

National Alternative Fuel Day Odyssey Makes the Rounds

By Louise Poirier,
Staff Writer

Organizations across the United States and Canada recently advocated for alternative fuel vehicles and cleaner means of transportation. The event came to Houston, Texas, where electric, flex-fuel and alternative fueled vehicles gathered in an effort to reach out to the community.

Transportation

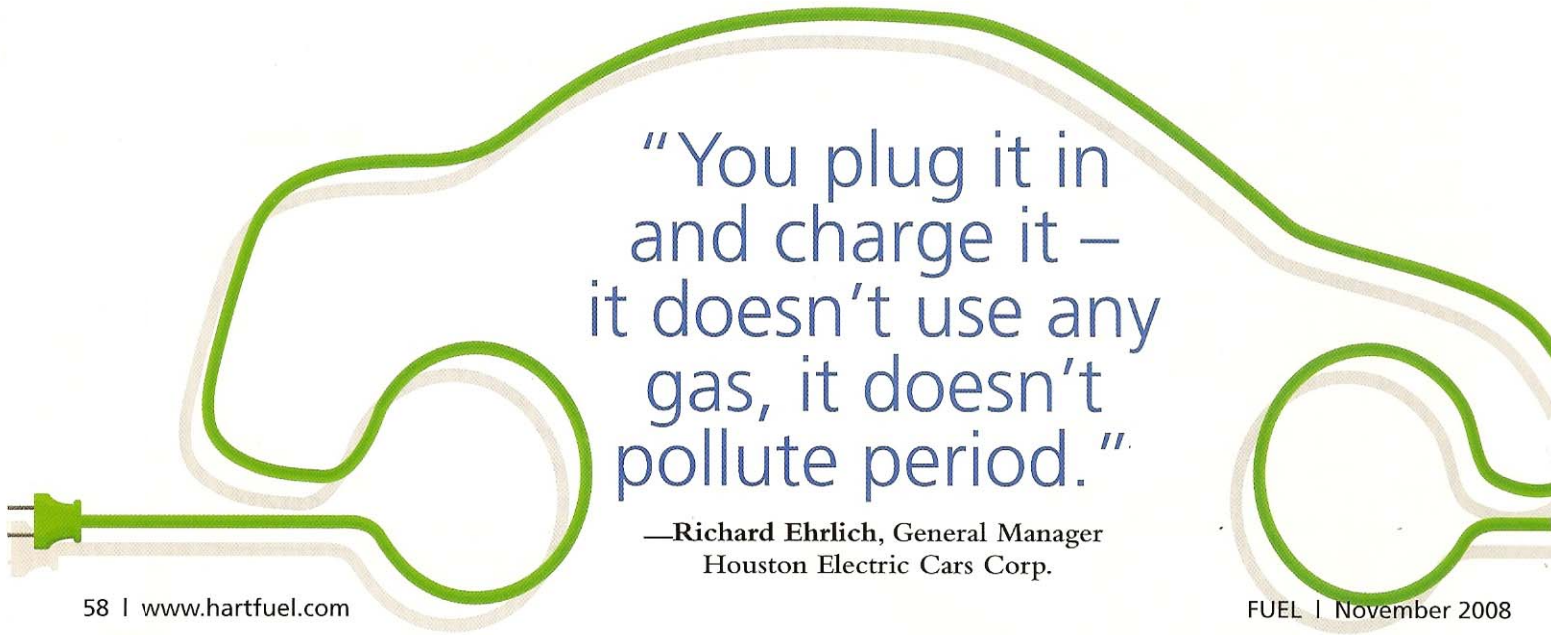
>>> Every two years, the National Alternative Fuel Vehicle Day Odyssey is held to promote the use of and educate the public about alternative fuel vehicles (AFV). Headquartered at West Virginia University, the National Alternative Fuels Training Consortium (NAFTC) organized the first celebration April 11, 2002, when organizations held events at 51 locations across 31 states to acknowledge the day. This year marked the event's fourth anniversary, and it grew to include 88 locations in the United States and Canada.

The event also has support from the U.S. Environmental Protection Agency and the U.S. Department of Energy.

Houston took part in Odyssey this year under the sponsorship of Gulf Hydrocarbon, a Houston-based biodiesel distributor. Electric cars, biodiesel and flex-fuel vehicles were showcased in an outside parking lot.

"Two years ago, Clean Cities did not sponsor it, and so I just wanted to make sure we had it again for this year, so we stepped up and said let's go ahead and sponsor it," said Jess Hewitt, chief executive officer and Gulf Hydrocarbon president. "The other thing is the past two events have been indoors, and we wanted to go with an outdoor event to actually bring the cars here."

"What we're doing here is we're just showing people the cars and the fuel, and we've had a lot of groups come



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—Richard Ehrlich, General Manager
Houston Electric Cars Corp.

by today. The Houston Police Department was here – they bought somewhere around 200 to 250 flex-fuel vehicles, between the Malibus, Impalas and all the Toyotas – they don't have any flex-fuel infrastructure to put the fuel in the car, but that's part of the process – now you've got the car, now you need the fuel. And so we also wanted to highlight the fact that we have the fuel and it can be distributed. Unfortunately, right now it has to be for the fleets. So getting the fleets out here to take a look at the electric vehicles, the flex-fuel and biodiesel vehicles was a real treat."

Richard Ehrlich, general manager of Houston Electric Cars Corp., a local electric car dealership, brought a ZENN electric car to the event.

