



DREAM WINDS DAIRY

DAIRY FARM
COOPERSVILLE, MI | CASE STUDY

Dream Winds Dairy has successfully implemented a 100.80kW flush roof-mounted solar array. This initiative has resulted in \$18,022 of annual cost savings.

AT A GLANCE

CHALLENGES

- Permitting & Regulations
- Electrical Capacity & Interconnection
- Relocation & Upgrade of Main Electrical Service
- Biosecurity

BENEFITS

- Significant Reduction in Energy Costs
- Protection Against Rising Utility Rates
- Strong Daytime Energy Alignment
- Productive Use of Existing Space

"One thing I really tried to do at the early stage of our business, was try to lock in our costs as much as possible. As the springtime came out, we got to see our power usage actually continue to drop month after month on our utility bill, which was really exciting. Every month, I pay less and less, even though we're using more and more power during that time of year."

PAUL WINDEMULLER

Owner of Dream Winds Dairy



Scan the QR Code to learn more about Dream Winds Dairy Solar Success Story!

OBJECTIVES

Dream Winds Dairy is a first generation dairy farm built from the ground up, showing that it is still possible to start a farm from scratch today. Without growing up in agriculture, the family took a leap of faith, learning the industry through hard work, experience, and a willingness to adapt along the way. As they continued building the farm, they focused on finding better ways to improve efficiency and create a successful modern operation through innovative technologies. With the farm continuing to grow, locking in predictable energy costs became an important next step, making solar energy a natural fit for their operation.

SOLUTIONS

Paul Windemuller, owner of Dream Winds Dairy, noted that one of the most unpredictable and consistently rising expenses was electricity, which increased year after year with little control or clarity around future costs. With a strong reputation in the agricultural industry, Harvest Solar designed and installed a system built with high quality materials to ensure reliable performance without disrupting daily farm operations or the animals below. The farm was also a strong candidate for solar since most of its energy use occurs during the day, aligning well with peak solar production hours. With an ideal roof structure for solar, the system helps improve long term efficiency and supports the farm's continued growth and sustainability.

FAST FORWARD

Estimated kWh Generation

This solar array has a nameplate capacity of 100.80kWdc and is estimated to generate approximately 133,219kWh per year.

Estimated Savings

The projected savings on utility bills over 30 years from this solar array amount to \$2,259,402.

Estimated CO2 Offset

The solar array's estimated CO2 offset is equal to the emissions from burning 2,865,354 pounds of coal.

Estimated Tax Incentives, Rebates, etc.

Dream Winds Dairy has factored in a 30% Federal Investment Tax Credit for this project to reduce the estimated ROI to less than 2.9 years.