



harvest
solar



RAVE ASSOCIATES

BEER & WINE DISTRIBUTOR
ANN ARBOR, MI | CASE STUDY

Rave Associates has successfully implemented a 198.8kW roof-mounted solar array. The initiative has resulted in \$28,038 of annual cost savings.

AT A GLANCE

CHALLENGES

- Initial Capital Investment
- Building Structural Loads
- Local Zoning
- Understanding Future Growth

BENEFITS

- Energy Bill Savings
- Long-Term Stability
- Tax Incentives
- Depreciation Value
- Innovative Industry Leader

OBJECTIVES

Rave Associates has proudly served southeastern Michigan for over 40 years, establishing itself as a leader in beer and wine distribution. Their facility demands significant energy, particularly for large cold storage rooms that ensure product freshness. Committed to sustainability and operational efficiency, they saw commercial solar as the ideal solution to power their business with clean, renewable energy while cutting down on unpredictable overhead costs in Michigan. Their south-facing roof provides an optimal spot for solar panels, ensuring maximum energy generation without consuming additional space.

SOLUTIONS

Christian Groesbeck performed a comprehensive analysis of the building's energy usage and rate structure to evaluate the financial advantages of onsite solar. Working closely with Rave Associates' leadership team, they compared cost benefits across various design options, ultimately selecting a flush-mounted, non-penetrating 198.8kWdc array. This system is designed to optimize Level 2 interconnection with DTE, offsetting majority of the building's annual energy consumption. Additionally, the electrical infrastructure was upsized to support future system expansion as Rave Associates continues to grow.

FAST FORWARD

Estimated kWh Generation

This solar array has a nameplate capacity of 198.8kWdc and is estimated to generate approximately 224,740 kWh per year.

Estimated Savings

The projected savings on utility bills over 30 years from this solar array amount to \$1,200,428.

Estimated CO2 Offset

The solar array's estimated CO2 offset is equivalent to the emissions from burning 4,833,858 pounds of coal.

Estimated Tax Incentives, Rebates, etc.

Rave Associates has factored in a 30% Federal Investment Tax Credit and Accelerated Depreciation for this project to reduce the ROI to 7.3 years.