PIERCE COUNTY

Office of the County Council

Ryan Mello
Councilmember, District No. 4

June 14, 2022

Washington State Building Code Council
1500 Jefferson St SE
Olympia, WA 98501

Chairman Doan and Members of the State Building Code Council:

As a local elected official from Pierce County, I write to strongly urge the State Building Code Council (SBCC) to build on your excellent work updating the Washington state commercial energy code and now adopt a new residential energy code that similarly aligns with our state and local climate and sustainability goals. **Specifically, I support an all-electric residential energy code that will reduce indoor and outdoor air pollution and ensure that we are building healthy, resilient, and affordable homes, by eliminating gas appliances, particularly for space and water heating, which account for the majority of pollution and carbon emissions from our building sector.**

Statewide Clean Codes Are Needed To Support Local Government Efforts

Pierce County is one of at least a dozen cities and counties in Washington, representing over 1.7 million people, that are developing or have implemented climate action plans[i] that commit local resources to curbing dangerous greenhouse gas emissions (GHGs).[ii] Buildings are the second-largest – and fastest growing – component of our state's GHG emissions. In 2018, burning fossil fuels in Washington buildings produced emissions equivalent to nearly 4 million cars or 5 coal plants. In Pierce County, buildings generated *over half* of our 2015 GHG emissions, including 14% from the commercial built environment and 19% from residential – almost one-fifth of our total GHG emissions, just from residential buildings alone. Washington state is required by law to achieve a 95% reduction in emissions from 1990 levels by 2050[iii], and we are committed to doing our part, including a 45% reduction by 2030. However, unlike with commercial construction, our reading of state law is that cities and counties are preempted from implementing energy codes for residential construction that are more stringent than the state's minimum requirements. Therefore, to meet our climate commitments, we are dependent on the SBCC to act again and require *all* new buildings across the state to be clean.

Clean Codes Support Our Energy Efficiency and Climate Commitments

Washington is a leader in the clean energy economy. As we continue to move the supply side of our grid to net zero emissions by 2030 and 100% clean electricity by 2045 as required by state law,[iv] we must also decrease the demand for energy. Heat pumps, which are 2-4 times more efficient than electric resistance or combustion gas equipment, can and must play a significant role in keeping our state on track for the 70% reduction in energy use that SBCC is required by law to meet.[v]

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The Climate Commitment Act (CCA) passed in 2021 imposes a steadily declining cap on greenhouse gas emissions to achieve a 95% reduction in by 2050; it will require natural gas suppliers to acquire rapidly declining and thus increasingly expensive pollution allowances, as gas use is phased out entirely over the coming decades. While existing gas customers will receive some protection from rate increases under the CCA, it's critical to note that most owners of newly constructed buildings will not[vi]. Continuing to add any new buildings to the gas distribution system means locking in decades of carbon and methane emissions, and more stranded assets for the gas industry, while condemning homeowners to greater fuel price volatility and the likelihood of expensive retrofits in the future. To achieve our climate goals and protect consumers, our first step must be to stop digging the hole deeper and commit to efficient, all-electric appliances in every newly constructed building in the state.

Clean Codes Support Our Economy and Housing Costs

The 2021 Washington State Energy Strategy states that building electrification is "the least-cost strategy" to decarbonize the building sector.[vii] In addition, one report estimates that electrifying our building stock would create 5,500 installation jobs in Washington and 80,000 manufacturing jobs nationwide that our state can compete for.[viii]

The Rocky Mountain Institute's (RMI) Economics of Electrifying Buildings study, as well as several other studies, found that in nearby Seattle, an all-electric home saves both money and 28 tons of CO_2 emissions over a 15-year period[ix]. This is because all-electric homes are typically cheaper to build upfront: $4,500 less than a mixed-fuel home with a gas furnace, water heater, and air conditioning (increasingly vital in our warming climate, as evidenced by last summer's dramatic and dangerous heat wave[x]). In addition, even before the recent run-up in energy prices, exacerbated by the war in Ukraine, both the Environmental Investigation Agency (EIA) and the World Bank forecast significant increases in natural gas costs, but relatively flat electricity costs – making the economic case for all-electric homes even stronger. Combined with the impacts of the phase-out of gas required under the Climate Commitment Act, any new homes built with gas will face ever increasing energy bills and an eventual expensive retrofit. This means that any new gas household we allow heightens the severe risk that we are stranding those families with escalating bills. And the homes least likely to be able to switch will be low-income households.

