Fuel Stations of the Future

JOHN DAVIS: The familiar roadside fuel island has not gone the way of the dinosaurs yet but todays megaplex gas stations with row upon row of gleaming pumps are now offering more fuel choices than ever before and facing competition from non-traditional fueling outlets as well.

Reuben Sarkar: “Whether it’s filling up your car with electricity, biofuels, natural gas, propane, hydrogen, or other future fuels, having more available helps increase our energy security and improves our environmental sustainability as well as offers more consumers a choice at the pump. We are also developing new technologies that are helping bring technologies from the laboratory to the streets, bringing you better cars and better fuels, sooner.”

JOHN DAVIS: Nationwide the fleet use of natural gas has spurred development of a whole new network of public and private natural gas stations. AT&T for instance, now operates more than 8,000 CNG vehicles and have committed to having 15,000 alt. fuel vehicles than it’s fleet by 2018. Ryder trucks has surpassed 30 million miles of CNG usage in their medium and heavy duty trucks.

And natural gas fuels 1 in 5 transit busses in our major cities. The infrastructure for delivering natural gas to individual locations is arguably better developed and more efficient than for tradition gas stations, where fuel supplies are still delivered by truck.

In many parts of the country gas pipelines already run to millions of homes and businesses to provide heating fuel. So, tapping into that supply is a relatively simple matter of adding compressor equipment and dispensers at the point of sale.

Clean Energy Corporation has made a big splash in natural gas in recent years, focusing on fleets and long-haul trucking and over 500 of their familiar lime green station canopies have cropped up at airports and industrial centers nationwide.

Midwest regional convenience store chain, Kwik Trip, offers natural gas in more than 30 of it’s stores in Wisconsin, Iowa and Minnesota. And at their home location in Lacrosse, Wisconsin, they offer CNG, LNG, and propane fuel in addition to a full slate of biodiesel blends and traditional petroleum fuels. Talk about one stop shopping.

Joel Hirschboeck: “Natural gas is probably our premier alternative fuel that we’re promoting currently. But, we wanted to be relevant in all of the fuels that were available today so that we had a good understanding of how those fuels may or may not fit into the different marketplace so that we were ready to react if need be, given a change in customer demand.”

JOHN DAVIS: Mirroring the rapid growth of natural gas outlets is america’s electric vehicle charging infrastructure, but in this case, the “fuel” comes to where the cars are: with ev’s, drivers are just as likely to charge at home as at work, or even the grocery store or airport parking garage. Essentially, any power outlet is a potential place to charge an electric vehicle.
But unlike traditional gas stations, profit is not the prime focus. While there are fee-based charging networks, many locations still offer free charging as perks to entice customers or simply engender goodwill.

EV maker Tesla has spent millions setting up a network of free “superchargers” with locations from coast to coast, that allows its customers to gain up to 175 miles of driving range in as little as 30 minutes.

There’s no telling what the fueling station of the future will finally look like. But as America’s push for clean driving solutions continues to advance the development of new fuels and power technologies, the act of refueling, and where we do it, will surely evolve as well.