



As the owner of H&S Welding, Heating, A/C, and Geothermal, Jason, already knew the benefits of geothermal heating and cooling but wanted to help his customers understand the benefits of combining geothermal with solar. Previously installing a geothermal system in his own home, he was able to couple his system with a solar PV array, to help bring his home as close to net zero as possible. Since geothermal reduces heating and cooling energy usage and utility costs, Jason was able to cover the remaining energy load through the use of solar.

INSTALLATION DETAILS

Previously installing a geothermal system with a horizontal loop, Jason worked with Enertech's Design Team to create a grid-tied system that would supply full coverage energy usage for his personal home. With excess energy being produced, he is able to take advantage of his net-metering policy with his utility company. Based on past years of energy usage, the array was designed to produce 120% of that usage, giving him comfort for year-round energy production from his array. This system is a 48 module, south-facing horizontal ground mount with an array size of 15.2 AC and 370W modules.



St. Augusta Home

PROJECT DETAILS

Building Size:	3,600 sq. ft. Rambler Style House and 900 sq. ft. Garage
Solar Equipment:	48 – AC370 Modules 2 - SolarEdge Single Phase 7.6 Inverters 48 - Optimizers
Installation Date:	12/19/2019
Contractor / Installer:	H&S Welding, Heating, A/C, & Geothermal Website
Electrician:	Calo Electric, 9091 220th St., St. Cloud, MN. Phone: (320) 291 – 5475
Utility Company:	Sterns Electric Website
Savings:	Through the combination of a geothermal heating and cooling system and a solar PV array, this home has reached net zero* status. Monthly Utility Costs with Geo: \$220 Monthly Utility Costs with Geo + Solar: \$0* with \$100 credit from utility company The payback of the solar PV system is estimated to be around 5 years



CONSTRUCTION TYPE
Retrofit



SOLAR PANELS
48 Ground Mount



INVERTERS
2 Single Phase 7.6



POWER PRODUCTION
15.2 kW

*Other than connection fees, and other fees associated with the utility company

