



<b>Location</b>	New Liberty, Iowa, USA
<b>Waste type</b>	Cattle manure, corn cobs
<b>Reactor volume</b>	2 x 3,500 m <sup>3</sup> (2 x 933,000 gallons)
<b>Electrical capacity</b>	1,600 kW <sub>e</sub>
<b>Start-up</b>	July 10 <sup>th</sup> , 2013
<b>Client</b>	AgriReNew, LLC

AgriReNew is a company located in New Liberty (Iowa, USA) which produces biogas with the help of two wet digesters, from a mixture of cattle manure and corn cobs, originating from the operations of their sister company, Sievers Family Farms, and seed corn producers nearby.

OWS co-developed the project with Sievers Family Farms, as part of the expansion to their beef feedlot operation. OWS assisted the farm with USDA REAP and US Treasury Section 1603 grant applications, as well as Iowa Renewable Energy Tax Credits and their power purchase agreement. OWS is providing biochemical engineering and consulting during biogas plant construction, commissioning and ongoing operations. OWS is responsible for the biological start-up and follow-up of the biogas installation. In addition, OWS was also involved in the determination of the optimal feeding substrate mixture.

During Phase 1, the farm has expanded to 2,400 head of cattle and a biogas plant comprised of two 3,500 m<sup>3</sup> (933,000 gallons) digesters will process the manure and bedding materials, along with a small amount of off-farm substrates. In addition to electricity, the farm will use waste heat for a variety of on-farm purposes. Phase 1 start-up started in July 2013. Phase 2, which will increase the herd to 4,800 head and two additional digesters, is planned for 2015.