Summary of Potential Federal and State Funding Sources for Manure to Energy Projects in MD, VA and PA

FEDERAL

We have focused our summary of federal programs on the Farm Bill because we believe these programs represent the best opportunity for regional interests to effect legislative or administrative changes. We recognize there are other federal programs that fund or provide incentives for renewable energy, most notably the Renewable Electricity Production Tax Credit and the Business Energy Investment Tax Credit, as well as other programs through the Department of Energy. Entities seeking funding are encouraged to investigate these other opportunities.

Farm Bill Programs

Rural Energy for America Program (REAP)

The U.S. Department of Agriculture's (USDA) Rural Energy for America Program (REAP) provides grants and loans for renewable energy and energy efficiency projects. It is administered through the Rural Development program. Grants can cover 25% of total renewable energy project costs, but the grants can be combined with REAP guaranteed loans and grants from other programs such as the Environmental Quality Incentives Program (EQIP), but the total USDA investment cannot exceed 75% of total project costs. Below are some details of the various programs under REAP and EQIP.

Rural Energy For America Program Grants/Renewable Energy Systems/Energy Efficiency Improvement Program (REAP/RES/EEI)

Summary:

- The REAP/RES/EEI Grants Program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to purchase and install renewable energy systems and make energy efficiency improvements.

Eligibility:

- The program is designed to assist farmers, ranchers and rural small businesses that are able to demonstrate financial need. All agricultural producers, including farmers and ranchers, who gain 50% or more of their gross income from the agricultural operations are eligible. Small businesses that are located in a rural area can also apply. Rural electric cooperatives may also be eligible to apply.
- Eligible renewable energy projects include projects that produce energy from wind, solar, biomass, geothermal, hydro power and hydrogen-based sources. The projects can produce any form of energy including, heat, electricity, or fuel.
- For all projects, the system must be located in a rural area, must be technically feasible, and must be owned by the applicant.

Funding:

- The grants are awarded on a competitive basis and can be up to 25% of total eligible project costs. Grants are limited to $500,000 for renewable energy systems and $250,000 for energy efficiency improvements. Grant requests as low as $2,500 for renewable energy systems and $1,500 for energy efficiency improvements will be considered. At least 20% of the grant funds awarded must be for grants of $20,000 or less.

REAP/Feasibility Grant Program

Summary:

- The REAP/Feasibility Grant Program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to conduct feasibility study for a renewable energy system.

Eligibility:

- The program is designed to assist farmers, ranchers and rural small businesses. All agricultural producers, including farmers and ranchers, who gain 50% or more of their gross income from the agricultural operations are eligible. Small businesses that are located in a rural area can also apply. Rural electric cooperatives may also be eligible to apply.
- Eligible feasibility studies for renewable energy systems include projects that will produce energy from wind, solar, biomass, geothermal, hydro power and hydrogen-based sources. The energy to be produced includes, heat, electricity, or fuel.
- For all projects, the system must be located in a rural area, must be technically feasible, and must be owned by the applicant.

Funding:

- The grants are awarded on a competitive basis and can be up to 25% of total eligible project costs. Grants are limited to $50,000 for renewable energy feasibility studies.

REAP Guaranteed Loan Program

Summary:

- The REAP Guaranteed Loan Program encourages the commercial financing of renewable energy (bioenergy, geothermal, hydrogen, solar, wind and hydro power) 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.

Funding

- Loans 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's customary interest rate, fixed or variable, negotiated by lender and business Lender's customary fees, negotiated by lender and business
  - One-time guarantee fee equal to 1% of guaranteed amount
  - Annual renewal fee

Eligibility:

- Borrowers, Lenders, Location**:**
  - New definition being determined. Borrowers must be an agricultural producer or rural small business. An entity is considered a small business in accordance with the Small Business Administration's (SBA) small business size standards NAICS code. Most lenders are eligible, including national and state-chartered banks, Farm Credit System banks and savings and loan associations. Other lenders may be eligible if approved by USDA.
- Eligible Project Costs:

- Includes the purchase and installation of equipment, energy audits, permits and fees, professional services, feasibility studies, business plans, working capital and land acquisition.

Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program (EQIP) is administered by the Natural Resources Conservation Service (NRCS) and is a voluntary program that provides financial and technical assistance to agricultural producers through contracts up to a maximum term of ten years in length. Anaerobic digesters are one of the practices eligible for EQIP funding. The USDA's Conservation Innovation Grants (CIG) program and the Chesapeake Bay Watershed Initiative are also both run through EQIP and can also fund manure to energy projects. Because the CIG program is designed to fund pilot projects and our focus is on commercialization, we have not included it in our summary. It is worth noting, however, that several manure to energy projects in the Chesapeake Bay region have benefitted from this grant program.

Summary:

- EQIP/CBWI 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 non-industrial private forestland. In addition, a purpose of EQIP is to help producers meet Federal, State, Tribal and local environmental regulations.

Eligibility:

- Owners of land in agricultural or forest production or persons who are engaged in livestock, agricultural or forest production on eligible land and that have a natural resource concern on the land may participate in EQIP. CBWI funding is restricted to agricultural producers located within the Chesapeake Bay watershed. In addition, some watersheds in the region were designated as high priority watersheds in this initiative because they have high yields of nitrogen and phosphorus, intense agricultural operations, and local water quality impairments due to excess nutrients or dissolved oxygen.

Funding:

- Maximum of $300,000 can be received through EQIP over a 6-year period
- Projects of special significance can petition for up to $450,000.
- EQIP/CBWI can fund up to 75% of the average cost of the project.

Other Farm Bill Programs

Value-Added Producer Grants (VAPG) USDA Rural Development (Although it does not say so specifically, manure to energy programs are eligible for funding.

Summary:

- The Value-Added Producer Grants (VAPG) program provides competitive grants to individual independent agricultural producers, groups of independent producers, producer-controlled entities, organizations representing agricultural producers, and farmer or rancher cooperatives to create or develop value-added producer-owned businesses. The term "value-added" includes an agricultural commodity or product that has undergone a change in physical state or was produced, marketed, or segregated (e.g. identity-preserved, eco-labeling, etc.) in a manner that enhances its value or expands the customer base of the product.

Eligibility:

- Grants may be used to fund one of the following two activities:
  - Develop business plans and feasibility studies (including marketing plans or other planning activities) needed to establish viable marketing opportunities for value-added products; or
  - Acquire working capital to operate a value-added business venture or alliance. Working capital applications generally must be supported by an independent feasibility study as well as a business plan.

Funding:

- The grants provide $100,000 for planning and $300,000 for working capital grants.

U.S. Small Business Administration – Business and Industry (B&I) Loan Guarantee Program

Summary:

- This program is very similar to the REAP Loan program described above, in terms of the loan amounts.
- The Business and Industry Loan Guarantee program guarantees loans made by eligible local lenders to businesses to benefit rural areas. The program's primary purpose is to create and maintain employment and improve the economic and environmental climate in rural communities. This is achieved by expanding the existing private credit structure capability to make and service quality loans to provide lasting community benefits. USDA Rural Development typically guarantees losses of up to 80 percent of the original loan amount. Inability to obtain other credit is not a requirement.

Eligibility:

- Business and industrial loans can be guaranteed in rural cities up to a population of 50,000. Priority is given to applications for loans in rural communities of 25,000 or less.
- Any legal entity, including individuals, public and private organizations and federally recognized Indian tribal groups, may qualify. There is no size restriction on the businesses. Local economic development organizations and investors can be considered.

Funding:

- Maximum Amount:
  - $25 million
- Loan Guarantee Limits:
  - 80% up to $5 million.
  - 70% over $5 million to $10 million.
  - 60% over $10 million to $25 million.
- Maximum Repayment Terms:
  - Working Capital - 7 years.
  - Machinery and Equipment - 15 years (or useful life).

Farm Ownership Loans (FSA)

Summary:

- FSA's loan programs are designed to help family farmers obtain loans and loan guarantees, and conduct business planning. In many cases, these are beginning farmers who need additional financial and business acumen to qualify for commercial credit. In other cases, they are farmers who have suffered financial setbacks from natural disasters, or who need additional resources with which to establish and maintain profitable farming operations.

Unlike FSA's commodity loans, most farm loans must be fully secured and can only be approved for those who have repayment ability.

Eligibility**:**

- In general, loan funds may be used to purchase a farm, enlarge an existing farm, construct new farm buildings and/or improve structures, pay closing costs, and promote soil and water conservation and protection.

Funding:

- Eligible applicants may obtain direct loans up to a maximum indebtedness of $300,000. Maximum indebtedness for guaranteed loans is $1,119,000 (amount adjusted annually for inflation). The maximum repayment term is 40 years for both direct and guaranteed farm ownership loans.
- No maximum loan amount listed.

