



**OREGON TRUCKING ASSOCIATIONS, INC.**

Before the Senate Environment and Natural Resources Committee  
Testimony of Bob Russell, Oregon Trucking Associations  
Senate Bill 324  
February 2, 2015

I have personally participated in the original administrative rules advisory committee on the Oregon's Low Carbon Fuel standard that resulted in rules that were partially adopted by the Environmental Quality Commission. More recently I participated in the administrative rules advisory committee that led to the rules pertaining to Oregon's Low Carbon Fuel Standard that were adopted by the Environmental Quality Commission in January of this year. I have also testified at every legislative hearing on Oregon's Low Carbon Fuel Standard beginning with the enabling legislation in HB 2186, enacted in 2009, and all subsequent hearings on bills proposing to eliminate the December 31, 2015 sunset of this program. After nearly six years of effort, we still find that Oregon's Low Carbon Fuel Standard program is incomplete, problematic and its potential for success highly speculative.

Oregon's Trucking industry is primarily concerned about the impact of the Low Carbon Fuel Standard on the price and availability of fuels to power our trucks. Incomplete administrative rules only increase our concerns. When the Environmental Quality Commission adopted the rules in January it deleted the values for Indirect Land Use Affects. However, we were informed that this is only temporary. At some time in the future, when DEQ has better information, they intend to include the missing Indirect Land Use Affects values. With these values unknown it is impossible to determine what fuels might satisfy the standard. From the trucking industry's point of view, it is reckless to adopt a program that in our opinion, will impact the cost and availability of fuels necessary to power our trucks when a significant component of the program is missing.

I believe that there is a common misconception about Oregon's Low Carbon Fuel Standard. Many people believe that all the oil industry has to do is blend increased amounts of biofuels, with petroleum based fuels, in order to meet the standard. Since, the trucking industry is almost exclusively concerned about diesel, I will

confine my remarks to the impact on diesel fuel. (However, the same issue is prevalent with ethanol blended with gasoline.) The reality is that the oil industry cannot increase the amount by volume of biodiesel blended with petroleum diesel beyond the five percent that Oregon requires today. Many diesel engine manufacturers limit their warranties to biodiesel blends of five percent or less. (See attached chart. For a more complete description go to [biodiesel.org](http://biodiesel.org).) I believe that the oil industry would be assuming liability for voided warranties if they were to provide diesel fuel with biodiesel blends above five percent. I do not believe the oil industry will do that. The result is the only way the oil industry can comply with the standard is to use biodiesel that has a lower carbon content than the biodiesel that is available in sufficient quantities today. This may work in the early years of 10-year reduction curve required by the standard but will certainly not achieve the full 10% required reduction. At the point where five percent biodiesel no longer meets the required reduction percentage, the oil industry must either stop selling diesel fuel in Oregon or purchase credits. In either case, it will adversely impact the availability or price of diesel fuel.

The recent rules adopted by the Environmental Quality Commission include a provision that allows persons to broker the credits authorized under the Low Carbon Fuel Standard. These brokers may buy, sell or hold credits. There are no rules providing oversight of these brokers. Certainly, because they are allowed to hold credits, they may very well speculate in order to increase the price. This is problematic not only from the standpoint of the potential increased cost of fuel but it also creates a potential for fraud. I thought we learned the lesson of the hazards of unregulated brokers in 1929. Since then, virtually all types of brokers have been heavily regulated to protect consumers. However, not so with the Low Carbon Fuel Standard.

There have been a number of studies regarding the potential of California's Low Carbon Fuel Standard on the price of fuels. DEQ relied on three of these studies to forecast the potential of fuel cost increases resulting from Oregon's Low Carbon Fuel Standard. The range of cost increases from these studies are from 4 cents to \$1.06 per gallon of fuel. DEQ chose to rely on the studies that forecast fuel price increases from 4 cents to 19 cents per gallon. The studies relied upon by DEQ did not focus on diesel fuel specifically. However, the California Trucking Association commissioned their own study that concluded that when California's Low Carbon Fuel Standard is fully implemented it will increase the cost of diesel fuel by \$1.47 per gallon. (See attached) To put this in context, HB 2001, also enacted in 2009, by the Oregon Legislature, included a 6 cent per gallon increase in Oregon's gas tax. This measure was the largest tax increase of any kind in Oregon and, when

fully implemented has raised about \$300 million per year in increased revenues. While the Oregon Trucking Associations supported this legislation because the money is used to improve our highways, roads, streets and bridges, the increase in the cost of fuel, as result of the tax increase, has been a significant burden on the industry particularly during the Great Recession.

