



Ag-Grid Leading the Way in Dual Purpose Energy Projects

Ag-Grid Energy is currently in seven states. Four operational projects are producing electricity in Massachusetts and Connecticut. An electricity project is under construction in New York.

Two more electricity projects are in development in Pennsylvania and California.

Renewable natural gas (RNG) projects are in development in Michigan and Texas.

Partnering with Farmers – Ag-Grid Energy is fulfilling its dual purpose to create energy with positive environmental impacts and to increase the economic viability of family-owned dairy farms by reducing costs and sharing profits. Our success to date demonstrates that through partnerships with dairy farmers, we can build anaerobic digesters that recycle cow manure to produce renewable electricity and RNG.

Recycling Food Waste – Our digesters are generating energy from a mixture of manure and food waste collected within a 50-mile radius of the dairy farm. With the support of local food waste generators and grease haulers, we are diverting organic waste from landfills or incinerators and recycling it. This reduces the burden on local municipalities to enforce safe disposal of food waste in compliance with increasingly strict state environmental laws.

Providing Complete Solutions – Since 2016, Ag-Grid Energy has been all about “Not Letting Waste Go to Waste!” Ag-Grid does this by bringing together all of the pieces involved in developing a digester facility: design, engineering, permitting, construction and operation. We partner with utilities for interconnection to the electric grid. We partner with NRCS, USDA and Department of Environmental Protection to create comprehensive nutrient management plans.

Power Backup Potential – In the future, our digesters could potentially add a micro-grid that would enable them to provide temporary power to the area in case of a disruptive weather or wildfire event.



Two digesters are under construction at Lent Hill Dairy Farm in NY.

Updates on Existing Projects

Rockwood Farm in Granville, MA has been selling electricity to 10 nearby municipalities since 2018. The farm's 450 KW digester system recycles manure from 700 cows as well as 25,000 tons of food waste per year.

Belden Farm in North Hatfield, MA has been selling electricity to four nearby municipalities since June 2019. The farm's 300 KW digester system recycles manure from 330 cows as well as 20,000 tons of food waste per year.

Fort Hill Farm in Thompson, CT became the first digester in Connecticut to produce electricity in January 2021. Two nearby municipalities are purchasing virtual net metering credits. The farm's 550 KW digester system recycles manure from 450 cows as well as 10,000 tons of food waste per year.

Hytone Farm in Coventry, CT became operational in March 2023. This is our first sand-friendly project, enabling the farm to continue using sand as cow bedding. One nearby municipality is purchasing all the virtual net metering credits. The farm's 550 KW digester system recycles manure from 375 cows as well as food waste from the area.

Lent Hill Dairy Farm in Cohocton, NY is under construction and expected to become operational this fall. The farm's two-digester system will produce 8 million kWhs of electricity by recycling manure from 4,000 cows as well as waste from local food manufacturers.

Meadowbrook Dairy in Lake Odessa, MI has a large RNG project in development with 400 cows. It is expected to be operational in late 2024.

Sen. Murphy Calls Hytone ‘Win, Win, Win’

Ag-Grid Energy CEO Rashi Akki and Hytone Farm owner Greg Peracchio (pictured) led a tour for U.S. Sen. Chris Murphy (D-CT) during his August visit to learn about the farm’s anaerobic digester. The digester project, which received about \$5M in state funding, reduces methane emissions as it turns manure and food waste into renewable electricity. **“It’s really a work of magic,” the senator said, “This is really a win, win, win project ... It’s providing a lot of benefits to the farm and to the state.”**

Source: *The Chronicle*,
thechronicle.com



What Should a Dairy Farmer Expect from a Partnership with Ag-Grid Energy?

Ag-Grid Energy seeks to secure the future of family-owned dairy farms through partnerships with farm owners. Our digester projects enable dairies to add and diversify revenue while creating renewable energy for their own use and for sale. There are other benefits as well.

Increased Financial Stability – Energy prices continue to rise and milk prices continue to fluctuate. Farmers need an alternate source of income to minimize those impacts. Ag-Grid optimizes revenues from the digester project and shares profits with the dairy farm. In addition, the farm saves money by using some energy from the digester for its own electricity and heating needs.

Odor Reduction – A digester system helps reduce on-site odors by removing sulfur during the digestion process. As a result, the effluent digestate material has no odor.

Nutrient Management – Farms can utilize the nutrient-rich digested solids as fertilizer for organic farming. The digestate retains all the nutrients (NPK) from the manure because the digester only uses the carbon. If there is a need for the farm to bed cows in digested solids, the project could include a solids separator.

Project Scope – A dairy farmer would expect to lease about 10 acres for the digester, engine, sulfur scrubber, and manure/food waste pits. Ag-Grid will build manure receiving tanks, food waste receiving tanks, one-to-three digesters based on manure volume and food waste availability, a CHP system to generate renewable electricity and heat to maintain digester temperature, and an electricity interconnection to deliver electricity to the grid. Ag-Grid also will evaluate access to a natural gas pipeline to determine if it makes sense to upgrade the biogas to RNG.

Why Ag-Grid Energy Is Sustainable

UGI Corporation, a Fortune 500 energy company, acquired a 33% stake in Ag-Grid in 2022. Through its wholly-owned subsidiary, UGI Energy Services, Ag-Grid has an ongoing source of capital and other valuable support for our biogas projects.

Live Oak Bank, our financing partner, is the largest SBA and USDA lender. The bank has tremendous resources focused solely on renewable energy projects such as anaerobic digesters.

Martin Construction Resource, our digester construction partner, has been building digesters for over 30 years. Martin continues to improve the design of its digester systems to maximize successful operation.

Contacts

Rashi Akki
Founder and CEO

rashi.akki@aggridenergy.com
610-574-8737

Umesh Akki
Chief Operating Officer

umesh.akki@aggridenergy.com
610-883-6562

Abu Akki
Director Business Development

abu.akki@aggridenergy.com
484-885-6309

Ken Verhelle
Director Food Waste Strategy
& Operations

ken.verhelle@aggridenergy.com
603-770-3387

Sherry Cotton
Manager Food Waste Logistics

sherry.cotton@aggridenergy.com
603-748-5810