

Co-chairs Lieber and Marsh, members of the Resilient Efficient Task Force.

My name is Jane Stackhouse and I live in Portland. I am a member of the steering committee for the Metro Climate Action Team (MCAT) and the owner of a 1925 duplex that is now fully clean electric on the Blue Sky program.

A lot of what this committee is considering for policies on homes and buildings has dual benefits. It will reduce climate pollution from using fossil fuels and also prepare the places we live, work, and visit for the climate harms fossil fuels have caused -- like increased wildfire and extreme heat. We know gas furnaces and [appliances pollute our indoor air](#) and adversely affects our health.

Today I want to talk about something that we ignore even more than most people try to ignore climate change. The predicted subduction earth quake, the "big one" is something most of us push out of our minds day-to-day. October 20 is the "[Great Shakeout](#)"-- a day of awareness for preparing ourselves for the earthquake. In that spirit, I want to highlight the explosive threat of methane gas and all the pipelines running underneath our homes, neighborhoods,

When I bought my owner-occupied duplex in 1992 it had gas heat and I had some concern about earthquakes so I had a seismic shutoff valve (a 'California valve') installed. I knew the gas company expected me to turn off the gas. And after I got over my amazement that they did not have a central shut off for the city I learned how to close off the gas to the house. I was not confident I could do that during an actual quake with glass breaking, furniture falling, and a need to get to my child and our neighbors. The California valve, popular after their big earthquake, makes it automatic. It cost me about \$600 back in 1996 but two days after it was installed my tenant called because she had no gas, no heat and no cooktop.

The gas was off because a large truck driving down the street caused too much vibration. We called the gas company and they turned it back on and showed me how to make the valve less sensitive. This happened two or three more times until I reset the valve, little by little, that it stopped turning off with the type of vibrations in my neighborhood. We've had some small earthquakes and the valve has not tripped. Would it go off with a quake strong enough to damage the pipes and possibly explode or at best catch fire?

I'll never find out. I went all electric in 2020 and had the gas cut off at the street. I don't have to worry about gas leaks, fire or explosions in my house. I still do not know what the neighborhood will look like when we have 'the big one'. If any one of the houses around me were to experience a gas explosion I'm sure it would shatter all my windows and maybe do more damage.

The only *guarantee* against explosions, fires, and methane leaks is to not have the system in place at all. To strategically transition off of gas and heating oil to clean electricity. Fortunately, we have an excellent alternative, clean electricity.

Beyond the extraordinary challenges of trying to prepare the entire pipeline system for a disaster like we have never seen, there is too much burden placed on individuals who have so much going on in their lives already.

The gas utilities' advice to home and building owners is to [strap down their gas appliances](#) to keep them from becoming bouncing bombs in an earthquake. This can be an expensive modification to existing homes and buildings and requires a lot of due diligence from individuals. For a renter this might be even harder to uncover or get the safety work done. Utilities also advise owners to figure out what kind of piping a home has, since older piping is more brittle. They advise you to have proper tools and the wherewithal to find and turn off your own gas lines-- Can you imagine? In the middle of the chaos of an earth-shattering disaster, with thoughts reeling about your family, friends, and communities and your own survival, that you'd have to go perform a task like that to keep from being blown up or burned? I was fortunate to have \$600 for the seismic valve and as you know, not all Oregonians can afford to hire a plumber for something they may not need.

With all the harm gas does to health and the climate this is yet another reason to quickly remove it from our lives. Electric homes are safer and one less worry when disaster strikes. And, in case of a major earthquake, electrified buildings and homes with solar panels and battery back up will be the way people in the neighborhood can survive for the days before help arrives. Ford tells us their F150 Lightning can power five homes for two days. If I didn't already own a EV I would be tempted to buy one just for the emergency preparedness.

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