

Rick Fritz

See Attached Letter

WA Clean Fuel Stnd Comment Aug2022

Dear Joel Creswell,

August 19, 2022

Thank-you for an opportunity to comment on WA Clean Fuel Standard. First and foremost is to stop the current political influences which favor narrow personal goals, while ignoring actual science of multiple 'clean energy' solutions. Those political preferences are blocking other necessary clean energy solutions.

The primary issue today is a transition of major transportation segments which are ripe for cleaner energy production. These ground and water segments include small **personal vehicles**, large localized **fleet vehicles**, large **long-haul road** vehicles, **railroad** and **ferry** systems state wide. Each transportation segment exists statewide, so **BOTH urban and rural** solutions will be needed. One size fits all narrow thinking in Olympia will destroy any multidimensional Clean Fuel Standard solutions. The goal is to reduce carbon emissions, not to force any single solution upon society. It will take multiple solutions. I will address the carbon free H2 transportation issues moving forward worldwide, and needed in WA.

Reality is to learn from the success of others worldwide. Japan, Canada, Germany, and even industry inside our USA has already made large moves to cleaner carbon free H2 energy in all areas of light and heavy transportation. H2 power = carbon free power. The vehicles are EV but the power comes from H2 not a huge lithium battery. Drive straight EV means you fully support lithium mining.

Small personal cars and trucks range from commuter to long-haul. Straight EV is being accepted and used by 1-2% of car owners today. These are mostly in urban environments. Petroleum Hybrid EV is used by 2-3%. (EU just banned sale of petroleum Hybrid EV cars.) What the USA ignores is the cleaner H2EV like Honda Civic H2EV (been sold in EU and Asia for 10+ years). Many countries offer petro, diesel and H2 at gas stations and have for many years. US petroleum industry had politicians block H2 technology development in our country. EV enhanced by H2 power generation, is the future of clean mobile transportation. Other nations have already made that switch or a commitment to switch.

Large local fleet vehicles from city and school buses to police, fire, EMS vehicles to local commercial fleets like UPS, FedEx and DHL delivery trucks can benefit from H2EV technology. FedEx is already moving to H2EV trucks in some locations, as is DHL. The Port of LA fleet is switching their semi-truck fleet to H2EV. Japan has 400 H2EV city buses, and Germany has 1000 H2EV city buses. Imagine every city and school bus in WA running on totally carbon free H2. We should have started that switch 5 years ago.

Long-haul road vehicles are critical to food and fuel delivery across WA. Today most semi-truck manufacturers are producing H2EV tractors. H2 refueling is being put into 700 truck stops coast to coast.

Railroads have been switching from diesel-electric to H2-electric. The UK has begun a 3 year plan to convert ALL diesel-electric trains to H2-electric. Canada has a 5 year plan to convert all heavy transportation nationwide from diesel to carbon free H2 energy.

Ferry fleets are a no brainer to switch from diesel power to H2-electric power. The North Sea ferry ships have been H2 powered for many years. WA state ferries could have gone to H2-electric years ago.

You want low-carbon fuel production... but WA to date, as ignored no-carbon fuel H2 provides. I laughed that petroleum industry wants transportation industry to go into LPG-electric power. The future is NOT LPG but to carbon free H2.

Please watch the video: <https://www.youtube.com/watch?v=iWo7A6T6m0I>

Ref: <https://www.forbes.com/sites/alanohnsman/2019/05/29/hauling-with-hydrogen-dhl-adding-fuel-cell-vans-to-its-delivery-fleet/?sh=572dc9379d8a>

Ref: <https://energypost.eu/hydrogen-fuel-cell-trucks-can-decarbonise-heavy-transport/>

“Hydrogen is the most abundant element in the universe, but vehicles powered by this clean fuel are somewhat scarce in USA. That’s changing, DHL is adding hydrogen fuel-cell vans to its fleet to cut carbon emissions with **faster refueling time and longer-range than battery-electric vehicles (BEV).**”

“DHL’s decision comes after truck maker Nikola Motor unveiled a vision for fuel-cell semi-trucks and extensive network of hydrogen fuel stations to power them... Toyota has sold hydrogen fuel-cell Mirai sedans for years. Fuel-cell semi-trucks are at Port of Los Angeles and are adding more in partnership with Kenworth.”

Please as WA moves forward with BEV (battery EV) be sure to provide EQUAL support to H2EV cars, buses and trucks, H2-electric trains and H2-electric ferries. Heavy loads and long haul will require H2 power. Cleaner air will start with zero carbon H2 power for most mobile uses statewide.

Sincerely, Rick Fritz, Cathlamet, WA