





Energy Programs Office

Energy Grants and Rebates for Agriculture

Agricultural Advisory Board Meeting March 24, 2022

Tom Wolf, Governor

Patrick McDonnell, Secretary

DEP Energy Programs Office

Primary agency responsible for implementing clean energy programs in Pennsylvania:

- > Renewable energy
- > Energy efficiency and conservation
- Climate change mitigation and adaptation
 - ➤ Alternative transportation
 - > Energy assurance
- Education, outreach and technical support

Works with partners to implement, coordinate, and facilitate programs.



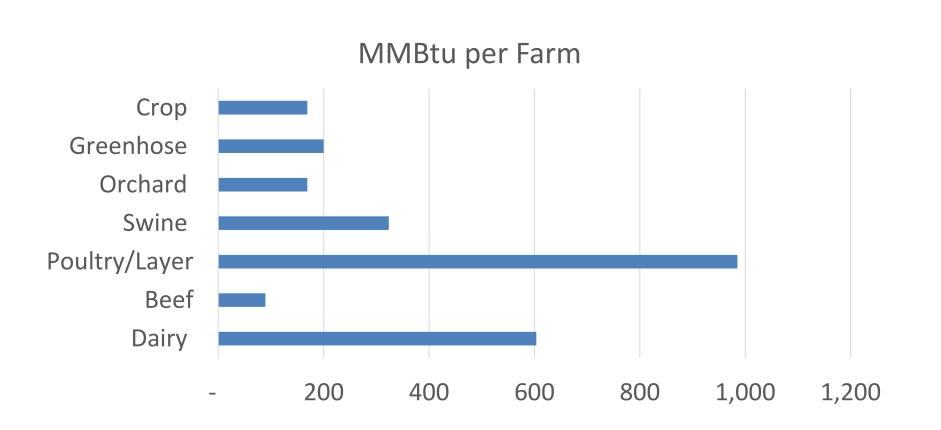
Study: Energy Use on Farms

- Study of where and how energy is being used on Pennsylvania farms
- Conducted in 2019 by contractor EnSave, Inc.
- Results and recommendations report completed March 2020





Energy Use by Subsector





Energy Savings Potential

Technical Annual Energy Savings Potential: \$20,368,103

Achievable Annual Energy Efficiency Potential*-10% of Technical Potential: \$2,036,811

*Based on audit data and factors such as incentive levels, farmer's cash on hand, market volatility, and changes to commodity prices that affect ability to invest in energy projects.



Review of Current Assistance Programs

- EnSave, Inc. researched federal, state, and private energy efficiency programs serving Pennsylvania
- Surveyed program administrators to learn more about past participation of agricultural producers in these programs, if known

Finding: Many farmers don't know about financial or technical assistance programs, marketing is difficult



State Incentive Programs

- 1. Small Business Advantage Grant
- 2. Pollution Prevention Assistance Account
- 3. Agriculture Energy Efficiency Rebate
- 4. Alternative Fuels Incentive Grant
- 5. C-PACE



Small Business Advantage Grant

- Administered by the DEP Small Business Ombudsman (SBO)
 Office
- For Pennsylvania-based small businesses with 100 or fewer full-time equivalent employees.
- Must save a business \$500 and 25% annually in energy or pollution prevention related expenses.
 - Includes utilities savings, and expenses such as eliminated disposal costs
- \$1 million in funding available each year.
 - Remains open until funds are depleted
 - Projects must be complete by 6/30/22



Small Business Advantage Grant

- Up to 50% <u>reimbursement</u> of eligible expenses.
 - Equipment-only costs (no labor/installation)
- Maximum grant award for any project type: \$5,000
- Grants are awarded first-come, first-served through online application process.
- Approximately \$450,000 still available (as of February 2022); apply by April 2022!
- All program information and documents available at: <u>Small Business Advantage Grant (pa.gov)</u>.



Small Business Advantage Grant

Types of Projects to Consider

Streambank Fencing Riparian Buffer Plantings Agricultural/Barnyard **Runoff Control Agricultural Solar Pumping LED Lighting** HVAC Boilers **Auxiliary Power Units** (APUs)

Recirculating Cooling Equip. **Evaporators** Air Compressors **Industrial Composter Industrial Fans** Oil Recycler **Commercial Refrigeration Commercial Ovens** Reverse Osmosis Equip.



