

Submitter: Edward Louie

On Behalf Of:

Committee: Senate Committee On Energy and Environment

Measure: SB868

Hello, my name is Edward Louie. I was born and raised in Portland, OR to immigrant parents who came to the U.S. really poor and limited in their education and knowledge about programs available to them. They purchased a dilapidated home because that is what they could afford. Being poor they remodeled the house and installed ventless natural gas heaters. Even with that heater running the house was very uncomfortable. That discomfort motivated me to learn what incentives and programs are available to help make energy efficiency improvements to the home financially possible. In 2016 I helped my parents navigate the rebates and tax incentives available at the time for ductless heat pumps. The ductless heat pump replaced a ventless natural gas heater which resulted in very high indoor CO<sub>2</sub> levels which is very unhealthy as well as releasing massive amounts of water vapor causing windows and toilets to sweat. My parents had towels under windows and buckets under the toilet tank to catch the condensation from the ventless natural gas heaters. That high level of humidity resulted in mold growth throughout the house. There should be a ban on ventless natural gas heaters in Oregon and nationwide. I endured it for 18 years, before leaving to go to college. The ductless heat pump performed fantastically even at the coldest days of the year in Oregon AND it offers very energy-efficient air conditioning which is no longer optional due to increasing extreme climate events. I did learn from running the heat pump year-round that they do gunk up and they are extremely difficult to take apart and deep clean. Had I known what I know now, I would have selected a ducted cassette mini-split and ducted via a dropped ceiling in the hallway. The ducted cassette mini-split form factor allows a standard disposable furnace filter to be installed on the return and the blower is behind the heat exchanger and not below it which keeps the blower wheel clean. I fully support SB 868, Healthy Heating and Cooling for All, and I hope the guidance is to recommend ducted cassette mini-splits and central heat pumps first and only use ductless when there is no other option. I also fully support SB 869, Build Smart from the Start, because fixing up a dilapidated home is extremely difficult. My hope is that the guidance for exterior continuous insulation which is required for our climate zone in the 2021 International Energy Conservation Code steers people to Larsen truss with blown-in cellulose or wood fiber board insulation instead of petroleum-based insulation boards to mineral wool which requires immense amounts of energy to melt rocks to spin it into wool.