

Geo-Newsletter April 2024









Innovative Energy Systems had a booth at the annual Chisago Lakes Showcase. It was great for the IE team to chat with so many inquiring people, and to explain the energy efficiency, long-term cost savings, and the environmental impact of installing a geothermal heat pump. It is important to keep relaying the importance of this technology and to help spread the word, which will in turn "reduce the world's carbon footprint one home at a time."

-Innovative Energy's Mission Statement

Conferences & Trainings

Jerry and Jackson Waltman attended the Minnesota Geothermal Heat Pump Association (MNGHPA) conference this past March. This conference included guest speakers Will Lange from Water Furnace, Paul Hanson from Connexus Energy, Brian Urlaub from Salas O' Brien, and many others. The conference allowed the Innovative Energy team to network with industry leaders and learn new techniques on how to improve the installation of a geothermal heat pump. Attending this conference also allowed Innovative Energy to earn education credits for the *Master Installer's Certificate*.





Jerry and Jackson Waltman attending the Minnesota Geothermal Heat Pump Conference and exploring Connexus Energy's immense geothermal system to provide all of the buildings heating and cooling needs.

Along with the geothermal conference, Jerry and Jackson also attended a training on a new emerging geothermal heat pump. This **Ecoforest** heat pump was originally created in 2012 in Spain collaborating with the University of Vigo. It is the first Spanish manufactured ground source heat pump and the first European manufacturer to incorporate modulating compressors and 4-way valves for heating, cooling, and domestic hot water. This Ecoforest heat pump is one of the very first variable speed water-to-water geothermal heat pumps. It is very exciting technology, and Innovative Energy is thrilled to see how they can incorporate this new technology!



A sneak peek at the new Ecoforest variable speed water-to-water geothermal heat pump. The sleek design and new variable speed technology will surely boost the product into the geothermal heat pump market.



The Innovative Energy team will be presenting for the second time at the 33rd Annual Energy Fair! The Energy Fair is put on by the Midwest Renewable Energy Association (MREA), and it's a single day, consumer-focused event about clean energy, sustainable living, and renewable technology. Innovative Energy will present a 50-minute workshop on geothermal technology.

For more information about the fair, go to the MREA website and click on Energy Fair under the events tab.

https://mreaevents.cventevents.com/event/08c874ee-f65d-49a1-8ca9-0b82fa391d86/summary



Jovi, Waltman's black lab, hanging out in the work truck at the IE shop

Geothermal Quick Facts?

- 1. The U.S. Department of Energy estimates that ground-source heat pumps reduce energy consumption and emissions by up to 44% compared to air-source heat pumps and <u>72%</u> compared to electric heating and standard air-conditioning equipment.
- 2. According to Hydron Module, they estimate that every geothermal heat pump they install will increase their homeowner's value of the home by up to \$28,000! Another study published in the journal Nature Energy, estimated a heat pump can increase the home's value by \$10,400-\$17,000!
- **3.** One-fifth of all homes in Sweden are heated with a geothermal heating/cooling system. Sweden is one of the coldest countries, and every year about 27,000 geothermal systems are installed into residential homes.
- **4.** Geothermal is one of the oldest types of heating. Geothermal was used as a spa treatment and heating in the third century BCE in the Qin Dynasty <u>over 2,000 years ago!</u>

 Romans also used geothermal hot springs for underfloor heating in ancient Britain.

Quick Fact's Sources

- 1) <a href="https://www.energy.gov/energysaver/choosing-and-installing-geothermal-heat-pump-system#:"text=Benefits%20of%20Geothermal%20Heat%20Pump%20Systems&text=According%20to%20the%20EPA%2C%20geothermal,with%20standard%20air%2Dconditioning%20equipment."
- 2) A. https://blog.hydronmodule.com/does-geothermal-increase-your-homes-value#:~:text=Studies%20show%20that%20for%20every,%2428%2C840%20in%20the%20current%20market.
- B. https://www.arlinghausair.com/does-a-heat-pump-increase-home-value-and-energy-savings/#:~:text=The%20Resale%20Value%20of%20a%20Home%20With%20a%20Heat%20Pump&text=In%20a%20study%20published%20in,with%20a%20new%20heat%20pump.
- 3) https://dandelionenergy.com/8-mind-blowing-facts-about-geothermal-heating-and-cooling
- 4) https://dandelionenergy.com/8-mind-blowing-facts-about-geothermal-heating-and-cooling