MARYLAND

Tax Credits

Clean Energy Production Tax Credit

Summary:

- Eligible biomass resources include anaerobic digestion, landfill gas, wastewater-treatment gas, and cellulosic material derived from forest-related resources (excluding old-growth timber and mill residues consisting of sawdust or wood shavings), from waste pallets and crates, or from agricultural sources. The list of eligible resources is generally the same as those eligible for the federal renewable electricity production tax credit (PTC), except the Maryland law contains added provisions related to biomass and biogas technologies. The tax credit has been in place since 2000, but has been amended several times since the initial enactment. Most recently, it was amended in May 2010 by H.B. 494 (effective July 1, 2010) to extend the facility in service deadline from 2010 to 2015; set a minimum tax credit limit of $1,000; and make excess tax credits refundable.

Eligibility:

- To qualify, a facility that "primarily uses" eligible resources to generate electricity must (1) be placed in service on or after January 1, 2006, but before January 1, 2016, or (2) generate electricity from an eligible resource that is co-fired with coal and initially begins co-firing an eligible resource on or after January 1, 2006, but before January 1, 2016, regardless of when the original facility was placed in service.

Funding:

- An individual or corporation that applies for and receives certification from the Maryland Energy Administration (MEA) may claim a credit equal to 0.85 cents per kilowatt-hour ($0.0085/kWh) against the state income tax, for a five-year period, for electricity generated by eligible resources. The credit for electricity generated by co-firing is 0.5 cents per kilowatt-hour ($0.005/kWh). As a result of H.B. 494, effective July 1, 2010 the MEA is no longer permitted to issue initial credit certificates for amounts of less than $1,000. At the general renewable energy credit rate of $0.0085/kWh, a facility would need to produce 23,530 kWh annually to meet this minimum. The electricity generated must be sold to an unrelated person during the taxable year. The MEA indicates that a net metering or interconnection agreement is sufficient documentation for this requirement.
- The maximum amount of credit is based on estimated annual energy production during a five-year period, or $2.5 million. The sum of all credits statewide may not exceed $25 million. Formerly, credits exceeding a taxpayer's state income tax for a taxable year could be carried forward to succeeding taxable years for up to 10 years. However, as a result of H.B. 494 credits in excess of income tax for a taxable year are now refundable.
- Applications for credit certificates are approved on a first-come, first-served basis. Certificates may not be issued after December 31, 2015. If, over a three-year period, a taxpayer does not claim on average at least 10% of the maximum credit amount stated in the certificate, the Maryland Energy Administration may cancel part of the certificate. Through March 2010 initial credit certificates totaling roughly $5.1 million had been issued to 10 qualifying facilities. Certificates for three landfill gas facilities and one commercial wind facility made up the vast majority of approvals, with the balance coming from several small scale wind and solar facilities.

Grants

Strategic Energy Investment Fund (SEIF) – Grants for Alternative Fuels & Renewable Energy

Summary:

- The SEIF is a special, non-lapsing fund that is made up of the proceeds from the auction of carbon allowances to electric power plants under the Regional Greenhouse Gas Initiative (RGGI). Maryland joined RGGI in 2006 as part of the Healthy Air Act. The SEIF does not receive any general funds nor does it include any ratepayer surcharges.
- Auctions are quarterly. The first was held on September 25, 2008 and generated $16.3 million for Maryland.
- The Strategic Energy Investment Act of 2008 requires that the Fund be allocated annually as follows:
  - 23% - Residential Rate Relief
  - 17% - Low Income Energy Assistance
  - 46% - Energy Efficiency, Conservation & Demand Response Programs (of which half must be used on low and moderate income families)
  - 10.5% - Clean Energy & Climate Change Programs, Outreach & Education
  - 3.5% - Administration of Fund
- The Maryland Energy Administration (MEA) proposes to use the Fund to offer a range of incentives and resources directly to Maryland consumers, businesses and communities to help decrease energy bills and increase the supply of clean, renewable energy. The investments will not only help reduce the state's carbon footprint, they will also expand Maryland's economy by creating new, green collar jobs.
- Note: Virginia and Pennsylvania are **not** members of RGGI.

