

Recovering Value from Waste

Biogas generated from the storage of animal manure at livestock operations presents a range of challenges, from emitting unpleasant odors to contributing to climate change. But under certain conditions, methane and byproducts from manure and other organic wastes can present financially and environmentally beneficial opportunities.



AgSTAR is a voluntary program coordinated by EPA, in cooperation with USDA, that supports farmers and industry in the development and adoption of anaerobic digester systems—specialized manure management systems that capture biogas. These technologies are most effective at confined livestock facilities that handle manure as liquids and slurries. The captured biogas, which is 60 to 70 percent methane, can be used to generate electricity or replace fossil fuels for other energy needs.

“The digester helps us deal with the odor problem, and the food waste tipping fees and electricity payments generate positive cash flow for the farm.” —Connie Patterson, Patterson Farms, Inc., Auburn, NY

Benefits of Anaerobic Digester Use

Digester systems can provide direct benefits, such as:

- Additional farm revenue
- Renewable energy
- High-quality liquid fertilizer
- Manure fiber (bedding, potting soil, etc.)
- Odor reduction
- Enhanced public image
- Carbon credits
- Rural job growth
- Flexible nutrient management



To learn more about digesters and the environmental and financial opportunities they present for managing manure, visit the AgSTAR website at:

www.epa.gov/agstar



Office of Air and Radiation, Mail Code 6207J

www.epa.gov

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**Got manure?
Want energy?
We can help!**





How AgSTAR Helps

AgSTAR provides a wide variety of resources and tools for those interested in exploring the use of anaerobic digester systems.

To connect with these and other resources, to join the listserv, or to learn more about the design, funding, implementation, and benefits of anaerobic digester systems, visit the [AgSTAR website](http://www.epa.gov/agstar) at:

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Information for Action

AgSTAR offers a variety of resources and tools, including:

- **Outreach materials and project development tools** that help assess digester feasibility and address system design, selection, and use on a variety of levels—from answering basic questions to examining in-depth technical issues.
- **Funding resources** that help connect those seeking to implement anaerobic digester systems with the numerous loans, grants, incentives, and other funding options available.
- **Events** including workshops, a national conference, and site tours to bring together interested parties to share knowledge, information, and experiences.
- **Information on operating digesters**, including nationwide statistics as well as in-depth project profiles that provide details on digester system design, biogas use, and benefits realized.

“AgSTAR’s resources allowed me to make the most productive environmental and economical decision for my farm.”

—Brad Poltermann,
Poltermann Farms, Pecatonica, IL



- **Pre-feasibility analyses** for livestock facilities interested in exploring the possibilities of digester systems and biogas recovery.
- **Newsletters and listservs** that provide the latest news on anaerobic digester use and biogas recovery from across the country.
- **Access to experts** from government, academia, industry, and non-profit organizations that can assist with digester planning, implementation, and operation.



AgSTAR supports the Global Methane Initiative, which seeks to advance cost-effective, near-term adoption of biogas recovery and use as a clean energy alternative globally. For more information visit: www.globalmethane.org