March 1, 2019

Joint Committee on Carbon Reduction jccr.exhibits@oregonlegislature.gov

Re: HB 2020 Testimony for Public Hearing on March 2, 2019

Co-Chair Dembrow, Co-Chair Power, and members of the Joint Carbon Reduction Committee,

My name is Fred Tanis, I live in Bend, and I support the Clean Energy Jobs (CEJ) bill.

Three decades ago climate scientists warned Congress of the dangers of global warming. Now the World has emitted since preindustrial times over a tera metric ton of anthropogenic CO2e into the atmosphere with about two-thirds of that after 1970. These levels of greenhouse gases have led to a rise in the mean global surface temperature of nearly one-degree C. Without further climate action the IPCC expects another tera metric ton of emissions by 2050 leading to a dangerous global mean temperature of 2 degrees C. Climate change is real in Oregon. The last few years of summer wildfire smoke are a wake-up call. Action is needed now to create a strong bill with a meaningful cap on emissions. Reducing emissions now is more cost effective than later.

Oregon has a unique opportunity to lead our state to a clean energy economy. The Cap and Trade approach of HB 2020 provides a low-cost option for achieving reduction targets while stimulating needed innovation for transition to a clean energy economy. Although Oregon does not have a large carbon footprint, we have opportunity to provide national leadership for mitigation and adaptation to climate change. Oregon efforts will help shape policy developments in other states, especially since action at the federal level is stalled.

I want all Oregonians to accept CEJ as the mechanism for achieving Oregon's CO2e emission reduction goals and the path forward to counteract climate change. Improvements in transparency and efficiency of expenditures to mitigate emissions and adapt will help gain acceptance. There are broad categories for spending of auction revenue outlined for the Climate Investment Fund. A detailed breakdown would be useful on the expected allocation of monies to renewable energy projects, sequestration efforts, administration, and assistance to households, workers, and businesses impacted by decarbonization. **Ideally this legislation would specify minimum annual investments for renewables and other zero emission energy projects**. Some of the suggested emission reduction projects such as weatherization assistance have been shown to be highly cost ineffective per metric ton of CO2e reduction when compared to onshore wind, utility-scaled solar, and natural gas combined-cycle (Gillingham and Stock, 2018). Minimal support should be directed to weatherization and other cost ineffective projects.

Most of the electric power generated for our community comes from coal. Coal to Clean Electricity (SB1547B) will eliminate use of coal to generate electricity by 2030. Electric utilities want to avoid stranded assets and will move slowly to change over to natural gas. It would cost nearly \$8B to completely convert to renewables all of Oregon's electricity use that is generated from coal. That's not going to happen but this legislation could set specific priorities to eliminate coal generated electricity at a faster pace by replacing it with more renewables.

I want to see more EVs in Bend. Currently the carbon footprint from a small electric car in Bend is the same as a large gas-powered SUV. There is strong momentum to change our carbon footprint.

Pass it now!

Kenneth Gillingham and James Stock, **The Cost of Reducing Greenhouse Gas Emissions**, Journal of Economic Perspectives, August 2, 2018