Comments in Support of SB 1559 350 Salem OR Philip H. Carver Ph.D. Co-coordinator 350 Salem OR Feb. 12, 2024

Greetings Chair Sollman, Vice-Chair Findley, members of the Committee,

Thank you for the opportunity to submit written comments in support of SB 1559, which will strengthen Oregon's outdated state greenhouse gas reduction goals to align with the best available science.

I have a Ph.D. in natural resource and utility economics from Johns Hopkins University and 37 years of experience as an senior economist and senior policy analyst with the Oregon Dept. of Energy and the Public Utility Commission (1980-2017).

I have direct personal experience on this issue. As technical staff I helped Governor Kulongoski's Advisory Group On Global Warming prepare the following **adopted goals in 2004**:

Goals: The Advisory Group believes that setting goals for Oregon, expressed together with actions that can plausibly meet those goals over time, gives purpose and structure to the task of reducing greenhouse gas emissions. The Advisory Group proposes the following new goals: 1. By 2010, arrest the growth of Oregon's greenhouse gas emissions (including, but not limited to CO2) and begin to reduce them, making measurable progress toward meeting the existing benchmark for CO2 of not exceeding 1990 levels. 2. By 2020, achieve a 10 percent reduction below 1990 greenhouse gas levels. 3. By 2050, achieve a "climate stabilization" emissions level at least 75 percent below 1990 levels.

(https://www.oregon.gov/energy/Data-and-Reports/Documents/2004%20Oregon%20Strategy% 20for%20Greenhouse%20Gas%20Reductions%20Report%20Legislature.pdf)

These were the targets most consistent with the available science twenty years ago. In my professional view, that 2050 goal and the current ORS goals are no longer consistent with the science about what is needed.

It is important to be clear how one determines such goals. Although climate science is the basis, there is also judgment about risks and an economic analysis in setting the goal. Set the goal too low and the risks of catastrophic costs are too high. Set it too high and the extra economic costs of early compliance are not commensurate with the reduced risk of social, economic and ecological catastrophes.

As a professional economist I can say confidently that the proposed goals in SB 1559 are not too stringent. In most cases the direct economic costs of shifting to renewable electric energy from fossil fuels are now negative. As an example, the costs of <u>building new</u> wind and solar

power plants at good sites in the U.S. are now lower than the <u>direct operating costs</u> of every coal-fired power plant in the U.S., except one plant in Wyoming. This estimate does not include the health costs from coal plant criteria pollution emissions or the damage from greenhouse gas emissions.

(https://insideclimatenews.org/news/30012023/wind-solar-coal-power-plant-costs/#:~:text=About %2080%20percent%20of%20the,co%2Dauthor%20of%20the%20report.)

Oregonians are already experiencing dangerous climate and health impacts as a result of fossil fuel use, with communities of color, low-income households, and rural communities bearing a disproportionate burden.

Near-term emissions reductions will also provide public health and economic co-benefits, by improving air quality and health outcomes, and by positioning Oregon to be a leader in producing clean energy technologies that the entire world is seeking in the clean energy transition. **This means more jobs in Oregon!** The net economic effects of the reductions implied by the goals in SB 1559 are clearly positive.

Yet, despite broad scientific consensus urging immediate climate emissions reductions – and knowing that the climate crisis is already damaging the lives and livelihoods of Oregonians – Oregon has not updated its climate goals in 17 years.

SB 1559 will fix that by aligning our state greenhouse gas reduction targets to reflect the best available science consistent with limiting global warming to 1.5 degrees celsius. Specifically, SB 1559 will update Oregon's climate goals, targeting emissions reductions of at least 45% below 1990 levels by 2030, at least 70% by 2040, and at least 95% by 2050. Recognizing Oregon's ability to sequester carbon through its forests, fields, marshes, and other natural resources, the bill adds language establishing an aspiration of the state to achieve net-zero by 2050 and net-zero-minus thereafter.

Even if the goal of limiting global warming of 1.5 degrees C is exceeded, that is not a reason to stop working to reduce emissions to nearly zero. Every degree of extra warming will bring a whole suite of new and terrible types of catastrophes.

The time to act is Now.