

I support the passage of HB4167 even though I do not believe it goes far enough to set a sufficient example of what actually needs to be done to curb the effects from a warming climate.

I have lived in rural Oregon (outside of City limits) for the last 46 years. Climate change impacts me as much as it does my friends who live in Portland. I support a strong and meaningful climate policy that significantly and effectively reduces/mitigates the effects of greenhouse gas (ghg) emissions. It must be made clear that HB 4167 cannot do all things for all peoples without becoming too weak to be effective. The amount of ghg emissions estimated for reduction by 2050 is inadequate. The goal should be net zero emissions by 2050 as urged by the Intergovernmental Panel on Climate Change. Net zero is defined as emissions being no greater than what can be captured and stored by our natural ecosystems. The goal for 2050 should be based upon sound scientific principles, not political conveniences.

In order to meet net zero goals in just 30 years it is clear humanity must do both, limit ghg emissions via a cap and invest program as described in HB 4167 AND sequester or put away as much atmospheric ghg as possible. It appears that achieving net zero emissions in just 30 years is not going to happen by reductions in emissions only. It will require further efforts that must include clear and obvious ways to encourage additional voluntary incentives for carbon sequestration within rural Oregon's 30 million acres of forests and arable lands. Knowledge about (through education) and access to a voluntary carbon sequestration program for rural Oregonians must be made clear, it must be adequately funded with appropriate incentives, and it must include atmospheric greenhouse gas emission reductions that are significant, quantifiable, verifiable, enforceable, and comprise reductions that would not otherwise occur. Agricultural practices that achieve soil carbon capture into arable lands are well known, and satisfy all these criteria. Toensmeier, E 2016.

Delayed harvest strategies to reduce ghg emissions as has been proposed with commercial forests, just cannot work without some type of financial incentives to encourage participation. I suggest the concept of a tax deduction for each year the timber harvest is delayed. Such tax write-offs can be used to help with management and maintenance costs of forests enrolled in the carbon capture program during the period of growth/no harvest. At the option of the volunteer participate in the program, these write-offs could be allowed to accumulate, and become collectible by the landowner at actual time of harvest. A floating write-off incentive rate could be provided with higher write-offs the longer the harvest is delayed with some minimal time in the program (5-10 years) being required first. In this fashion the State will never have an actual payout of funds and the future

Oregon reduction in taxable income can be planned and anticipated for at some time in the future.

Similarly, agricultural practices that encourage organic carbon accumulation in soils (cover cropping, pasture and range management, silvopasture, reduced tillage, etc) could be encouraged by a tax write-off incentive along with a financial incentive to be awarded periodically for each ton of additional atmospheric CO₂eq that accumulates in the soil and measured as soil organic matter. As with the timber incentive approach, the longer a farming practice accumulated atmospheric carbon dioxide, the greater the incentive should become for the land owner to stay in the program. Alternatively, a farmer wanting to join the program could be asked to volunteer to keep the farm in the carbon sequestration program some specific length of time (25,50? or more years).

Carbon sequestration into Oregon's 15 million acres of arable lands can be significant. Net capture of 0.5 tons of soil carbon per acre and more are readily achievable with various agricultural practices. (Toensmeier, 2016. Appendix C, and page 31). If only 20% of Oregon farm land was to voluntarily enroll in a carbon sequestering program, I calculate that soil carbon sequestration could offset the entire estimated Oregon net agricultural emissions of 6MMT as CO₂ eq.(DEQ, 2018).

Carbon capture into soils and timber management can start this growing season. This would jump start Oregon onto a glide path that would bring zero net emission concepts within the next 30 years, with fewer controversies on costs and who benefits.

Citations:

DEQ 2018. Appendix A and B: Oregon's Greenhouse Gas Emissions through 2015: An assessment of Oregon's sector-based and consumption-based greenhouse gas emissions <https://www.oregon.gov/deq/FilterDocs/OregonGHGreportAB.pdf>

Toensmeier, E 2016. The Carbon Farming Solution.

<https://www.chelseagreen.com/product/the-carbon-farming-solution/>

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