Clean Codes Support Healthy Homes and Communities

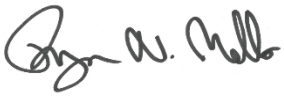
A recent Harvard study showed that in Washington, burning fossil fuels in buildings was responsible for 52 premature deaths and over $577 million in health impacts in 2017, based on *just their outdoor air pollution alone*. Combusting gas in furnaces, stoves and ovens releases dangerous air pollutants like nitrogen oxide (NOx), carbon monoxide (CO), fine particulate matter (PM2.5), ultrafine particles, and formaldehyde. These pollutants can lead to a range of respiratory, cardiovascular, and neurological health issues - children in homes with gas stoves are 42% more likely to develop asthma symptoms[xi]. Health burdens related to pollution and other environmental stressors such as extreme heat disproportionately affect low-to-moderate income communities. Our State Energy Strategy has pledged to address these disparities while also ensuring the "equitable distribution of clean energy benefits and reduction of burdens to communities highly impacted by climate change."[xii] The SBCC adoption of an energy code that reduces air pollution will empower local communities like ours to repair the historical inequities that are further aggravated by climate change. Moving away from the use of an explosive gas to heat new buildings also reduces the risk of fire and explosions, such as that which occurred in the Greenwood neighborhood of Seattle in 2016[xiii].

As a local elected official, I am on the front lines in responding to and supporting our communities during extreme weather events like the recent floods, wildfires, droughts and heat. I am committed to helping solve climate change by lowering Washington's greenhouse gas emissions, and to adapt to its effects by making our communities healthier, safer and more resilient.

Prolonging gas use just makes no sense when there are better, cleaner, less expensive and safer heat-pump options available now, which take advantage of Washington's increasingly clean electrical grid.

For all the reasons mentioned above, I strongly believe the SBCC should require all-electric new residential construction, ensuring that our communities are sustainable, affordable equitable, and healthy, now and in the future.

Sincerely,



Ryan Mello, Councilmember
Council District 4

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[i] Sustainability 2030: Pierce County's Greenhouse Gas Reduction Plan: https://www.piercecountywa.gov/DocumentCenter/View/102689/Sustainability-2030-Pierce-Countys-Greenhouse-Gas-Reduction-Plan
[ii] "Cities with Climate Action Plans," Zero Energy Alliance: https://zeroenergyproject.org/all-cities-with-climate-action-plans/
[iii] Washington State Legislature: https://apps.leg.wa.gov/rcw/default.aspx?cite=70A.45.020
[iv] "Clean Energy Transformation Act" Washington State Dept. of Commerce: https://www.commerce.wa.gov/growing-the-economy/energy/ceta/
[v] Washington State Legislature: https://app.leg.wa.gov/rcw/default.aspx?cite=19.27A.160
[vi] Washington State Legislature, Climate Commitment Act, Section 15(c): https://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/Senate/5126-S2.SL.pdf
[vii] Washington State Energy Strategy, pg. 67 (2021): https://bit.ly/3kJ5WOH
[viii] Rewiring America, "The Benefits of Electrification,": https://map.rewiringamerica.org/states/washington-wa
[ix] "The New Economics of Electrifying Buildings", RMI. https://rmi.org/insight/the-new-economics-of-electrifying-buildings
[x] "Hidden Toll of the Northwest Heat Wave: Hundreds of Extra Deaths": https://www.nytimes.com/interactive/2021/08/11/climate/deaths-pacific-northwest-heat-wave.html
[xi] "Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children", Internal Journal of Epidemiology: https://doi.org/10.1093/ije/dyt150
[xii] Washington State Energy Strategy, pg. 22 (2021): https://bit.ly/3kJ5WOH
[xiii] "Seattle explosion leaves heart of Greenwood neighborhood a gigantic mess": https://www.seattletimes.com/seattle-news/greenwood-explosion-destroys-buildings-injures-9-firefighters/