



Memorandum

Date: November 16, 2022

To: Mayor Vinis and Eugene City Council

From: Eugene Sustainability Commission

Subject: Fossil fuel infrastructure ban ordinance

The Sustainability Commission strongly supports the proposed ordinance to prohibit fossil fuel infrastructure in new low-rise residential buildings. We see this as an important step to reduce carbon emissions in Eugene, meet the goals of the City's Climate Recovery Ordinance, CAP2.0 goals, and be consistent with prior Commission recommendations.

Electric alternatives to natural gas heating and cooking in homes are viable, economically competitive, and already widely used in Eugene. Because it is cheaper to construct all-electric homes, this ordinance would help reduce housing costs.

We urge City Council to pass this ordinance to both address climate change and to protect people's health.

For many years, it's been known that burning gas inside a home creates unhealthy air pollutants, in particular a lung irritant, nitrogen dioxide. In homes without adequate ventilation or use of an exhaust hood to vent the pollution outside, the simple act of cooking a meal creates so much nitrogen dioxide the indoor air exceeds legal limits set for outdoors.¹ Study after study shows children living in homes with a gas stove are at a higher risk of developing asthma symptoms— 42 percent higher.²

This year, new research has found many gas stoves leak continuously, even when they are turned off.³ These tiny methane leaks also pollute the air indoors. New research found that unburned gas contains many hazardous air pollutants,⁴ including benzene, a human carcinogen. According to the World Health Organization there are no safe limits for exposure to benzene in the air.⁵ Researchers found these tiny, undetected gas leaks in some homes can expose people to as much benzene as is in second-hand smoke.

Using natural gas inside our homes is bad for the planet and it's bad for people.

¹ J. Logue et. al. [Pollutant Exposures from Natural Gas Cooking Burners: A Simulation-Based Assessment for Southern California](#). Published January 1, 2014.

² W. Lin, B. Brunekreef and U. Gehring. [Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children](#). *Epidemiology*. Vol. 42, August 20, 2013

³ Lebel et al. Methane and NOx Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes. *Environmental Science and Technology*. Vol. 56, January 27, 2022.

⁴ Lebel et al. [Composition, Emissions, and Air Quality Impacts of Hazardous Air Pollutants in Unburned Natural Gas from Residential Stoves in California](#). *Environmental Science and Technology*. Published online October 20, 2022.

⁵ World Health Organization. Exposure to benzene: a major public health concern. May 1, 2019. <https://www.who.int/publications/i/item/WHO-CED-PHE-EPE-19.4.2>

Thank you again for your strong and continuing leadership on this issue.

Sincerely,

The Eugene Sustainability Commission