Submitter:	Kyle Meyer
On Behalf Of:	
Committee:	Joint Committee On Transportation
Measure:	HB4141

I am a postdoctoral researcher with Portland State University Department of Chemistry, with experience in geochemistry, biochemistry, and climate science. Today, I write testimony in opposition to this bill as presently written.

As it stands, I do not believe that the timetable for petroleum diesel fuel prohibition is realistic.

To propose such measures, there must be something compensatory with respect to the use of credible fuel alternatives or other technologies.

Petroleum diesel fuels and other distillate fuel oils underpin critical sectors of our state's livelihood -- farm equipment, construction equipment, commercial and residential heating and other utilities, maritime shipping, and railroad transport. Without support for these lifelines, our state will experience extreme hardship.

I support exploring the use of oil-producing crops, animal fats, and waste oil/grease in an effort to produce renewable diesel and biodiesel to serve as that alternative. These types of biofuels are shown to greatly reduce carbon emissions, while readily blending with petroleum diesel (in the case of biodiesel) or serving as a complete drop-in alternative (renewable diesel).

Other technologies to offset the use of petroleum diesel simply aren't here yet to scale.

I wish that they were, but we must ground ourselves in the hard physical limitations we face in walking this difficult tightrope.

As such, we are left with these biofuels, which aren't without substantial issues. In order to produce the renewable diesel and/or biodiesel to offset petroleum diesel use will require a wide variety of oil-producing crops accounting for vast amounts of Oregon's limited agricultural lands. There is also the concerns about land use conversion and fertilizer/pesticide use (among other environmental issues) that will need to be addressed.

However, we are at a crossroads for pursuing such measures. According to the Oregon State Board of Agriculture 2021 report (https://www.oregon.gov/oda/shared/documents/publications/administration/boardrep ort.pdf), the average age of the Oregon farmer is 57.9 years, with some 2/3rds of Oregon's agricultural lands expected to change hands in the years ahead. Another major contributor in terms of minimizing carbon emissions through renewable diesel production is minimizing the distance for sending oil crop feedstocks to processing plants and their return journey as a usable biofuel.

To propose a bill such as this should also come with the expectation of developing instate production capacity to produce these biofuel alternatives. Such a notion not only minimizes the vast distance of sourcing -- like the Neste processing plant in Singapore or South American cooking oil presently approved by the DEQ's Clean Fuel Program (https://www.oregon.gov/deq/ghgp/cfp/Pages/Clean-Fuel-Pathways.aspx) -- but also alleviates some of the energy dependency of our state and nation in favor of self-sufficiency.

Incorporating these kinds of considerations into this bill could create a rare win for the state in reconciling energy production, climate solutions, and the economic means to provide for our citizens.

Without such considerations, we enact measures that leave us at risk of being unable to sustain the basic needs of our population.

I would be in favor of supporting a bill that could better address these difficult realities.

In the meantime, I believe that a great deal more work must be done to evaluate case scenarios where this transition could happen with the means available to us today and within our grasp over the timetable proposed by HB 4141.

While the goals with respect to carbon emissions are admirable, we need a clear roadmap for getting to that point.

We also cannot neglect the other factors that also demand our attention in addition to carbon emissions.

There is much to consider in carving the path forward.

Thank you for your time and consideration, as well as the opportunity for testimony.