Clearly the Pacific Institute comes to this debate with both a point of view and an agenda. Too bad, because otherwise it could have been interesting.

A. Complaints about the mileage used for each vehicle is addressed in a document on the CNWMR.com site. Fundamentally it says that the Prius (since this seems to be the choking point for the Pacific Institute) was given a 109,000 lifetime miles figure NOT because it couldn't or wouldn't last for more, rather because the lifetime mileage has to be adjusted for average driving distances per year and how long the current technology is viable.

NEW high tech products have a limited life expectancy because they become obsolete more quickly. In Prius's case, the stage 1 and stage 2 hybrid drive systems are already or soon will be out of date. In 10 years those systems will be as ancient as Windows ME.

If Prius drivers are covering only 6,700 miles per year, then clearly in 10 years the cars will have no more than 67,000 miles on them. Put simply: The car could last longer in terms of miles, but replacement technology makes existing technology virtually unusable by the time the vehicle is 109,000-miles old (about 15 years from introduction).

B. Attribution of 85 to 90 percent of a vehicle's lifetime energy use during a vehicle's operation is similarly incorrect. As Dust to Dust shows in the "coffee" example, virtually none of the studies of automotive life-cycles include the energy expended for employee transport to factories, disposal of major and minor components at the end of the vehicle's life or the support industries necessary to put a vehicle on the road and keep it there.

In Prius's case, the disposal of the battery pack and electronics has yet to be refined by the disposal industry.

Put simply, of the 3,000-plus data points per vehicle, the U-M study pointed to by PI included barely 800 for only a handful of cars and trucks and the vast majority of those were during the operation stage of their lifetime. This clearly biased the report to the time the vehicle is being driven and used by the consumer and minimizes the impact of both the pre-production, production and disposal stages.

Nor did any of the studies cited look at support industries during the pre- and post-ownership stages such as road maintenance (based on mileage and weight), environmental compliance and literally hundreds of non-vehicle support activities.

C. This is NOT inappropriate amortization. Example: When GM built the Impact electric car, it had a production plan that far exceeded the eventual sales level.

IF U-M or anyone else had used the production plan rather than actual sales as a component for an energy usage study, they would have significantly underestimated the social energy cost per vehicle.

Second, there was and remains no guarantee that a vehicle will succeed in the marketplace. The Honda Accord Hybrid is a perfect example. The energy expended to design, develop, manufacture, support and eventually dispose of the Honda Accord Hybrid is actually HIGHER than our estimate because the vehicle is now obsolete in terms of amortizing the cost of those pre-production activities over a now smaller base of vehicles.

What Pacific Institute is attempting to say is that we have to take on faith that a vehicle will succeed in the marketplace and make life-cycle calculations based on that manufacturer's projection. Dust to Dust did not. We specifically attributed early development costs to the specific number of vehicles sold because there was and is no guarantee that the vehicle will survive (e.g. GM Impact) after its first or second year.

And, as Dust to Dust points out, the longer a vehicle remains in production the less the cost-per-mile is impacted by the pre-production expenditures. Obviously, this is because the initial expenses for battery development, for example, can justifiably be spread over more vehicles. Thus Prius showed a decrease in dollars-per-mile in the second data release from CNW.

D. Scion xB and xA argument. The two cars do, indeed, use some of the same manufacturing processes. What Pacific Institute does not say is that they are purchased by distinctly different types of drivers, have significantly different volumes (and thus amortization schedules), have different content, different disposal rates, different weights of high-tech components including metals/plastics, etc.

Just because two vehicles are built using the same process, same platform or even the same assembly line does NOT mean they are identical vehicles. Flexible assembly lines are common today with an assortment of vehicle types produced at the same time.

Add the types of driving, distances driven and owner demographics into the mix (as we did) and there can be (and are) distinct differences in energy costs per mile.

E. Just because the Pacific Institute doesn't have "precise" data doesn't mean we don't. Our information is based on more than 27 years of both tracking repair and use of vehicles and having the systems necessary to get to an accurate assessment of real-world data.

For example, the Prius was listed by the EPA and promoted by Toyota as giving approximately 60 miles per gallon. Dust to Dust listed it at 46 mpg. The revised EPA list reduced the Prius's fuel economy to 48 -- more akin to our assessment (which Toyota disputed initially). Our figure was based on real-world, real-driving data not a static cycle or estimate.

F. Lack of Transparency in regard to funding is a silly argument meant to somehow disparage Dust to Dust, yet Pacific Institute is willing to cite a study that was directly paid for by Ford and Chrysler. We point out on numerous occasions in the report as well

as to reporters and anyone else who asks that CNW did not accept money from any outside source to perform this study. We did not receive a grant from government or business, asked no private or government agency to participate in any way, nor do we charge for the results. Furthermore, CNW is a privately held company with no obligation to reveal financial data publicly.

Finally, the Pacific Institute clearly has a "dog in this fight" based solely on its stated purpose as found on its web site. Clear from the list of names of those on its board of directors and advisory board as well as its staff that there is a strong bias toward an activist rather than a scientific environmental interpretation of data. Nor is there a location on the web site listing major contributors to the Pacific Institute so we are blind to who actually funds the organization.

In summary, the Pacific Institute's seven page report on Dust to Dust is inaccurate, incomplete and biased.

If the Pacific Institute were honest, it would generate its own study of this issue (we would supply the list of 3,000-plus data points we used for them to investigate) or, at a minimum, begin a dialog that deals with real-world issues such as high-tech, 15,000-mile Prius tires (as an example), the lack of environmental controls at Chinese factories where Prius batteries are "born" or the literally hundreds of other energy and transportation-related issues that exist.

These should be the real concerns of PI deserving real answers rather than the nonsense contained in its report. Consumers need to make informed choices about energy sources and how automobiles fit into the energy use debate, not PI's pointless drivel.

Art Spinella
CNW Research
August 20, 2007

Response to Pacific Institute "Hummer versus Prius" May 2007