

Electrification in his own words:

# GOING ALL ELECTRIC IN MINNEAPOLIS

What's it like to create an all-electric home? Chris Martin shares his family's story.

"My wife and I have had several conversations about how we could make our lives more environmentally friendly. We ended up doing a lot of home upgrades in two bursts. In 2020, we installed a new electric panel, induction range, air source heat pump, and solar panels. After the 2020 installations, the goal became 'just stop burning stuff' and complete the switch from gas to electricity. In 2022, we added a heat pump water heater and dryer as well as insulation. At times, it was exhausting and difficult, but we're happy with the result."

"As for utility costs, they changed from \$160 per month on average to around \$100-\$110. We are on Xcel Energy's electric heating rate, which is less in winter, and Windsource, which adds a little extra cost. In winter so far, our total utility costs have been similar to those when we had the gas furnace, maybe ever so slightly higher. But we get the benefit in spring, summer, and fall of cheap cooling and net metering from the solar panels."

"The heat pump provides heating to the home until it reaches zero degrees outside, then it switches over to the back-up electric resistance heat. The whole system keeps us comfortable. The only issue we had was that ice built up around the condenser in the winter, so we had to put it on a higher stand."

"We learned we shouldn't get too attached to a company or their rep or installers. In the end we have to live with the product, and we won't hear from them again once the item is installed."

## House Details:

- Year built: 1949
- Size: 1,648 sq ft
- Location: Minneapolis, MN
- Utility: Xcel Energy for electricity



Outdoor unit of the air source heat pump

## Projects:

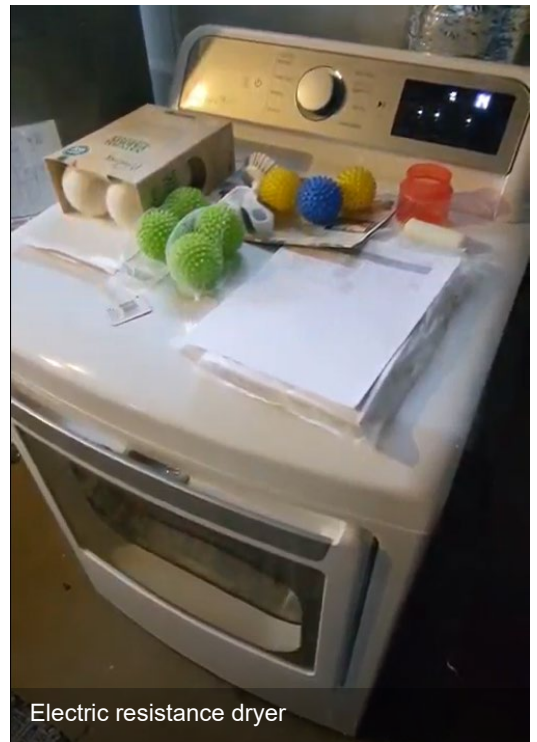




Air handler for the air source heat pump



Heat pump water heater



Electric resistance dryer

## Equipment Details:

- Air source heat pump
  - Ducted system two stage electric resistance backup heater at 5 and 10kW
  - Cold climate rated
  - Size: 3 tons
  - Brand: Bosch
- Electric resistance dryer
  - Size: 7.3 ft<sup>3</sup>
  - ENERGY STAR
- Heat pump water heater
  - Size: 50 gallon
  - Brand: Rheem
- Induction stove
  - Brand: Frigidaire
- Service panel
  - 200Amp service
  - Installed 240V outlets for the stove and dryer
- Solar array
  - 15 panels
  - Size: 5.4 kW
- Thermostat
  - Ecobee thermostat helps control and track energy usage
- Insulation and air sealing



Induction stove



Questions about switching to all electric appliances at home?

Contact an Electrify Everything Advisor:  
612-244-2486, [info@electrifyeverythingmn.org](mailto:info@electrifyeverythingmn.org)



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