## **Opportunities for Growth and Financial Incentives in Northeast/Mid-Atlantic**

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#### UNIVERSITY OF MARYLAND E X T E N S I O N

Solutions in your community

#### Overview

**Educating People to Help Themselves** 

Legislative changesMarylandNY

•VT

- •Maryland's net-metering law
  - - originally passed 1997
  - - expanded several times since
- •Rules apply to all utilities

•Systems that generate electricity using solar, wind, biomass, fuel cell, closed-conduit hydroelectric, and micro-CHP resources are eligible

- •Net metering is available statewide until the aggregate capacity of all net-metered systems reaches 1,500 MW. (approximately 10% of 2014 peak demand)
- •System size is generally limited to 2 MW

•Net excess generation (NEG) is generally carried over as a kilowatt-hour credit for 12 months. Compensation for any NEG remaining in a customer's account after a 12-month period is paid to the customer at the commodity energy supply rate.

- •Customers own all renewable-energy credits
- •Meter aggregation is permitted for agriculture, as well as non-profit organizations and municipal governments or their affiliates.

- •Utilities must install a meter capable of measuring the flow of electricity in both directions.
- •Utilities must offer net metering through a tariff or contract at non-discriminatory rates.
- The net-metered customers pay a monthly customer charge.

#### Overview

Legislative changes
Maryland - Incentives
NY

- •Animal Waste Technology Fund
- •Provides incentives (\$) to companies that demonstrate new on-farm technologies for managing animal manure.
- •These technologies generate energy from animal manure, reduce on-farm waste streams, and repurpose manure by creating marketable fertilizer and other products and by-products.

- •Will fund one or more projects.
- •Up to \$3.5 million will be granted. Approximately \$2 million will be directed to renewable energy.
- •Who? Individuals, businesses and nonprofits in good standing to do business in Maryland and State and local government entities.
- •No research.

- •Proposed projects must be located in Maryland.
- •Third party monitoring
- •Available for tours

- •Has funded fluidized bed project, pyrolysis project, anaerobic digestion project, composting project
- •Projects must have a nutrient management component
- •Available for tours
- •Funds provided by the Chesapeake and Atlantic Coastal Bays Trust Fund and the Maryland Energy Administration.

## Maryland - MEA

- •Animal Waste to Energy Grant Program
- •Open to businesses, government agencies, and non-profits in Maryland.
- •Up to \$6,000,000 dollars

•Two areas of interest: pilot or on-farm scale projects with capacities of less than 2MW. (40 percent cost-share required) and community or regional scale projects with capacities of greater than 2MW. (50 percent cost-share required)

## Maryland - MEA

#### Project selection criteria (partial list)

- Capacity and efficiency of the project in producing electric energy;
- Quantity of animal waste and co-digestion material (food or other organic materials) that can be processed by project (project must include at least 51 percent animal waste).
- Effectiveness of project at reducing waste volume and addressing the remaining byproducts;
- The ability of the project to eliminate/reduce nutrients from the waste stream;
- Ability to beneficially use any by-products generated by project and potential market opportunities for such byproducts;
- Funds secured and/or already invested in the project (skin in the game);

## Maryland - MEA

- •Combined Heat and Power Grant Program
- •\$4 Million first come, first served program
- •Target: commercial, industrial, institutional, and critical infrastructure facilities (including healthcare, wastewater treatment, and essential state and local government facilities), and to encourage the implementation of CHP technologies.
- •Maximum per project cap = \$500,000

### New York - NYSERDA

•New York State Energy Research and Development Authority

•Develop a less polluting and more reliable and affordable energy system.

•Aim to reduce greenhouse gas emissions, accelerate economic growth, and reduce customer energy bills.

### New York - NYSERDA

NYSERDA Funding Programs

- •Advanced Clean Energy (ACE) Exploratory Research Funding
- Agriculture Energy Audit Program
  Air Source Heat Pump Program
  Charge Ready NY
  CHP Program

## Vermont

- •Sustainably Priced Energy Enterprise Development Program, with 25-year contracts at fixed rates. The program was capped at 50 MW. It has morphed into a great information source, but no grants.
- •The Clean Energy Development Fund that offered \$250,000 grants has been depleted. Now mostly small grants for pellet and wood stoves.
- •Central Vermont Public Service Corporation Cow Power project are also largely depleted. Cow Power allowed utility customers to purchase renewable energy for \$0.04-kwh above retail to support farm projects. Remaining funding will largely be used for technical assistance.
- •Funding from the state's Agricultural agency is also drying up.

## Summary

## EQIPREAPAWTFMEA Waste to Energy, CHP

Waste Handling AD CHP Electrical connection

## Summary

## Four Proposals 15-100 pages?

### One stop shop?

# QUESTIONS

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