I do not believe that anyone really knows how much Oregon's Low Carbon Fuel Standard will increase the cost of fuels. However, we do know that there will be cost increases if for no other reason than the oil industry will be required to purchase credits in order to comply. The risk we take with increased diesel fuel prices is the potential impact on Oregon's economy. Today, the trucking industry transports approximately 75% of the tons of freight moving to, from and within Oregon. This market percentage is forecasted to increase in the coming years. Significant increases in the price of diesel fuel will increase the cost of transporting goods to markets both within and outside of the state. There is a very real danger that Oregon products will be less competitive in other markets and Oregon consumers will pay increased prices for the goods purchased here. We believe that this is a serious risk and should be carefully considered by the Oregon Legislature before DEQ is allowed to implement a Low Carbon Fuel Standard.

The administrative rules contain three deferrals, or offramps, in the event that there are insufficient fuels available or if the price increase is substantial. The first deferral is designed to address emergencies that result in inadequate supply of fuels. This deferral is triggered as a result of a natural disaster or an unanticipated disruption in the production or transportation of the fuels necessary to comply with the standard. Hopefully, this situation will never occur but if it does, it is hard to imagine that transportation fuels of any kind will be available in Oregon. The second deferral is designed to protect against fuel shortages. However, the calculation is based on the amount of credits available not the actual supply of fuels. All this means, is that the oil industry does not have to buy credits if none are available but has little if anything to do with the availability fuels. The third deferral is a monthly price deferral. However, this deferral is based on a 12 month rolling average. You can certainly see how significant price spikes could be masked by the average leaving the consumers no option but to pay higher prices. New language in the -3 amendments to Senate Bill 324 seem to require the Environmental Commission to adopt rules for "managing and containing the costs of compliance with the standards." If this language contemplates that the Commission will adopt new or different deferrals then it leaves another gaping hole in the program increasing the uncertainty of the program's impacts on the availability and price of transportation fuels in Oregon.

Oregon's trucking industry acknowledges that carbon emission from vehicles contribute to climate change. We also accept responsibility to reduce emissions from our trucks. Over the past couple of decades, we have dramatically reduced emissions from heavy trucks. The following are the regulations, incentives and research efforts that have significantly decreased emissions from heavy trucks:

### **Regulatory**

- EPA required pollution control technology on 2010 and newer truck engines that reduces particulates and NOx by approximately 95% compared to engines built in 2001.
- EPA regulation requiring truck manufacturers to improve heavy truck average MPG by 20% by 2018.
- EPA Renewable Fuel Standard requiring increased use of biofuels including biodiesel.
- Oregon Renewable Fuel Standard requiring diesel blends that include 5% biodiesel.
- Oregon truck idling regulation that sets a basic standard of 5 minutes of idling or less in any given 60-minute period.

### **Incentives**

- EPA SmartWay program that assists trucking companies to adopt fuel saving technologies.
- Oregon Department of Energy 35% tax credits for the increased cost of purchasing natural gas powered trucks and for natural gas fueling stations.
- Oregon PUC program that authorizes the agency to approve natural gas tariffs that provide a cost effective way to build natural gas fueling stations.

### **Research**

- EPA Super Truck Program that has provided \$115 million in grants to truck manufacturers to develop heavy trucks that consume 50% less fuel.

Oregon's trucking industry acknowledges that there is more to do particularly with respect to carbon emissions. However, we strongly believe that the low carbon fuel standard is not the way to accomplish the goal. The US contributes about 17.33% of the world's carbon emissions. Currently, Oregon produces about six tenths of one percent of the US carbon emissions. Of that, about 34% comes from Oregon's transportation sector. However, the Low Carbon Fuel Standard exempts aircraft, railroad locomotives and watercraft of all kinds further reducing its effectiveness. Then, the standard itself only requires a 10% reduction. Climate

change is a global problem. Oregon's Low Carbon Fuel Standard will have almost zero impact on the problem. There are better ways to reduce carbon emissions from vehicles. For all of these reasons, the members of the Oregon Trucking Associations strongly urge you to vote "No" on Senate Bill 324.

