

Case Study: Grassland



Family-owned since 1904 with roots in the Swiss Alps going back generations, Wisconsin-based Grassland Dairy Products, Inc. is a leading sustainable producer of high-quality butter products and dairy ingredients. It is the world's largest family-owned buttery.

At their Greenwood, WI, facility they process up to 6 million pounds of milk per day, sending 500,000 gallons of wastewater per day to a custom-engineered CFR retrofit of its existing wastewater treatment plant with a membrane bio-reactor (MBR) system. Low and high-strength streams are segregated to optimize aerobic and anaerobic digestion performance.

The CFR upgrade has enabled Grassland to re-use up to 80,000 gallons of water a day for steam generation and cooling tower purposes. The anaerobically produced biogas fuels a generator that produces 9,000 kW per day of electricity, saving nearly \$230,000 a year in energy costs.

Overall, the company is saving up to \$150,000 per month on costs they would otherwise incur without the CFR MBR wastewater treatment plant. The return on investment is estimated to be less than four years.