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RUMBLE SEAT / DAN NEIL / THE AUTO SHOW

An auto industry falls short of green

L.A.'s car showcase underscores that the government needs to help automakers in the drive to make eco-friendly vehicles.

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Porsche—a company associated with environmental friendliness like Wilt Chamberlain is with prim chastity—is going green. On the company's stand at the Los Angeles Auto Show (starting Friday) is a front-wheel-drive, zero-emission electric car. One version of the car is a series-hybrid -- the gas engine doesn't turn the wheels but, rather, charges the batteries -- and features all-wheel drive. Very cutting-edge stuff.

The car is a Lohner-Porsche, circa 1900, built by automotive pioneer Ferdinand Porsche and the Lohner coachworks in Vienna. Porsche AG has conscripted the car from its museum in order to establish the company's bona fides as it introduces the Porsche Cayenne hybrid concept, the gas-electric version of its urban trailblazer. Setting aside the Cayenne hybrid's technical merits for a moment, we should ask: Why didn't the all-wheel-drive series-hybrid version of the Lohner-Porsche succeed?

For reasons, it turns out, that sound familiar to us today. The vehicle was complex and costly; the batteries -- over a ton of lead-acid -- were not sufficiently "energy dense," which is to say their electrical output was canceled out by their weight and bulk. Over a century later, as the world awaits salvation from the curse of its own oil-based mobility, automakers cite these same drawbacks in explaining why plug-in hybrids (PHEVs) and electric vehicles (EVs) are not ready for primetime. And these are not the ogres of Detroit. This is Honda, Toyota and Nissan. Batteries remain the critical and highly contested component, the as-yet imperfect technology upon which the future of the automobile depends.

Sometime this week, various environmental and human rights groups -- including the Freedom From Oil Campaign coalition -- will protest outside the show's site at the L.A. Convention Center. These groups argue that automakers already have the technology to achieve vast increases in fuel economy by making their vehicles hybrids, PHEVs (which run in electric-only mode for some distance on grid-supplied energy) and EVs. These groups contend that automakers hypocritically tout their green technologies at auto shows only to improve their image -- "greenwashing" -- even as they fight increased fuel-economy standards in Congress and the courts. At the moment, for example, automakers are suing to stop California and other states from imposing their own greenhouse-gas emission standards that would sharply increase fuel-economy standards.

These critics are half right. The automakers are hypocrites for promoting themselves as agents of change even while they battle increased regulation. The cognitive dissonance is plain in the Cayenne hybrid, or the elephantine Cadillac Escalade hybrid (also at the show). These slightly more efficient monsters will look, in some future Museum of the Automobile, ridiculous, a

testament to our conflicted times.

But as for the wholesale conversion of the automotive fleet to hybrids, PHEVs and EVs, well, that's problematic precisely for the same reasons faced by Ferdinand Porsche. Even the most advanced traction batteries have issues of energy density, durability, cost and safety. It is not true that the automakers can simply throw a switch and mass-produce reliable, affordable and desirable grid-charged gas-electrics or EVs that will go 100 miles on a charge, not just in sunny L.A. but wintry Calgary. This is the contention of people who do not have to put their names on cars, who do not have to sell, warranty, service and answer suits by dissatisfied customers. This is the contention of people who don't have to put out the fires of overtaxed lithium-ion batteries.

In fact, there are plug-in hybrids on the horizon, most notably the Chevy Volt project, and the Volvo C30 ReCharge concept, which is at the show. But no one knows if these cars are acutally going to work. They are huge technical gambles.

If it sounds as if I'm defending the automakers, I am, but I'm also proposing a course of action. Government needs to spend whatever it takes to help automakers develop battery technology and should grant consumers whatever tax breaks and incentives necessary to make the transition to electric vehicles, in a generation, all as a matter of supreme national interest.

Consider the context of this year's auto show. The price of oil is flirting with $100 a barrel. Recent studies suggest that, as the energy demands of emerging giants India and China increase, world oil consumption could rise 55% by 2030. Even oil executives concede we cannot drill or mine enough to satisfy that kind of energy appetite. According to the International Energy , all countries need to take "decisive and urgent action to curb runaway demand." If you're not persuaded by the impending crisis of global climate change, consider this: What happens to real estate equity in the far-flung exurban areas -- say, Lancaster or Palmdale -- when homeowners cannot afford the gas to commute to work? What happens to retailing when Americans can no longer afford to log the estimated 1 billion driving miles per day devoted to shopping?

It's becoming clear to all but a few dead-enders that radical change in mobility is needed.

Meanwhile, other technologies are falling out or otherwise being discredited. Hydrogen fuel-cell technology, ethanol, biodiesel, biomass each has significant problems of supply, infrastructure, cost and scalability that make batteries and EVs look easy. Corn ethanol, for example, uses more petrochemical input than it replaces, involves vast amounts of arable land and water and generally creates more problems than it solves. Electric vehicles, whether PHEVs or pure EVs, win the big-picture contest of post-oil transportation.

In ordinary times, whatever they are, we could celebrate the automakers' achievements that we'll see on the Convention Center floor. Mercedes-Benz, for instance, is showing off a diesel hybrid, the S400, which would in production roughly double the mileage of the conventional gas-powered S-class. Likewise, advanced diesels from VW, Audi -- clean enough to pass California emissions standards -- are ready to take to the roads in 2008.

Whatever potential gains such low-volume vehicles represent, however, are utterly nullified by the American market's continued lust for horsepower and size. Consider a few of these metrics. According to the Environmental Protection Agency, the average curb weight of light vehicles for

2008 is a whopping 4,144 pounds, the highest ever and about 40% higher than a generation ago (curb weight and fuel economy are inversely related). Average horsepower has more than doubled in the same period.

Here's a good example, courtesy of Ward's Auto World: The redesigned Scion xB is a foot longer, has 50% more horsepower and weighs 600 pounds more than the previous model. It's no wonder average fuel economy hovers near historic lows.

When I walk through the L.A. Auto Show, I see vast, misdirected genius. If you took all the brains and expertise invested in, say, the BMW M3 and turned it to the problem of clean electric propulsion, we wouldn't be having this conversation. But there's still more money and glamour in the car as we've known it than in the car as Ferdinand Porsche dreamed it.

Oh, well -- maybe next year.

http://www.latimes.com/classified/automotive/highway1/la-hy-neil14nov14,0,5046607.story?coll=la-class-autos-highway1