An anaerobic digester (AD) is a gas-tight container in which microbes convert manure and other types of compatible organic material such as waste silage or food wastes into biogas. The biogas can be used directly for heating purposes to offset propane use on the farm, or made into electricity. The digested materials are stabilized, with much less pathogens and odor than the original manure, yet retain their nutrients and value as a soil conditioner and fertilizer. Some producers reuse digested solids or recovered sand as bedding materials greatly reducing their production and bedding disposal costs.

Workshops Exploring Anaerobic Digester Technology on Small Farms

"Improving options for North Country producers!"

Cornell Cooperative Extension St. Lawrence County

"A Feasibility Study"

Clarkson University

USDA

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.
Biogas from digesters can be used like natural gas—a heat source or even to power a generator to produce electricity. This could lower farm power costs.

Producers may receive economic benefits through charging tipping fees when collecting manure or other compatible organic wastes to co-digest with their manure.

Economic Benefits

On Farm Benefits

Lower odors than fresh, lagooned, or stored manure can cut down on odor complaints from neighbors and during manure application.

Kills pathogens that may be present in manure, reducing the risks associated with manure handling and application in and around the farm environment.

Reduces greenhouse gas emissions from dairy farms; it is a best management practice for manure and a focus of the US EPA’s AgSTAR program.

Digested manure retains its nutrient value as a fertilizer for crops.