Electrification in her own words:

A HYBRID HOME IN GOLDEN VALLEY

When Jess Curtes and her husband, Jeff, bought their house in Golden Valley in 2018, almost all the appliances used natural gas. Jess shares her family's experience electrifying their largest gas appliances to create a hybrid electric home.

"Making the shift to electrification is really important. Our main driver was doing our part for the environment and the climate crisis. Cost savings and not being reliant on fluctuating gas prices were another reason why we got an EV and a heat pump."

"We started making the shift to electric by installing a [ducted] heat pump with a gas furnace as the backup. It's really comfortable, and we've been impressed with how effective it is in this climate. A year or so later, we installed a mini-split heat pump in the garage which has been really nice. We originally got that to melt snow off the cars, but then we found that it was also effective in the summer for cooling. We were able to spend time in there during the pandemic when everyone was home."

"We also were interested in a heat pump water heater as an electrification measure, but one of the concerns we had was, 'is it going to be hot enough, and is it going to run long enough?' On the one hand there is the conversation about how we shouldn't be taking long hot showers, but on the other hand it's nice to know that you can. Once we established that a heat pump water heater could supply enough hot water to not run out, we were really excited by that. We installed it and have never run out of hot water. It's quiet and it's comfortable. It's something you don't notice, which makes it fantastic."

House Details:

- Year built: Built in 1959
- Size: 3,500 sq. ft.
- Location: Golden Valley, MN
- Utility: Xcel Energy for electricity



Jess & dog, Atlas, next to their mini-split heat pump condenser

Projects:





"We were interested in getting rooftop solar panels, but we have big oak trees in the back so our roof wasn't ideal. Our neighbors told us about their community solar garden subscription, and we realized it made more sense for us to do that. We subscribed and now we source all our electricity from solar. We save money on our bill, help encourage more solar gardens to be built, and feel good knowing we are part of the solar movement."

"Thinking about our next project, we would really like to have an induction stove. We've looked into it. We have a gas stove, and we are hearing more and more that gas stoves leak pollutants into the house, even when they are turned off. Avoiding breathing methane in our home is a big reason we want an induction stove."



Equipment Details:

Air Source Heat Pump (house)

- Size: 3 ton
- Brand: Bryant
- Model: Evolution
 Extreme 28OA
- Switchover Temp: 20°-28° F.

Furnace and Air Handler

- Size: 80,000 btu/hr
- Brand: Bryant
- Model: Evolution 987M
- Variable speed air handler

Air Source Heat Pump with mini-split (garage)

- Size: 1.5 ton
- Brand: Mitsubishi
- Model: M-Series Hyper Heat
- 1 mini-split head

Heat Pump Water Heater

- Size: 80 gal
- Brand: AO Smith



Heat pump water heater



Dual fuel furnace and heat pump system





Questions about switching to all electric appliances at home?

Contact an Electrify Everything Advisor: 612-244-2486, info@electrifyeverythingmn.org



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