## Markus Boos

My name is Markus Boos, and I am a pediatrician and scientist in Washington. I appreciate the opportunity to address the Department of Ecology and provide my thoughts on Northwest Innovation Works' proposed fracked gas-to-methanol refinery.

Simply put, I cannot speak strongly enough AGAINST the building of this refinery, and implore Washington state to deny the permit for its construction. Based on the Department of Ecology's analyses, this project would produce millions of tons of carbon pollution yearly. Not only does this run contrary to our state's climate goals, but the facility will also pollute water systems including the Columbia River, while devastating surrounding ecosystems.

As a physician, I would like to address the health effects that would result from construction of this refinery. What the Environmental Impact Statement does not directly address are the indirect costs that will occur secondary to this refinery's adverse effects on human health locally.

In 2018, the Intergovernmental Panel on Climate Change released a detailed report summarizing the devastating effects of human-driven climate change secondary to the combustion of fossil fuels and the release of greenhouse gases. These consequences include both economic and health impacts from natural disasters, sea level rise and the effects of extreme heat on changing ecosystems that will be unable to support human life. To mitigate these catastrophic impacts, the IPCC demands that we reach and sustain net zero greenhouse gas emissions as quickly as possible. Fundamentally, the permitting and building of this refinery runs contrary to that goal and no amount of greenwashed messaging about "carbon emission savings" associated with this project can contradict this fact.

We are experiencing the health effects of unabated greenhouse gas release today, and these will only worsen exponentially with time. Deaths from heat stroke, natural disasters including hurricanes, floods and wildfires, and heat-sensitive infections such as Vibrio are already increasing in our backyards, and worldwide. As a pediatrician, I also recognize the local, longitudinal health effects of pollution and climate change secondary to greenhouse gas emissions from refineries such as the one in question, which include a greater incidence and severity of atopic dermatitis, asthma and other respiratory illnesses secondary to polluted air (which is compounded by climate change-driven mega wildfires that we are currently experiencing).

I also witness first hand the persistent, detrimental mental health effects on those who experience natural disasters or scarcity as a result of these emissions and subsequent climate change. We know that, unfortunately, all of these consequences disproportionately affect children and the elderly, leading to a worsened quality of life and increased healthcare costs over an individual's lifetime. These enormous costs will ultimately fall on our woefully unprepared healthcare system and they MUST be considered in any impact assessment.

I implore the state to deny the permit for the construction of Northwest Innovation Works' proposed fracked gas-to-methanol refinery. Our health, our lives and our children's future depend on making decisions that transition us away from fossil fuels and towards a renewable energy future.

Thank you.