As promised, we start the day with discussions of advanced powertrains. OEM representatives from GM, Toyota, and Ford shared the podium with DENSO and Bright Automotive (a start-up company seeking to revolutionize delivery vans) to talk about one of the central challenges in the automobile business today — that is, what are the next advances in automotive propulsion.

What we’ve heard repeatedly at other industry conferences is that plenty of life remains, and improvements are to be made, in the traditional internal combustion, piston engine. We’ve seen over the past half-dozen years, for example, substantial improvements in the guise of direct injection, turbo and supercharging, intercooling, electronically controlled valve timing, heat management, and other technologies.

Simultaneously, we’ve seen more transmissions with sophisticated dual clutches, more gears, and electronic management that contributes to economy, plus some advances in continuously variable transmissions (CVTs). I’ve not been a fan of most CVTs, though they offer some significant efficiencies. They just seem too wheezy to me. There are some, Lexus comes to mind, that are so nicely controlled that we can’t tell the difference.
With each of these innovations come incremental improvements in fuel economy and when added together they become mighty significant. If you read our product reviews here at TAC you’ve probably noticed raves about new models offering more power and better fuel economy usually with little if any extra cost. As a non-engineer I’m regularly astounded by what the auto industry has accomplished.

But where we are going, and at what pace, are big questions that everyone would like to answer with some measure of accuracy in order to have the advantage in coming years.

How about fuel cells? For years we’ve been hearing, and we continue to hear, that hydrogen powered fuel cells will power our personal vehicles, and probably commercial ones as well, in the long run. How long a run? Probably decades at the least.

Toyota, though, is promising to have an “affordable” and “available” fuel-cell vehicle in selected markets (those few markets where infrastructure is available) by 2015. Considering they have a just a few in practical testing now makes me wonder if that might be an overly ambitious prediction. Our experience with Toyota makes us a bit reticent about challenging that prediction.

Hydrogen, of course, is not readily available anywhere now so the infrastructure must grow before the market can develop. California has begun the process in the Los Angeles area and seeds have been planted in New York. We won’t expect to see hydrogen available here in the Midwest for many years it comes to major urban markets.

On another topic an impressive panel this afternoon talked extensively about the federal government’s roll in guiding the auto industry. With new CAFE standards in place there appears to be some relief that the decision is made, though substantial disagreement that it is the right decision.

Sean McAlinden, the Center for Automotive Research’s Chief Economist and resident curmudgeon, insists that mandated green technology usually doesn’t work. He also pointed out that the 1905 Detroit Electric car had a range of 80 miles per charge, just a few miles better than a 2011 Nissan Leaf. McAlinden recommends that the industry ignore mandates and just design and build vehicles that meet actual demand. He points out that government demands for fuel efficiency of the 1980s nearly resulted in Ford and Chrysler bankruptcies. So government mandates are not often a good thing.

The new mandates stretch to 2025 with a review option beginning in 2018 that will allow for some adjustments if needed. Negotiations with the industry resulted in more favorable treatment for utility vehicles and pickups. Not surprisingly VW and Mercedes, companies that don’t make trucks (for U.S.), were among the few who did not endorse the plan.

Most experts on the panel agree that an effective way to achieve fuel efficiency without imposing onerous standards would be to significantly raise the gasoline tax. Dan Becker, director of the Safe Climate Campaign, an environmentalists’ group lobbyist points out that there may be a maximum of three legislators within the entire House and Senate that would dare vote for such a plan. Becker contends that the US should be leading the effort to mitigate global warming and that we are shirking that duty.

What is amazing, agreed most of the panel, is that industry representatives, environmentalists, labor leaders and government officials could come together enough to agree on new standards.

They also agreed that a well-known, unintended consequence of the new standards will be an ever accelerating deficit of the highway use taxes (gas taxes, that is) that support highway infrastructure (roads, bridges, etc.) projects. We are already seeing those problems at both the state and national levels because of consumers buying smaller, more fuel-efficient vehicles.

Disagreement permeated the panel as to whether any government entity should be picking winners by mandating certain types of vehicles. California, for example, has mandated, and still does, that a certain number of vehicles to be sold in their state must be of the zero-emission persuasion. That essentially means electrics. To quote panelist Mike Stanton, auto industry lobbyist, “If we build them will they come?” Maybe not. Then what? What if no one buys the mandated vehicles? No one answered that question.

An interesting pitch we heard at the beginning of one session today came from the University of Michigan Solar Car Team. In a few months they will be competing in the Solar Car World Challenge, a 1,500-mile race across Australia using only the power of the sun. Nearly four-dozen teams mostly sponsored by universities. Having won three consecutive US championships in solar car races they now think they can win the world title if only they have a modest infusion of capital to pay for more efficient solar cells.

Tomorrow we’ll all be abuzz, the result of speeches by Fiat and Chrysler boss, Sergio Marchionne, and UAW leader, Bob King.

Stay tuned.

2011 C.A.R. MANAGEMENT BRIEFING SEMINARS

Day 1
Day 2
Day 3
Day 4

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Continental DWS06 Real World Road Test By...
ON THE ROAD OR ON THE TRACK AMERICAN ETHANOL PASSES THE TEST

WILL THE EPA PROTECT FAMILY FARMS OR CATER TO OIL COMPANIES?

TELL THE EPA THAT RURAL AMERICA NEEDS A STRONG RENEWABLE FUEL STANDARD.

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