Dear Chair Sollman, Vice-chair Findley, and Members Golden, Hayden, and Lieber

I strongly oppose SB 803 on climate, environmental justice, and food security grounds.

Not only is it too little too late– asking for **only a 40%** (theoretical) reduction in emissions **starting in 2030**, but includes a caveat wherein if the price of renewable diesel is higher than that of petroleum diesel, petroleum diesel could be sold– but renewable diesel itself is neither clean nor renewable.

It is true that tailpipe emissions, particularly soot (particulate matter), are lower from renewable diesel engines than from old diesel engines burning petroleum diesel.

- However, since this bill would allow continued use of petroleum diesel depending on market price, Oregon may see none of the public health or snowpack preserving benefits of this particulate reduction .
- A more certain and cost effective way to insure that particulate emissions are reduced would be to require – and possibly provide rebates for– particulate filters for older vehicles:¹

According to the California Air Resources Board, while renewable diesel does act to reduce PM emissions in legacy diesel engines, "There were **no statistical differences in PM emissions" in new technology diesel engines** (NDTEs) no matter whether renewable diesel, another type of biofuel, or petroleum diesel (the CARB reference fuel) was tested.²

Even if renewable diesel were cost-effective, it has serious **climate, food security**, **environmental justice, and sustainability issues.**

- Climate: Many experts indicate that ODOE's current emissions intensity estimates are flawed, because they do not sufficiently consider the effects of the scale of demand on indirect land use change. Soy feedstock, specifically noted in this bill, could– in terms of CO2 emissions– end up being worse than petroleum diesel.³ ODOE's current emissions intensity estimates also do not consider the effects of the displacement of feedstocks⁴– for example tallow has many industrial uses⁵, and fish carcasses are used in pet food and aquaculture⁶ on total emissions.
- **Food security:** In a Washington Post article from last May titled "Vegetable oil prices soar, far outstripping other food inflation," experts note the war in Ukraine and the drought in Argentina as partial causes, but "**The bigger issue**, Luginsland said, **is the**

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https://www.fhwa.dot.gov/ENVIRonment/air_quality/cmaq/reference/cmaq_diesel_retrofits/cmaqdiesel.pdf ² pg viii, https://ww2.arb.ca.gov/sites/default/files/2021-11/Low_Emission_Diesel_Study_Final_Report.pdf

³ https://theicct.org/u-s-biofuels-policy-lets-not-be-fit-for-failure/

⁴ <u>https://theicct.org/wp-content/uploads/2022/01/impact-renewable-diesel-us-jan22.pdf</u>

https://theicct.org/wp-content/uploads/2021/06/ICF_LCFS_Biofuel_Categorization_Final_Report_011816-1.pdf

⁶ https://www.easyfish.net/en/blog/fish-by-products-and-their-industrial-uses/

"push-pull between food usage and fuel."7

The senior grains and oilseed analyst at Rabobank says that 55 - 60 million additional acres– an area almost the size of Oregon– of soybeans would be needed to meet the planned expansion in renewable diesel through 2025. He continues, " **"Soybeans would basically wipe out corn and wheat acres in the U.S. just to produce enough oil for this."**

- Environmental justice: The pressure to increase renewable diesel supply is pitting refineries against prime farmland: Locals in Port Westward are currently trying to fight a planned renewable diesel refinery in their area, right on the Columbia river⁸. Deforestation in the Amazon, a likely side-effect of expanded demand for soybeans, will not only be devastating in terms of releasing huge amounts of carbon dioxide into the atmosphere, it also destroys the land and livelihoods of remaining Indigenous tribes.
- **Sustainability:** A WRI report indicates that meeting just 20% of the worlds' 2050 energy needs from biofuels would require "the total amount of biomass people harvest today—all the crops, plant residues, and trees harvested by people for food, timber, and other uses, plus all the grass consumed by livestock around the world."⁹ Meeting just half of transportation demand with biofuels would require displacing all of the worlds' food crops.¹⁰ It is worth noting that producing energy with solar power (PV) is far more efficient than biofuels, on a per acre basis: Solar requires 30 100 times less land¹¹, and may even beneficially share space with food cropland¹².

Cellulosic/ or wood biomass feedstocks: Finally, I know there is hope that cellulosic renewable diesel made from woody waste and invasive trees may come to the rescue. There are two reasons why this is unlikely.

- First, it is simply unsustainable. Once you burn the invasive species and restore the habitat, what do you have to burn the next year? Currently forests are sometimes logged once every 20 years; new evidence suggests that we must shift to 40 year logging timeframes.
- Second, cellulosic this has been a goal for over a decade. Yet while the US Renewable Fuel Standard had a mandate for 17 billion gallons of cellulosic biofuels in 2022¹³, <u>Only .63</u> billion gallons or 3.7% of the mandate- was produced.¹⁴ And in southern Oregon, a refinery that proposed to do just this faces foreclosure, after receiving millions in subsidies and *before* producing even one gallon of fuel.

Thank you for voting against this bill, and for considering the issues with "renewable" diesel.

⁷ <u>https://www.washingtonpost.com/business/2022/05/11/vegetable-oil-prices-surge/</u>

https://www.wweek.com/news/2022/09/28/turning-fish-grease-into-diesel-fuel-could-solve-oregons-carbon -problem-why-are-enviros-so-queasy/

⁹ p3 <u>https://files.wri.org/d8/s3fs-public/avoiding_bioenergy_competition_food_crops_land.pdf</u>

¹⁰ p10 https://files.wri.org/d8/s3fs-public/avoiding_bioenergy_competition_food_crops_land.pdf

¹¹ p4 generally 100x as efficient, ,p14 solar still 30x more productive than most productive potential for cellulosic ethanol <u>https://files.wri.org/d8/s3fs-public/avoiding_bioenergy_competition_food_crops_land.pdf</u>

https://today.oregonstate.edu/news/combining-solar-energy-and-agriculture-mitigate-climate-change-assist-rural-com munities

¹³ <u>https://afdc.energy.gov/laws/RFS</u>

¹⁴ <u>https://www.greencarcongress.com/2022/06/20220604-eparvo.html</u>

Sincerely, Helena Birecki Climate Reality Project volunteer leader