

**Archived:** Friday, August 13, 2021 3:00:02 PM

**From:** [Dylan Plummer](#)

**Sent:** Thursday, August 12, 2021 11:53:29 AM

**To:** [City Council](#)

**Cc:** [Ck](#)

**Subject:** [EXTERNAL] Sierra Club Support for Equitable Electrification in the City of Shoreline

**Sensitivity:** Normal

**Attachments:**

[SierraClub.BuildingElectrificationLetter.CityOfShorelinepdf.pdf](#) 

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**CAUTION:** This email originated from outside of the City of Shoreline. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mayor Will Hall and Shoreline City Council,

Find attached a letter from the Sierra Club in support of policies to encourage equitable electrification in your city. Please feel free to reach out if you have any questions about the information included in the letter.

We look forward to working with you to support bold climate action in Shoreline.

Best,  
Dylan Plummer  
Senior Campaign Representative, Building Electrification  
Sierra Club



**To:** Mayor Will Hall & Shoreline City Council Members

**CC:** Shoreline City Clerk Jessica Simulcik Smith

**Subject:** Support for Equitable Electrification in the City of Shoreline

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Dear Mayor Hall and Shoreline City Council members,

Earlier this week, the Intergovernmental Panel on Climate Change (IPCC) released its most dire report yet, which the [United Nations Secretary-General described as “code red for humanity”](#). This report was released a month after the State of Washington experienced the [deadliest heatwave in its history](#) and during another summer filled with extensive wildfires and drought. As the IPCC report discusses, these events in Washington, and the similar catastrophes unfolding across the globe, are being driven by anthropogenic climate change caused by the burning of fossil fuels like “natural” fossil gas.

In the face of this crisis, it is critical that elected officials at all levels of government take the bold action required to reduce greenhouse gas (GHG) emissions in line with the best available science in order to mitigate the worst impacts of climate change. Increasingly, elected leaders are looking towards building electrification policy as one meaningful avenue for emission reductions. Not only do these policies contribute to efforts to mitigate the worst impacts of the climate crisis, they also afford communities greater protections for health and safety by reducing indoor and outdoor air pollution.

Emissions from buildings are growing at a faster rate than any other source of carbon pollution in Washington, due to the direct-use of fossil gas for heating and cooking in both residential and commercial buildings. Burning fossil fuels in the buildings sector in Washington produced [18 million metric tons \(MMT\) of carbon dioxide equivalent \(CO<sub>2</sub>e\) in 2018](#), the equivalent to the annual emissions from 3,957,182 cars or 5 coal plants. This is 19% of the total emissions from fossil fuel combustion in the state. CO<sub>2</sub>e emissions include emissions from burning the fuels at the end use and upstream emissions. Upstream emissions are mainly methane, a potent greenhouse gas and the main component of fracked gas, which leaks when gas is extracted, processed, transported, and used in homes and other buildings.

Burning fossil gas in buildings both contributes to the climate crisis and also greatly impacts air quality and poses significant health and safety risks across the state, disproportionately impacting children, communities of color, low-income communities, and other historically underserved demographics. Just one hour of cooking on a gas stove produces [nitrogen dioxide levels that would be illegal if found outdoors](#). A recent [study](#) showed that in Washington, burning fossil fuels in buildings was responsible for 52 premature deaths and \$577,650,107 in health impacts in 2017. 94% of those impacts were from burning gas in buildings. This is a conservative estimate as these statistics only include health impacts from outdoor PM<sub>2.5</sub> and precursor pollution; it also does not include pollution from upstream extraction.

As the Pacific Northwest experiences increasingly dire climate-driven heatwaves, building electrification policies provide an opportunity to better protect communities from heat, while creating savings on utility bills. A [recent study conducted by Rocky Mountain Institute](#) investigating cooling options for



Seattle homes (a close parallel for Shoreline) found that electric heat pumps are not only capable of maintaining a comfortable and safe indoor air temperature during extreme heat, but that they can save households \$228 a year when compared to dual fuel heating and cooling systems (AC unit + gas furnace). The study also concluded that “CO2 emissions are reduced by around 25 percent for the entire home when it operates with the heat pump compared to the high-capacity AC and furnace”, demonstrating heat pumps are a win-win on both emissions and customer savings.

Many cities and counties across the state and the country are already taking steps to ensure all new buildings are powered solely by electricity, including Seattle, Tacoma, and nearly 50 municipalities in California. Cities are also working to retrofit existing buildings to use electricity, and to work to subsidize highly efficient electric appliances such as heat pumps and hot water heaters. Electrifying buildings is a critical step to addressing the climate crisis; it is also achievable, affordable, healthy, safe, and can create a more resilient and equitable energy system.

In light of the significant impacts of the direct-use of gas in buildings to public health and safety and our climate, the Sierra Club strongly supports the Shoreline City Council in its exploration of policies that support equitable building electrification in new construction and the phase out of fossil fuels in the city, with an emphasis on providing a just transition for the most vulnerable communities and workers.

Thank you for your consideration,

Dylan Plummer, Senior Campaign Representative, Sierra Club