

To: Chairs Dembrow and Helm.

Joint Committees, Energy and Environment, and Environment and Natural Resources

Date: March 1, 2017

From: Rand Schenck, 2947 NE 31st Ave, Portland, Oregon, 97212

Subject: SB 557

Oregon urgently needs to act to address climate pollution and its many harms to people and the planet by passing SB 557. We must put on cap climate pollution and achieve rapid reductions in that pollution as quickly as possible. Currently, Oregon has notable goals to reduce greenhouse gas emissions but those goals are not based on current science and there is no real policy in place to achieve those reductions. In addition, we need to put a price on climate pollution and then invest the monies raised to ensure a just energy transition - one that enables further reductions in climate pollution, promotes clean energy, and reduces harms to disadvantaged communities.

There are so many harms that result from climate pollution that where to begin is challenging. I will focus on just a couple. With global warming more precipitation is falling as rain in the Cascades rather than snow. Our snow pack is decreasing - that is the trend regardless of exceptional snow years like the current one. According to the EPA, average annual temperature increases in the Northwest have been about 1.3F over the past 100 years and are projected to increase by 3 - 10F by the end of this century. The result of these changes will be a less reliable supply of water for hydro power, agriculture and the health of our eco-systems as spring snowmelt will occur earlier and summer stream-flows decline. On a personal note, I love to cross-country ski. My opportunities to ski in the Cascades will inevitably decrease. And the trends are such that when my adult daughters reach my age, they likely will have to drive far north into Canada to cross-country ski.

Another harm that results from these changes in snowpack will be on our salmon. Salmon are especially sensitive to changes in stream temperatures. Studies by EPA show that roughly one third of current habitat for salmon and other cold-water species in the Northwest will be too warm for them to tolerate by 2100. Of course salmon also have seasonally timed migrations up our rivers and streams to spawn. With earlier and higher stream-flows that result from climate change comes

damage to spawning nests. Its quite magical to watch salmon spawning in near-by streams. We risk losing this icon of the Northwest.

The last harm I will mention is the impact on oysters and our fisheries. Our oceans are becoming more acidic and one of the results here in the Northwest has been the die-off by the billions of oyster larvae - the seawater is so corrosive that it eats away the young oyster shells before they can form. Of the two trillion tons of CO₂ released into the atmosphere over the past 200 years, about a quarter of that has been absorbed by the oceans. The effect of this corrosiveness is akin to osteoporosis, which causes bones to become brittle. With increased acidity shells become thinner, growth slows down and death rates rise. This is and will continue to be a significant challenge to both shellfish harvesters and commercial fisherman, and the nearly \$500 million value that represents here in the Northwest.

The monies generated by SB 557 are essential to ensuring a just transition. These funds can be targeted towards projects that will reduce greenhouse gas emissions. Currently we are sending millions of dollars to out of state fossil fuel companies. We need to instead use those resources to develop clean energy jobs in Oregon and improve the energy efficiency of our buildings.

In addition we need to dedicate funds to mitigate impacts on low income individuals and communities. Some of the revenue generated can be used to address regressivity. We can also ensure that rural communities are not dis-advantaged. Research by PSU shows that in fact rural Oregonians will pay less than urban folks and benefit most from polluter pay programs through job creation and wage increases.

Most Oregonians are demanding action on climate change. They want polluters to pay for dumping their climate pollutants into our shared atmosphere. They are especially supportive of clean energy - wind and solar. By putting a price on greenhouse gas emissions and investing in a clean energy future, we can both grow our economy and do our part to ensure a habitable planet for the future.

