

All-Electric in Trenton

Trenton, IL



Whether it's entertaining guests, swimming in their heated pool with their boys, or doing laundry, the Segers prioritize efficiency, clean energy, and reliability for their daily home needs. Being no stranger to renewable technology, they knew they wanted to include a geothermal heating, cooling, and hot water system in their all-electric home. Not initially realizing geothermal's full potential and extensive benefits, the Segers were blown away by their low monthly utility costs.

Wanting to save even more, they installed a solar PV system to offset their home's monthly energy consumption. By taking the proper steps of creating a tightly sealed home, making other energy-efficient upgrades, tracking their energy consumption, and even doing laundry and dishes during their solar array's peak efficiency times, they were able to maximize their savings on monthly utility bills.


This all-electric home features a 10KW DC solar PV ground mount and a 4-ton two-stage vertical packaged Compass XT geothermal unit with two water heaters stored in their fully finished basement.


They worked closely with EnerTech to ensure that they maximized their home efficiency with properly design systems and almost full solar coverage of their energy consumption. Additionally, the Segers installed LED lightbulbs, passive French doors, and window tinting on their front-facing windows to help energy savings. Initially, when they built their home, they made sure they included 2 x 6 exterior walls for their home and garage for a higher R-value to help keep the heat in the home, black tar paint for nail holes, weather proofing electrical boxes with extra insulation and foam, low ease windows, and insulated garage door panels.

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PROJECT DETAILS

Building Size:	2198 sq. ft.
Loop Type:	Vertical
Geothermal Equipment:	4-ton GeoComfort Compass XT Two-Stage Vertical Packaged
Solar Equipment:	38 Modules (Q Cells 390) – Ground Mount Inverter: Fronius Primo
Contractor / Installer:	Joe's Electric Kyle Seger Jarrod Leckrone
Savings:	Monthly Utility Bill: Close to \$0 per month* Lifetime Energy Production: 36.00 MWh Over 95% solar coverage *Monthly bill does not include utility charges/fees

 CONSTRUCTION TYPE
New Construction

 SYSTEM TYPE
Radiant & Forced Air

 LOOP TYPE
Vertical

 POWER PRODUCTION
10 kW

