TELL ME WHY

The mystique of alternative fuels continues to capture our attention.

BY JOHN EICHBERGER

Why do we spend so much time talking about alternative fuels and powertrains? Why are we—industry analysts, media, general public, public officials—so taken with these shiny new objects? Is the next wave of transportation going to be electrified autonomous ride sharing or will we still be stepping on the “gas” and looking left and right before crossing an intersection? I’ve written about this before, and the questions still remain.

At the time of this writing, the Fuels Institute has just completed our final Summer Symposium of the year, a series of talks designed to bring leading experts to the Washington, D.C., metro area to share the latest in market research, technology and policies within the fuels and vehicles industry.

For this last symposium, we looked at the fuels and vehicles market, including a number of forecasts—or projections, as the U.S. Energy Information Administration (EIA) now calls them—for where the market is heading. And I raised these questions to one of our speakers.

We were spending a lot of time talking about electric vehicles and infrastructure, and everyone in the meeting was interested and engaged. But just moments before the discussion began, we heard two presentations basically saying that gasoline-dominant vehicles are projected to maintain a greater than 90% market share for the next three decades. So why were we spending so much time talking about a footnote in the market?

Think about this:

• Through June, 99.3% of 2016 U.S. light-duty vehicle sales were equipped with liquid fuel powered engines (gasoline, diesel, mild hybrid), according to WardsAuto.
• The EIA’s Annual Energy Outlook projects that non-liquid fuel vehicles will account for less than 5% of the light-duty vehicle transportation energy consumed in 2040.
• Navigant Research projects for the Fuels Institute (corresponding report to be released in the fall) that...
96.6% of registered light-duty vehicles in 2025 will be liquid-dominant, and that is derived from an aggressive case that assumes higher crude oil prices and lower battery prices than expected in the reference case, each of which would encourage more rapid adoption of alternatives.

The U.S. Environmental Protection Agency (EPA) and National Highway Transportation Safety Administration (NHTSA), in preparing for the midterm review of the Corporate Average Fuel Economy (CAFE) program, in July issued a draft Technical Assessment Report that found automakers are likely to satisfy the CAFE requirements in 2025, primarily with gasoline internal combustion engines and “only modest amounts of hybridization, and very little full electrification... technology will be needed to meet the standards.”

So why are we so enraptured by alternative fuels? It could be because they are different, so they remain somewhat mysterious. Maybe it is because we all truly believe this represents the future and that we are only sitting on the edge of tomorrow. We have a lot of questions and we have a lot of concerns, and there seem to be a lot of hurdles to overcome. Maybe we like a challenge, or we are just attracted to Herculean efforts. Who knows?

There certainly remain many hurdles to the broad distribution and market domination of such alternative powertrains as electric or hydrogen fuel cell-powered vehicles. But there appears to be interest in seeing them succeed—there definitely is investment to make it so—and progress is being made rapidly every single day.

So while all data and analyses indicate that we are still decades away from true power diversity in our transportation sector, that does not mean the groundswell is not building. I have been a pessimist about the broad electric vehicle sector in the past, but I can see the momentum growing. And yes, it will be some time before the primary market indicators tell us a change is truly afoot—but once they do, watch out.

I recently read a Deloitte report called “The Future of Mobility.” The report classified the market into two perspectives: Insider View and Disrupter View. The first believes change will happen slowly and incrementally, allowing the market to evolve over time. The latter believes a tipping point will upend the status quo. I tend to believe in a hybrid of the two: The next 15 to 20 years will be consistent with the perspective of the Insider View, but then I believe the dam will break and everything will change rapidly.

I believe that because in 15 to 20 years, my peers, predecessors and I will no longer be the target or influential market demographic. Those who are just kids today will control the destiny of the market, and these “new” vehicles will just be regular vehicles to them—no mystery, no uncertainty, no concerns—a market of just “is.” That will result in a rapid and unstoppable shift in the market. There will, of course, be traditional powertrains and liquid fuels to support the market, but we won’t be talking about 99% market share anymore.

Today, we are privileged to be able to look into the future, to wax poetically about our visions of tomorrow and truly begin to unravel the mix of challenges that stand between now and then.

It is a great time to be part of this industry. For more information about the Fuels Institute or to get involved, contact John Eichberger, executive director, at (703) 518-7971 or email him at jeichberger@fuelsinstitute.org.