Pollution Prevention Assistance Account (PPAA) Loan

- Are you considering an energy efficiency or pollution prevention project that will:
 - Take longer than a few months to complete,
 - Doesn't fit the eligibility requirements of other programs, and/or
 - Needs to be financed due to the high costs?
- Consider the PPAA Loan Program!
 - Low interest loan administered jointly by DEP SBO Office and DCED
 - Over \$1.425 million available (as of Nov 2021)



Pollution Prevention Assistance Account (PPAA) Loan

- Revolving loan program (never closes)
- For many types of Pennsylvania businesses (not restricted to small businesses)
- Covers up to 75% of total eligible project costs
- 2% fixed rate for the life of the loan
- 10-year maximum term
- Maximum loan amount is \$100,000 for any 12month period



Pollution Prevention Assistance Account (PPAA) Loan

- Loan funds may be used to purchase equipment or implement process changes which fulfill one or more of the following:
 - Reduce or reuse raw materials on site
 - Reduce production of waste at the source
 - Significantly reduce energy consumption
- Applicants must work with your Local Certified Economic Development Organization (CEDO) to apply.
 - https://dced.pa.gov/cedo/
- Additional information can be found here:
 - PPAA Loan Program



Pilot Ag Energy Efficiency Rebate

- DEP in September 2021 launched a new rebate through State Energy Program funds from U.S. DOE.
- The program is first come, first served
- Ag producers meeting the definition of a "normal farming operation" are eligible





Pilot Ag Energy Efficiency Rebate

- Rebates are up to 50% of <u>equipment</u> costs, up to \$2,000 for the following technologies:
 - LED lighting, including fixtures and controls
 - Efficient milk pumping equipment
 - Efficient ventilation equipment



The Rebate Process

- Interested farmers should apply online
 - www.dep.pa.gov/agricultureenergy
- DEP will issue them a rebate voucher
- The farmer purchases and installs the equipment
- They then submit receipts and project photos to DEP for reimbursement

Alternative Fuels Grants

- EPO administers the Alternative Fuels Incentive Grant (AFIG) program, which provides grants for alternative fuel vehicles. Farms are eligible.
- Funds natural gas, biodiesel, propane, hydrogen, and electric (EV) vehicles.
- On-road vehicles only, registered in Pennsylvania.
- www.dep.pa.gov/alternativefuelsincentivegrant



C-PACE

- C-PACE is Commercial Property Assessed Clean Energy
- Authorized by legislation
- Voluntary program passed by county or municipal resolution
- Commercial and agricultural property owners may develop a clean energy project and secure a capital provider to finance the project. The loan payment is added to the property tax bill and collected as an assessment by the county/municipality.
- https://pennsylvaniacpace.org



Federal Incentive Programs

- 1. Rural Energy for America Program (REAP)
- Environmental Quality
 Incentives (EQIP)
 Program
- 3. Tax Credits for Renewables





REAP Grants and Loan Guarantees

- Administered by USDA
- For renewable energy systems or to make energy efficiency improvements
- Grants up to 25% of eligible project costs
- Loan guarantees up to 75% of eligible project costs
- Program closes on March 31, 2022
- https://www.rd.usda.gov/pa



EQIP Program

- Administered by NRCS
- Starts with an energy audit
- Farmers can then apply for funding to offset the costs of the purchase or installation of equipment recommended under the audit.
- https://www.nrcs.usda.gov/wps/portal/nrcs/mai n/pa/energy



Federal Tax Credits

- For renewables like solar, geothermal, and wind energy
- Amounts vary from year-to-year
- For projects after December 31, 2019, and before January 1, 2023, 26%.
- Farmers can then apply for funding to offset the costs of the purchase or installation of equipment recommended under the audit.
- www.irs.gov for up-to-date information





Act 129 Utility Rebates

- Prescribed reductions in electric consumption and peak demand to be met by those electric distribution companies (EDCs) with at least 100,000 customers...which they meet by incentivizing energy efficiency through rebates
- Regulated by the PUC (Pennsylvania Public Utility Commission)
 - 1. Duquesne Light Co.
 - 2. Metropolitan Edison Co. (Met-Ed)
 - 3. Pennsylvania Electric Co. (Penelec)
 - 4. Pennsylvania Power Co. (Penn Power)
 - 5. West Penn Power Co.
 - 6. PECO Energy Co.
 - 7. PPL Electric Utilities
 - *Rural Electric Cooperatives do not fall under Act 129

Sustainable Energy Funds (SEF's)

- There are 4 SEF's in Pennsylvania
- The funds are designed to promote the development of sustainable and renewable energy programs
- They often offer financing for energy projects
- https://www.puc.pa.gov/electricity/sustainableenergy-fund



Free Energy Assessments

- Performed by Pennsylvania Technical Assistance
 Program at Penn State with DEP State Energy
 Program funding from U.S. Department of Energy:
 - On-site energy assessment
 - Recommendations report
- We also promote USDA REDA (Renewable Energy Development Assistance)-funded assessments through the Emerging Technology Applications Center and St. Francis University.











Energy Programs Office

Questions?

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DEP Agriculture Energy Website:

www.dep.pa.gov/agricultureenergy

