





CAPITAL STEEL & WIRE

STEEL & WIRE MANUFACTURING FACILITY MASON, MI | CASE STUDY

Through the successful implementation of a 99.54 kW ground-mounted solar array, Capital Steel & Wire has achieved annual savings of \$14,751 and was awarded the USDA REAP Grant.

AT A GLANCE

CHALLENGES

- Initial Capital Investment
- Zoning & Building Codes
- Utility Upgrades
- Local & State Regulations

BENEFITS

- Reduced Utility Expenses
- Clean, Safe, & Affordable
- Performance Monitoring
- Energy Independence
- Reduce Carbon Emissions
- Hedge Against Future Electric Rate Increases

"Harvest Solar did a really good job at evaluating our energy needs on an annual basis and designing a system that would work for us. They took a look at grants that were available to our operation in addition to tax incentives in combining that in a cost performance that made sense to us and showing us our exact return on investment over a period of years."

FRED RENDER

Capital Steel & Wire Director



Scan the QR Code to learn more about Capital Steel's Solar Success Story!

OBJECTIVES

The energy demands of Capital Steel & Wire's manufacturing facilities are high, with wiring, bar processing, and heat treating requiring considerable electricity for efficient daily operations. Long-term fluctuations in energy prices can impact the business's success and ROI, emphasizing the need for energy independence and a reduced carbon footprint.

SOLUTIONS

Harvest Solar conducted a detailed energy analysis of Capital Steel & Wire Manufacturing's facility. Led by solar expert Ken Zebarah, the team evaluated the company's energy consumption patterns, peak demand periods, and overall usage. This analysis provided a clear understanding of the energy needs and the potential savings from a solar installation. The results included a customized solar solution with a 99.54 kW ground mount system that was placed for optimal efficiency. The system's location allows room for potential future expansion of the facility and adhere to strict zoning requirements. The project was implemented by Harvest Solar's skilled professionals, who managed the entire installation process from permitting to construction. Post-installation, Harvest Solar provides ongoing performance monitoring and service to ensure the system operates at full efficiency.

FAST FORWARD

Estimated kWh Generation

This solar array has a nameplate capacity of 99.33 kWdc and is estimated to generate approximately 130,926 kWh per year.

Estimated Savings

The projected savings on utility bills over 30 years from this solar array amount to \$738,801.

Estimated CO2 Offset

The solar array's estimated CO2 offset is equivalent to the emissions from burning 2,816,045 pounds of coal.

Estimated Tax Incentives, Rebates, etc.

Capital Steel & Wire has factored in a 26% Federal Investment Tax Credit for this project to reduce the ROI to 7.2 years.

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