"You plug it in and charge it – it doesn't use any gas, it doesn't pollute period," Ehrlich said. "It's a class of car called a neighborhood electric vehicle; it's made by ZENN, a Canadian company. They import the naked chassis near Montreal and they have an assembly plant there where they make them into the final electric car. They import the car without motor or drivetrain, made by Microcar of France, so it's a French-made automobile.

"It would be safe to drive this car 40 mph, but legally it can only go on streets of 35 mph. To charge it from zero to 100% takes 6.2 KW hours, which costs the consumer US\$0.80, so it doesn't significantly change your electric bill. The cost to operate it is under \$0.02 per mile, it's less than one-tenth the cost of a regular car, less than one-twentieth the cost of a Hummer and less than one-fifth of the cost of the most efficient hybrid car."

ZENN made its first model in 2006, and the little car can go about 64 miles with no accessory use, about 30 miles with full accessory use and is virtually noiseless.

"The real usage for a neighborhood electric vehicle is you're only going a few miles at a time, so you have a lot of opportunity to plug it in," Ehrlich said. "And the charging curve is very strange. In the first 10 minutes, it charges about one-third of your total charge. In the next four hours, it charges almost all of the remaining, close to 100%, but it's not truly 100% unless you leave it in for another four hours, for eight hours total."

William Swann, a member of the Houston Electric Car Club and electric car enthusiast, brought his modified Geo Metro – the vehicle runs off the batteries stored in the trunk, with a total running cost of about \$0.032 per mile.

Other exhibitors included a local Chevrolet dealer, which showcased a flex-fuel Impala, along with Green Mountain Energy and the Greater Houston Partnership, which both had booths.

Schmidt & Sons brought a 4,500-tanker truck to Odyssey as well.

"We wanted to make sure something big was going to

be here, because we knew the event was going to be small," said Todd Madden, sales manager at Schmidt & Sons. "We wanted to try to help that as best we can. We [are actually interested] because whether it's diesel or biodiesel we're hauling, we're hauling. It doesn't matter, we're going to be transporting it. And if it's solar energy, we'll figure out a way to transport that. So we don't just want to be diesel distributors, we want to be energy distributors.

"I'm glad we're participating, we'll do it again the next year and probably have two or three tankers, bring something bigger that will catch people's eyes."

Also in attendance was Houston City Council member, head and founder of the Sustainable Growth Council Committee and mayoral candidate Peter Brown.

>> Biodiesel in a Box

Gulf Hydrocarbon's GEM Biodiesel Cube is offering greater accessibility to biodiesel consumers. Though they are not available for the average consumer, the ease with which biodiesel can be put into vehicles offers a cleaner alternative for businesses with biodiesel-ready vehicles. Jess Hewitt, chief executive officer and president of Gulf Hydrocarbon uses the 5-gal cube on his own vehicle.

"This is a diesel vehicle, and it can run off of biodiesel or diesel, or a combination," he said. "I try to use about 20% biodiesel.



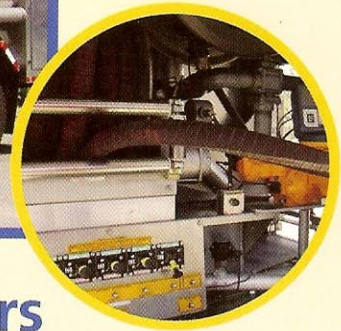
Photo by Louise Poirier

"Biodiesel is pour and go – it meets all the specifications of the engine manufacturer. So basically, this [box] comes with a cap, you remove the cap, and there's a valve, and then run the hose. I put the box on top of my roof, put the hose into the filler cap, turn it

on and in about four minutes, it drains out. What I like about this is that biodiesel is real slippery, and so it's hard to get off of stuff. So I don't like to touch it. So with this system, I don't have to touch anything. It drains right into the tank and because it's a bladder, it doesn't have to be vented, it just collapses around itself. Then when it's done, I'll close it off, pull the hose out and then all this can be recycled." ■



Fuel management is made easier with Schmidt & Sons practice of adding alternatives and additives at the hose. (Photos by Louise Poirier)



>> Fueling Fleets with Fewer Tankers

Schmidt & Sons, which displayed one of its 4,500-gal tankers at the Odyssey event in early October 2008, is fueling fleets in a smarter way. Instead of injecting additives or biofuels into the tank, the company does so at the hose.

"That's what's really unique about that truck," said Todd Madden, Schmidt & Sons sales manager. "The design's extremely new, the way all the switching and all the valves and everything work. What we are kind of interested in with these folks is that we can inject different types of fuels or we can inject different types of additives into the fuel at the hose, not at the tank. Everybody else is blending in the tank, we're blending at the end of the hose. That allows us to carry one product but offload at the end of the hose whatever we want. So if some-

body wants a biodiesel blend at 99% or 50%, instead of screwing up an entire tanker load, let's say I'm only filling one car, that's like 20 gal. My smallest tank is 500 gal. So if he wants a blend of B100, I'm going to screw up that whole 500 gal – who am I going to sell that other 480 gal to? And that's where your problem exists.

"We fuel fleets like Coca-Cola, Fed-Ex, HEB [grocery store], so some of their trucks – like Coca-Cola runs a clean diesel additive – we inject it directly into diesel for them, and then we leave the site and go to HEB and they don't want anything, so it allows you to do different products using the same base fuel but injecting it at the hose, and that's what the whole thing's about. It's all computerized, prints it all out so they know they got what they want." ■

"Myself, I just got a smart car, and I just filled it up this morning for the first time, and I was very curious how many gallons the gas tank holds — 7.5 gal — and I drive further than one of those great big SUVs...Alternative fuels are absolutely critical."

—Peter Brown, Houston City Council member, head and founder of the Sustainable Growth Council Committee

