



Date: February 6, 2018

To: House Committee on Energy and Environment; Senate Committee on Environment and Natural Resources

From: Our Children's Trust, on behalf of youth and future generations

RE: HB 4001 & SB 1507

Dear Representative Helm, Senator Dembrow, and Members of the Committees,

In order to protect our planet's climate system and vital natural resources on which human survival and welfare depend, and to ensure that young people's and future generations' fundamental and inalienable human rights are protected, government climate pollution policies *must* be based on the best available climate science. There are numerous scientific bases for setting 350 parts per million (ppm) as the uppermost safe limit for atmospheric carbon dioxide (CO₂) concentrations. It is imperative that all states and governments around the world set and implement greenhouse gas (GHG) emission limits targeted at limiting the long-term global temperature increase to no more than 1°C, or a maximum of 350 ppm in global atmospheric CO₂ concentrations by 2100.

If global CO₂ emissions do not increase in 2018 (2017 is the peak year for emissions), emissions reductions begin this year, and we implement global reforestation and improved agricultural practices and policies to sequester 100 gigatons of carbon (GtC) throughout this century, the annual rate of emissions reduction will be ~ 10% per year. If emissions reductions are delayed, the necessary emissions reduction path become steeper and steeper, rendering a return to safe levels of atmospheric CO₂ increasingly unlikely.¹ It is imperative that the State of Oregon establish emission limits consistent with a trajectory aimed at returning atmospheric CO₂ concentrations to below 350 ppm by 2100. The emission limits in HB 4001 and SB 1507 are outdated and not consistent with this trajectory. Put differently, these emission limits would lead to even more catastrophic and irreversible climate change impacts, such as multiple meters of sea level rise, species extinction, more extreme droughts and wildfires, devastating ocean acidification, and others. To be consistent with the best available climate science and the 350 ppm by 2100 trajectory, the State would need to reduce CO₂ emissions by ~ 83% from today's levels by 2035, and reduce by ~ 97% from today's levels by 2050. **HB 4001 and SB 1507 should be amended so that Oregon's statewide emission limits are based on today's best available climate science.**

¹ James Hansen et al., *Assessing "Dangerous Climate Change": Required Reduction of Carbon Emissions to Protect Young People, Future Generations and Nature*, PLOS ONE 8:12 (2013).



As evidenced by low snow pack², unseasonably warm temperatures, the ongoing impacts of ocean acidification, and the stark visual reminders of last summer's destructive wildfires enhanced by climate change, Oregon is already facing a wide variety of worsening climate impacts.

These are not policy issues that can simply wait for another legislative session. The legislature has a fiduciary duty to protect the public trust resources of our State, as well as the constitutional rights of our youngest citizens. Nothing poses a greater threat to those rights than climate destabilization. Time is of the essence and your leadership is crucial at this time. Thank you for your consideration of this testimony and for your service to our State.

Sincerely,

Our Children's Trust

² See https://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/or_swepctnormal_update.pdf.