Eligibility:

- Grants support renewable energy project development. Small grants can often make projects economically viable. On a selective basis, MEA makes grants to help finance renewable energy projects.
  - Priority will be given to projects that:
    - Increase alternative fuel infrastructure.
    - Maximize reduction of petroleum through the use of alternative fuels or advanced technologies.
    - Support alternative fuel projects that reduce greenhouse gas emissions.
    - Increase generation of electricity from Tier 1 renewable resources located in Maryland.

Funding:

- Only part of the 10.5% of the SEIF that goes to fund Clean Energy and Climate Change Programs, Outreach and Education is available for renewable energy projects. To date, no manure to energy projects have been funded.

Loans

Maryland Resource-Based Industry Financing Fund (MRBIFF)

Summary/Eligibility:

- MRBIFF offers low-interest loans to established agricultural and resource based industry firms for the purchase of land and capital equipment for production and processing activities. Monies may also be used to help finance environmental or water-quality enhancement projects. Priority will be given to niche market-oriented and value-added projects as well as beginning or transitioning producers and processors. The Maryland Agricultural and Resource Based Industry Development Corporation (MARBIDCO) will provide up to 50 percent of financing needed for a project under this program, and a commercial lender and/or another public financing instrumentality must also have an equal financial commitment in any transaction.

Funding:

- A commercial lender must participate
- $200,000 for acquisition of equipment and fixed assets.
- $400,000 for real estate purchases, food/meat processing and bioenergy projects.
- Loan Terms: Equipment - 5 to 7 years; Land - 10 to 30 years, not to exceed commercial lender.
- MARBIDCO Interest Rate: 3% APR (Fixed rate for 3 years; higher rate thereafter.)
- Loan Origination Fee: 0.5% (paid at closing to MARBIDCO)
- Loan Origination Fee: 0.5% (paid at closing to MARBIDCO)

VIRGINIA

We did not find any state programs in Virginia that provided funding or tax credits for renewable energy projects. SB 678, introduced last year, would have established an electricity production tax credit for facilities using agricultural livestock waste nutrients to produce electricity. The amount of the credit among was modeled after the federal tax credit program. The legislation passed out of the Senate; however, no further legislative action was taken.

PENNSYLVANIA

Tax Credits

Alternative Energy Production Tax Credit

Summary:

- Pennsylvania's Alternative Energy Investment Act of 2008, signed into law by Gov. Edward G. Rendell on July 9, 2008 established the Alternative Energy Production Tax Credit. This tax credit is available to taxpayers who develop or construct alternative energy production projects located in the Commonwealth of Pennsylvania with a useful life of at least four years. The program provides for a tax credit of 15 percent of the total amount of all development, equipment and construction costs of the project, after all other grants and subsidies are subtracted, up to $1 million per taxpayer. A taxpayer, upon application to and approval by the Department of Environmental Protection may sell or assign, in whole or in part, an alternative energy production project tax credit granted to the taxpayer if no claim for allowance of the credit is filed within one year from the date the credit is approved by the department and the Department of Revenue under this act.

Eligibility:

- Types of projects identified in the legislation as eligible for the Alternative Energy Production Tax Credit include:
  - Energy Production or Distribution
  - Manufacturing
  - Research and Development
  - Rail

Funding:

- The following values are maximum tax credit amounts for each fiscal year:
  - $5,000,000 in Fiscal Years 2008-2009, 2009-2010, 2010-2011 and 2011-2012
  - $8,000,000 in Fiscal Year 2012-2013
  - $10,000,000 in Fiscal Years 2013-2014 and 2014-2015
  - $2,000,000 in Fiscal Year 2015-2016

Program is not operating because appropriations have not been authorized.

Loans and Grants

Pennsylvania Energy Development Authority (PEDA)

Summary:

- The Pennsylvania Energy Development Authority receives periodic funding, year-to-year to fund renewable energy projects. It received a bond issue 5 years ago for $50 million, and with additional funding has issued over $10 million/year to projects. PEDA generally opens the application period for about 2 months each year. 2 years ago the maximum allowable funding for 1 project was $1 million, and last year it was $500,000. The maximum funding depends on the total funding available in a given year. There are approximately 200-300 applications received each year. This projects funds anaerobic digesters but not gasification projects. It is open to solar, biomass, geothermal projects, and many more renewable energy systems.

Funding:

- $500,000 ➔ $1 million maximum funding/project
- Matching funds required, but no specific percentage – The more matching funds available, the more likely a project will be awarded a grant.

