



harvest  
solar



## FOUR STAR GREENHOUSE FAMILY-OWNED GREENHOUSE CARLETON, MI | CASE STUDY

Four Star Greenhouse has successfully implemented 2 ground-mounted solar arrays in total of 398kW. This initiative has resulted in \$74,784 of annual cost savings and awarded the USDA REAP Grant.

### AT A GLANCE

#### CHALLENGES

- High Initial Investment
- Permitting & Regulations
- Season Variability
- Underground Obstructions

#### BENEFITS

- Tax Benefits & Grants
- Significant Cost Savings
- Energy Independence
- Increased Profit Margins
- Environmental Impact
- Optimizing Unused Ground Space

*"We chose Harvest Solar for our Solar project because of their proven expertise in delivering reliable, efficient renewable energy solutions. Their commitment to sustainability and tailored customer service made them the ideal partner for our green initiative."*

#### DAN FOSTER

**Senior Manager of Growing Operations  
at Four Star Greenhouse**



**Scan the QR Code  
to learn more  
about Four Star  
Greenhouse's  
Solar Success  
Story!**

### OBJECTIVES

Four Star Greenhouse, a family-owned and operated business, spans nearly 30 acres of greenhouses and brings over 40 years of expertise in plant growth. Driven by their mission to help customers save money and boost profits, they set internal goals aligned with those same principles. With the significant energy demands of greenhouse heating, cooling, and lighting, solar energy became the ideal solution to cut utility costs and support the ongoing expansion of their facilities.

### SOLUTIONS

Four Star Greenhouse recognized the need for an alternative energy solution that could support their growth while reducing long-term costs. With their high energy demands and commitment to sustainable goals, they connected with Ken Zebarah at Harvest Solar to explore what a solar energy project could mean for their business. Ken recommended a combined 398kW for the two ground-mounted solar arrays, designed to power their operations and boost profitability, enabling them to continue serving their communities and fulfill their dream of running a successful, family-owned greenhouse. Their industry expertise made them value a trusted partner, and Harvest Solar's commitment to quality made it the perfect match for successful solar projects.

### FAST FORWARD

#### Estimated kWh Generation

This solar array has a nameplate capacity of 398kWdc and is estimated to generate approximately 555,602MWh per year.

#### Estimated Savings

The projected savings on utility bills over 30 years from these solar arrays amount to \$4,558,642.

#### Estimated CO2 Offset

The solar array's estimated CO2 offset is equal to the emissions from burning 11,950,270 pounds of coal.

#### Estimated Tax Incentives, Rebates, etc.

Four Star Greenhouse has factored in a 30% Federal Investment Tax Credit and awarded the USDA REAP Grant for both projects to reduce the ROI to approximately 2.3 years.