

# Mark Westby Company

## Fueling the Future

In August, we reported the trend of hydrogen gradually replacing diesel as the most broadly used source of fuel in the trucking industry. Again, electric engines had a big head start and were able to raise a lot of money and government endorsement. No doubt, electric trucks will have their place, but battery weight and access to charging infrastructure will always be limiting factors.

In early September, Werner Enterprises signed a letter of intent to purchase 500 Cummings 15-liter hydrogen engines as they become available. Werner is a true leader in the trucking industry. Clarence "C.L." Werner sold his family car in 1956 and bought his first truck. Werner now has over 13,000 employees and revenues of \$2.5B. Their goal of achieving zero emissions by 2050 is so much more reasonable than other goals we read about.

The reason for a "letter of intent" is that those 500 engines are not in full production. It's a commitment to the manufacturer and the technology. Like battery-powered engines, hydrogen engines are years away from even making a dent in the need for diesel. That leads us to the concern over the current diesel supply and refining capacity.

Typically, the United States has at least a 50-day supply. Last week, we were at a 25-day supply. It comes as no surprise that as the U.S. pivots away from fossil fuel, our refining capacity is shrinking. Refineries are being converted to renewable energy or dismantled. Energy companies are hesitant to spend money upgrading the refineries still up and running.

One thing is for certain, our dependency on fossil fuels will not end any time soon. The more we import, the less control we have over pricing and availability. When and if fracking comes to a complete end, mother Earth will certainly benefit and extraction costs on U.S. soil will rise on top of shrinking refining capacity.

Regardless of how one feels about the closure of the Keystone Pipeline, there is some irony to it all. CN is Canada's largest railway. They patented a process to solidify tar sand into bricks or "pucks," thereby removing the worries of harmful tanker spills on American land. Now, even more Canadian tar sand will come to the U.S. on trains and trucks... powered by diesel.

Finally, one barrel equals 42 gallons of diesel. In 2021, the U.S. Transportation Sector accounted for 46.82 billion gallons of diesel. Total consumption for 2022 will likely be more, and there is no good reason to believe 2023 will be any less.

Be Safe,  
Mark