

November 15, 2022

Chairs Lieber and Marsh, and members of the REbuilding Task Force,

I live in a 4-plex in NW Portland. About 10 years ago, we owners did some remodeling. We upgraded windows and insulation and installed solar panels. The solar panels for my unit generate more than my annual electrical load. We also replaced our water heater with an electric heat-pump water heater, and we have an electric washer and dryer. A couple of years ago, I installed a 240-V outlet to charge my little electric Fiat.

We want to go further, though. We're really motivated to complete going electric by replacing our gas furnaces and cook stoves. We want to clean up our own indoor air quality and reduce our contribution to climate change and outdoor air pollution, but our biggest motivation is to increase our safety and that of our neighbors. We're worried about what would happen in the event of an earthquake or fire. We live just a few blocks from the big gas leak explosion that took place in NW Portland in 2016.

So, a couple of months ago, I called a contractor to get an estimate for replacing our gas furnaces and cook stoves with electric. The estimate for the electrical work that will be needed for our 4-plex is \$35,000. That is just the electrical work. Appliance costs and individual circuits for the stoves and heat pumps are beyond that.

The cost is that great because our house was built in the 1920's. It doesn't even have the minimum 100 amps per unit required by current code, and complete upgrades of our electrical panels and wiring will be required before we can begin to install new electrical appliances.

Our experience leads me to three suggestions for your important work.

1. For many older residences, the electrical upgrades will be the most expensive part of a conversion from gas to modern electric appliances. According to the National Association of Homebuilders, 38% of the US housing stock was built before 1969, before 100 amps per unit was generally required. The Inflation Reduction Act includes rebates of \$4,000 for electrical panel upgrades and up to \$2,500 to repair or replace wiring. You should increase the financial incentives in Oregon to make these conversions affordable in older homes.
2. The earliest appointment I could get after calling a contractor for an estimate was two months later. If I can schedule this work, I'll likely wait another six months or more before it can be done. We don't have nearly enough electricians and contractors. We need to transition rapidly, and we'll need many more trained people. Your recommendations should include significant resources to encourage work force training and apprenticeships.

3. It is much cheaper and better to build modern electrical homes in the first place. Begin requiring efficient electrical appliances in new construction now so that homeowners or taxpayers don't need to pay for more expensive retrofits that will be desired 10 or 20 years from now, and so that new home buyers or renters can benefit right away from living in cleaner, safer homes.

Thank you for the opportunity to tell you about my experiences.

Linda Craig
NW Portland