



SIETSEMA FARMS

**TURKEY FARM
ALLENDALE, MI | CASE STUDY**

Sietsema Farms has successfully implemented a 149.76kW ground-mounted solar array. This initiative has resulted in \$28,189 of annual cost savings.

AT A GLANCE

CHALLENGES

- Initial Investment
- Space Restrictions
- Permitting & Regulations
- Weather & Location Variability

BENEFITS

- Hedge operating costs against rising electric rates
- Tax Incentives
- USDA REAP Grant
- Self-Sustained Food Production
- Reduced Electric Consumption from the Grid
- Minimal Management Required
- Meets long-term sustainability goals

"The process of working with Harvest Solar has been very impressive, the team members that they have facilitate everything from reviewing the portfolio of putting the solar on the farm, the review of the utility costs, and the offsets to the different sizes of the solar systems. And then, working with Harvest Solar has been a tremendous benefit in that they bring the whole package together."

RICK SIETSEMA

Owner of Sietsema Farms



**Scan the QR Code
to learn more
about Sietsema
Farms' Solar
Success Story!**

OBJECTIVES

Sietsema Farms has chosen to embrace solar energy as a step toward greater sustainability for the future. As a leading turkey farm raising over 100,000 turkeys annually, they are seeking ways to reduce their environmental impact and make their operations more efficient. Now in its 3rd generation, the farm is committed to ensuring its legacy continues through the 4th and 5th generations, with solar energy playing a vital role in this goal. Solar power helps offset the farm's energy use, delivering numerous benefits to its daily operations.

SOLUTIONS

Ken Zebarah began by carefully reviewing the farm's utility expenses to determine the ideal system size to offset their energy costs. The result was a 149.76kW ground-mounted solar array, which now balances the farm's energy use. With lower costs and solar power in place, the farm is seeing strong returns. This shift allows them to significantly reduce reliance on the grid and produce energy on-site, helping to support their food production and self-sufficiency. This strategy aligns with the farm's long-term vision for sustainability, ensuring they remain competitive for the next 35 years and set future generations up for success.

FAST FORWARD

Estimated kWh Generation

This solar array has a nameplate capacity of 149.76kWdc and is estimated to generate approximately 202,006kWh per year.

Estimated Savings

The projected savings on utility bills over 30 years from this solar array amount to \$1,015,112.

Estimated CO2 Offset

The solar array's estimated CO2 offset is equal to the emissions from burning 3,538,515 pounds of coal.

Estimated Tax Incentives, Rebates, etc.

Sietsema Farms has factored in a 30% Federal Investment Tax Credit and awarded the USDA REAP Grant for this project to reduce the estimated ROI to less than 3 years.