Manufacturer	Biodiesel Blend Approval	Notes
Arctic Cat	B20	
Audi	B5	
Blue Bird	B20	
BMW	B5	
Caterpillar	B20/B5	B20 is approved for most engine models. See specific models for additional info.
Chrysler Group	B20 fleets/B5 all other diesel vehicles	B20 is approved for Dodge Ram in Government, Military, and Commercial Fleets. B5 is approved for all other diesel vehicles.
Cummins	B20	See specific models for additional info.
Ford Motor Co.	B20	B20 approved for all 2011 and newer diesel engines. B5 is approved for all older models.
General Motors	B20	B20 approved for all 2011 and newer models. B20 is also available as a Special Equipment Option (SEO) for 2007-2010 models. B5 is approved for all older diesel vehicles.
Izuzu Commercial Trucks of America	B20	
John Deere	B20	B5 preferred, but all John Deere engines can operate with B20 blends. Engines without exhaust filters can operate with blends above B20.
Kenworth	B5	
Kubota	B20	
Mack Trucks	B20	
Mercedes Benz	B5	
New Holland	B100	
Perkins	B5/B20	Depends on model.
Toro	B20	Only approved for engines built after 2008. Conversion kits available to retrofit engines built after 2002.
Volkswagen	B5	
Volvo Trucks	B20	

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# The Impact of the Low Carbon Fuel Standard and Cap and Trade Programs on California Retail Diesel Prices

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April 25, 2012

Table 4 shows that the cost of this Cap and Trade rule would raise the wholesale cost of diesel by \$0.42/gallon by 2020.

**Table 4. Cap and Trade Wholesale Diesel Price Impacts<sup>29</sup>**

Price impacts	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cap and Trade	0	0	0	\$0.33	\$0.34	\$0.36	\$0.38	\$0.40	\$0.42

### 3. Total LCFS and Cap and Trade Program Costs

Table 5 displays the total program-based annual price impacts of the combined LCFS and Cap and Trade programs. By 2020, the joint wholesale impact of the two programs would be \$1.89.

**Table 5. Program-Based Diesel Price Impacts**

Price impacts	2012	2013	2014	2015	2016	2017	2018	2019	2020
LCFS	\$0.06	\$0.11	\$0.19	\$0.41	\$0.46	\$1.11	\$1.20	\$1.31	\$1.47
Cap and Trade	0	0	0	\$0.33	\$0.34	\$0.36	\$0.38	\$0.40	\$0.42
Net Program Costs	\$0.34	\$0.40	\$0.50	\$0.74	\$0.80	\$1.47	\$1.57	\$1.71	\$1.89

**4. Impact of Combined Program Costs on Wholesale Diesel Prices** Table 6 displays the impact of the combined program costs on wholesale diesel prices. The base forecast is the CEC's high price forecast. The net wholesale price is the sum of the combined program impacts and the base case, not including taxes. By 2020, the wholesale price of diesel would be \$5.37.

**Table 6. Impact of Combined Program Costs on Wholesale Diesel Prices**

Price impacts	2012	2013	2014	2015	2016	2017	2018	2019	2020
Base Forecast <sup>30</sup>	\$3.04	\$3.17	\$3.30	\$3.39	\$3.42	\$3.45	\$3.47	\$3.48	\$3.48
Net Program Costs	\$0.34	\$0.40	\$0.50	\$0.74	\$0.80	\$1.47	\$1.57	\$1.71	\$1.89
Total Price, ex tax <sup>31</sup>	\$3.10	\$3.26	\$3.47	\$4.13	\$4.22	\$4.91	\$5.04	\$5.18	\$5.37

**5. Program-Based Retail Diesel Price Impacts** Table 7 displays the retail impacts of the combined LCFS and Cap and Trade costs. The retail impact is the difference between the retail CEC base price forecast and the retail price forecast that includes program costs. Retail prices are calculated using current federal, state and local tax rates<sup>32</sup>.

Table 7 shows that the retail impact of the combined LCFS and Cap and Trade programs will increase retail diesel prices by \$2.22/gallon by 2020, increasing the retail cost of diesel by 50 percent to \$6.69/gallon.

<sup>29</sup> The carbon intensity of diesel is 0.40 MT CO<sub>2</sub>/barrel. See 40 CFR Parts 36, 87, 89 et al. Mandatory Reporting of Greenhouse Gases: Final Rule. The diesel CI multiplied by the average carbon credit price and divided by 42 gallon/barrel gives the per-gallon cost.

<sup>30</sup> CEC High Oil Price Diesel Price Forecast: Ex Tax.

<sup>31</sup> Sum of forecast and total program price increment.

<sup>32</sup> Includes 24.4 cpg federal excise tax, 13 cpg state excise tax, 2 cpg state UST fee, 9.12% state tax and 8.11% local tax.