conversion facilities by eligible material owners. Qualified biomass conversion facilities produce heat, power, biobased products or advanced biofuels from biomass feedstocks.
- Establishment and annual payments may be available to certain producers who enter into contracts with the Commodity Credit Corporation (CCC) to produce eligible biomass crops on contract acres within BCAP project areas. BCAP project area information can be found here: <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=ener&topic=bcap-pjt> and the project area listing can be found here: <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=ener&topic=bcap-pjt-bloc>

FSA Programs (Continued)

■ Conservation Loan (CL) Program

- The U.S. Department of Agriculture's Farm Service Agency (FSA) makes and guarantees conservation loans to promote conservation on farms and ranches throughout the United States to conserve our natural resources.
- CL funds can be used to implement a conservation practice approved by the Natural Resources Conservation Service (NRCS), such as reducing soil erosion, improving water quality, and promoting sustainable and organic agricultural practices. This would include: installation of conservation structures; establishment of forest cover; installation of water conservation measures; establishment or improvement of permanent pastures; transitioning to organic production; manure management, including manure digestion systems; and adaptation of other emerging or existing conservation practices, techniques or technologies.
- Those interested may apply for direct CLs with loan limits up to \$300,000 at local FSA offices. In addition, guaranteed CLs up to \$1,119,000 (amount adjusted for inflation) may be available by applying with lenders working with FSA to obtain a guarantee.
- Interest rates on guaranteed CLs will vary but may not exceed the rate charged the lender's average farm customer.
- To apply or ask questions, contact your state or local FSA Office:
<http://offices.sc.egov.usda.gov/locator/app?state=us&agency=fsa>
- Fact Sheet: http://www.fsa.usda.gov/Internet/FSA_File/crp_prog_090210.pdf

Past Awards

- 2009 REAP Award Recipients — 233 renewable energy projects:
<http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=2009/09/0417.xml>
- 2011 REAP Award Recipients —
<http://www.rurdev.usda.gov/SupportDocuments/RD-REAP20000-aboveSept2011.pdf>

Other Recommendations and Resources

- Seek help by contacting your local USDA or NRCS office.
 - USDA — http://www.rurdev.usda.gov/recd_map.html
 - NRCS — <http://offices.sc.egov.usda.gov/locator/app>
- Review information provided to by FarmWare. <http://www.epa.gov/agstar/tools/project-dev/farmware.html>
- Contact your CPA for best tax advice.
- Get local engineer involved to understand permits that might be needed.
- Always confirm eligibility, match requirements and schedule of all grant applications.
- Confirm if you need to be registered with Grants.gov and/or System for Award Management (SAM), which was formerly the Central Contractor Registry (CCR). Each agency has their own requirements and establishing an account can take several days.
 - Grants.gov — <http://www.grants.gov>
 - SAM — <https://www.sam.gov/portal/public/SAM/>
- Obtain checklist of documents needed to apply for the specific program.
- Do a self-evaluation.
- Always check Federal Register or agency announcement for grant updates.
 - Federal Register — <https://www.federalregister.gov/>

Stacking Programs

- Early Coordination is IMPORTANT.
- Example: Use REAP program to fund digester and utilize EQIP program to assist with manure collection/transfer and then you could potentially use VAPG with back-end digester product.*

*Stacking multiple programs for project funding hinges on an applicant's particular project/s, various eligibilities, agency requirements and other variables and is not applicable in all situations.