Alternative and Clean Energy Program

Summary:

- The Alternative and Clean Energy Program provides financial assistance in the form of grant and loan funds for the utilization, development and construction of alternative and clean energy projects in the Commonwealth. The Program is administered jointly by the Department of Community and Economic Development (DCED) and the Department of Environmental Protection (DEP), under the direction of the Commonwealth Financing Authority (CFA). DCED conducts the financial review of proposed projects, DEP conducts the technical review and the CFA ultimately makes the decision, based on these reviews. This program was bond funded and of the $ 165 million originally appropriated, roughly $ 70 million is left.

Eligibility:

- Businesses; not-for-profit organizations; and political subdivisions including municipalities, counties and school districts are eligible to apply. It is a competitive program and the evaluation criteria include looking at the amount of matching funds, the technical and financial feasibility of the proposed project, and the energy production or cost savings (for improved energy efficiency projects).

Funding:

- Grants up to $2 million and loans and loan guarantees up to $5 million are available for a variety of alternative and clean energy projects including: installation of equipment to facilitate or improve energy efficiency or energy conservation; construction or renovation of high performance energy efficient buildings; installation of alternative energy producing systems including but not limited to wind, geothermal technologies, biomass, low impact hydro, and waste technologies; construction of facilities that will manufacture alternative fuels such as ethanol or biodiesel; development of facilities that will be used to manufacture component parts for alternative and clean energy systems.
- Matching Requirement: There is a matching investment requirement of at least $1 for every $1 of program funds awarded. The repayment term for most loans is 10 years with interest rates of 1% for energy efficiency and geothermal technology projects 4% - 5% for other types of projects.

Sustainable Energy Funds in Pennsylvania:

The Pennsylvania Public Utility Commission approved the establishment of the Sustainable Energy Funds (SEFs) in 1998 as a condition for the final settlement of the electric restructuring plans of the state's five largest electric companies. Under the settlement, five funds totaling approximately $55 million were established to address environmental and economic development issues across the state. The five funds were: 1) the West Penn Sustainable Energy Fund in the Allegheny Power territory; 2) Metropolitan Edison Company Sustainable Energy Fund; 3) Penelec Sustainable Energy Fund of the Community Foundation for the Alleghenys; 4) the Sustainable Development Fund in the PECO Energy Company territory and 5) the Sustainable Energy Fund of Central Eastern Pennsylvania in the PPL Electric Utilities, Inc. territory.

The funds are designed to promote the development of sustainable and renewable energy programs and clean-air technologies on both a regional and statewide basis. Each have different levels of funding and eligibility requirements. The funds have provided more than $20 million in loans and $1.8 million in grants to over 100 projects. A Statewide Sustainable Energy Board was formed in 1999 to enhance communications among the four funds and state agencies. The board includes representatives from the Commission; the Department of Environmental Protection; the Department of Community and Economic Development; the Office of Consumer Advocate; the Pennsylvania Environmental Council; and each regional board. The SEFs differ from most other state funding resources because they actively involve local communities in the decision-making process. Local residents serve on the SEF boards, and the funds are administered locally and functions differently. West Penn Power SEF has funded the most manure to energy projects to date and is highlighted below.

Native Energy is working with the West Penn Power SEF, the Metropolitan Edison and Penelec SEFs, and the Pennsylvania Department of Environmental Protection to assist in the development of Pennsylvania farm digester projects. West Penn Power SEF is also currently working to fund the EnergyWorks gasification plant in Gettysburg, PA. It is our understanding that the funding has not yet been approved.

Funding for West Penn Power:

- The program provides mostly loans, but not all loans. It does not have the level of funding that the Pennsylvania DEP has for these projects. Grants tend to be in the range of $10,000's, and a project has to be a very promising one to receive grant assistance.
- The loans typically have a 3-5% interest rate. The terms are generally 5-6 years. They have done longer time frames, but with limited assets 5-6 years is the normal length they can afford. They have done one 10 year loan before.
- While grants are typically made in the $10,000's range, the higher grant amounts can be near $250,000 to $500,000. The largest grant it has given out was $2,000,000. The fund likes to put money into projects that otherwise would not happen. The program likes a strong economic development aspect to its funded projects, and embraces that idea of "made in Pennsylvania, used in Pennsylvania." It has funded projects outside of its coverage area, like a wind project in Scranton, because it felt Pennsylvania needed more wind energy projects. If projects can potentially create a lot of jobs, they likely will receive strong consideration. The program also likes to push new technologies, so that is why it is supporting the gasification project in Gettysburg, Pennsylvania.