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On Behalf Of:	myself
Committee:	Joint Committee On Transportation
Measure:	HB4141

I am generally in support of HB 4141 that will gradually phase in the requirement to sell only renewable diesel in Oregon.

Renewable diesel is 100% compatible with diesel engines, also called a drop in fuel, because no modifications are needed. I understand that it produces less black carbon and therefore burns cleaner than fossil fuel diesel. Important considerations for renewable diesel are the feedstock, the carbon intensity, price, availability, and how do we phase out renewable diesel.

The feedstock, the material used to make the renewable diesel is a major consideration in the calculation of carbon intensity. If made from waste oil or biologic material that is readily available close to the manufacturing site, the carbon intensity (the savings in carbon) will be higher than if the feedstock is imported biological material that has other environmental consequences. Hence the prohibition to use palm oil that is from trees that have displaced indigenous forests and must be imported. Carbon Intensity is calculated by Argonne National Laboratory and even includes the area where a crop is grown.

We must understand that CO2 is CO2. When burned, renewable diesel produces CO2. Its advantage is the CO2 released is from crops that just sequestered CO2 from our atmosphere, not CO2 that was stored for millennium. As with fossil fuels the processing requires considerable energy input. And, of course, it must be transported to the user. All of these are considered in calculating the Carbon Intensity. If the Carbon Intensity is less than fossil petroleum fuel, we get a savings in the CO2. This is how renewable diesel can save up to 60% of the total CO2 over fossil fuel diesel.

Sounds good, and what is the downside? The easiest way to make renewable diesel is from oily biological matter. Used and recycled cooking oil, soy and other crops used to make vegetable oils are the easiest to process. These has limited supply or supply we would want to limit if we valued food over fuel for vehicles. Less attractive crops and waste products, ones we would not use for food, tend to be higher in cellulose and more energy intensive to process and hence have a higher Carbon Intensity (less savings on total emissions). HB 4141 assumes the use of waste biological material and invasive plant species and prohibits the use of palm oil. All positive considerations.

Because renewable diesel is a 'drop in fuel' and functions the same as fossil fuel

diesel the primary market factors are price and availability. Price is subsidized by the Clean Fuels Program that offers credits to renewable diesel producers that are purchased by fossil fuels producers / distributors. Fair since fossil fuel producers receive millions in Federal subsidies that are so entrenched in our system as to be invisible. If we manufacture and set up distribution for renewable diesel there is an easy market if the price is competitive. HB 4141 will help incentivize that market.

Because HB 4141 prohibits the use of palm oil and focuses on biological waste products it should not disrupt food supply chains. The bill calls for a phase in around the state beginning in 2025 and being statewide by 2029. It only applies to on road diesel vehicles and most of these vehicles to not currently have another viable option (e.g., electrification or hydrogen).

Still CO2 burned and released in the atmosphere is still CO2. Therefore, renewable diesel and other biofuels are only a transitional fuel. We must continue to focus on electrification. This may look like a disincentive to renewable diesel producers but there is a market for renewable diesel beyond on road vehicles and eventually the producers can enter markets for agricultural and construction equipment, stationary equipment, and other vehicles that are not easily electrified.

Please vote yes on HB 4141 with the knowledge that it is a transitional solution although best option we have now.