

Chair Sollman, Vice Chair Brock-Smith, Committee members.

My name is Melanie Plaut. I am a retired physician and I volunteer with Oregon Physicians for Social Responsibility.

This bill shouldn't be controversial. Personally I would have favored a bill requiring PUC pre-approval for hydrogen projects, given what I know about the risks and benefits of hydrogen in this setting, but that is not what the current bill, the dash-1 amendment does.

This bill is only about notification.

This bill will not slow hydrogen innovation, and it is not burdensome to the industry.

They already mail multiple bills and notices each year, so the cost is minimal.

Compared to what they have spent on trying to promote their hydrogen projects, or fight the Climate Protection Plan, this is next to nothing.

Hydrogen is not evil, nor is it magical. Over the next decades we will figure out its role in the clean economy. Rate-payers have a right to understand any benefits of hydrogen addition to the methane distribution system (which industry has probably oversold, given its high cost and minimal effect on decarbonization). They also have a right to understand any risks.

Industry would like you to believe there are zero health and safety risks, but this is not settled science.

When burned, hydrogen produces nitrogen oxides from the nitrogen in the surrounding air, via what is called the Zeldovich reaction. NOX has been known for decades to cause lung inflammation and asthma symptoms. Not all studies agree how much hydrogen as a partial replacement for methane increases the NOX produced, but a 2022 meta-analysis from the U of California¹ of 14 studies showed on average an 8% increase in NOX with hydrogen. I'll say that again: a summary of studies suggested an 8% increase in the creation of a known harmful byproduct.

Then there is safety: As you increase hydrogen to a level which would make any significant dent in carbon emissions you start to run into concerns with pipe embrittlement, lack of compatibility with household appliances, and the possible increased risk of fires and explosions.

We need to follow the state of Washington in passing a requirement to provide notification for hydrogen injection, the most minimal of guard rails, so customers know what they are paying for, and the PUC is able to appropriately oversee its use.

You have heard industry say that hydrogen is going to be important in the hard-to-decarbonize sector. I agree! But let's be clear, home heating is NOT a hard-to-decarbonize sector. Multiple independent studies have shown that for homes and businesses, electrification is significantly more cost-effective. There is a clear path forward for gas utilities: they can become "thermal utilities."² This would both decrease emissions and provide continued employment for utility employees.

Thank you. Melanie Plaut MD, Portland, OR

¹ <https://online.ucpress.edu/elementa/article/10/1/00114/183173/Emissions-of-NOx-from-blending-of-hydrogen-and>

²<https://www.sightline.org/2023/01/11/is-there-a-future-for-gas-utilities-it-could-be-heating-and-cooling-your-home-from-the-ground/>