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Upstate gets look at fuel of future

Hydrogen Road Tour stops at Zentrum

By Jenny Munro BUSINESS WRITER

GREER -- Don Rubenstein, a Simpsonville resident, said he'd be the first in line to buy a hydrogen-powered automobile when they go on sale to the public.

He and his son Preston attended the Hydrogen Road Tour stop at the BMW Zentrum on Saturday. The stop lasted for a couple of hours before the tour cars refueled and left for Columbia and Aiken later in the day. The event attracted more than 100 people.

"We're here because we love the idea of people conserving energy," Rubenstein said, adding he has driven a hybrid for about 18 months. And he said he believes hydrogen is "a logical choice" for a fuel of the future.

The Hydrogen Road Tour is driving from Maine to California to raise awareness of hydrogen as an automotive fuel option and the need for a fueling infrastructure. The tour, which has driven about 1,000 miles so far, will make 31 stops in 18 states over 13 days.

The 10 cars -- the liquid hydrogen-fueled internal combustion engine BMW Hydrogen 7 and various hydrogen fuel-cell cars -- are refueling at existing stations when they can. But a mobile fueling rig goes with them.

"We had to bring our fuel with us," said Chris White of the California Fuel Cell Partnership. "One day a trip across the country won't be such a big deal."

While at the stop, members of the public were allowed to drive or ride in the hydrogen-fueled cars.

Candice Yount, who came down from Asheville, N.C., with her family, said the ride in a Nissan 7CV "was very quiet. We did not have any surges. It was smooth, silky smooth."

She said her family would buy such a car, probably for short trips.

"We would be willing to pay more in order to help this effort," she said. "We have a crisis with energy. This coming together is wonderful."

Preston Rubenstein, 10, said, "I think it's good because we don't need to use gas as much. We don't to pay that much."

U.S. Rep. Bob Inglis was pleased with the crowd. "I see a bunch of people willing to change, willing to see the future, not be threatened by but embrace it," he said. "How long before this happens? Some change happens really fast."

White predicted hydrogen fueled cars would be in the showroom around 2015, some a little earlier and some a little later.

"I think this is the beginning of another American century," he said of the technology. "Let's take a swing at it."

BMW's Hydrogen 7 is the sole car on the tour using a hydrogen-powered internal combustion engine.

Jason Perron, project leader of BMW CleanEnergy Program North America, said BMW believes "hydrogen is essential to our long-term sustainability."

He said both hydrogen technologies are strong, but BMW "believes our customers appreciate the characteristics of an internal combustion engine."

In the next few years, "I think you will see the world change from a digital view -- gasoline or nothing," he said, adding numerous alternate fuels are possible.

Shannon Baxter-Clemmons, executive director of the South Carolina Hydrogen & Fuel Cell Alliance, said the hydrogen industry is important to the state. A move toward hydrogen as an automotive fuel in the state would enhance economic growth, limit the state's environmental footprint and improve the nation's energy security.

Currently, South Carolina is the site of \$26 million in both private and government investment in hydrogen and fuel cell technologies, she said.

Karl Garant and Keith Lindgren, graduate students in the first automotive energy program at Clemson University's International Center for Automotive Research, are enthusiastic about hydrogen.

"I think it's a very reasonable fuel," Lindgren said. "It can be expected to be a long-term solution."

Garant said, "The technology is there. It's expensive now. It's the infrastructure."

Although they expect both internal combustion engines and fuel cells to be part of the early hydrogen mix, they believe one will eventually win out.

Cheryl McQueary, deputy administration of the Department of Transportation's Research and Innovative Technology Administration, said the United States now produces 9 million tons of hydrogen annually -- enough to fuel 34 million of the 250 million vehicles on the road.

More hydrogen fueling stations are being built -- some as stand-alone units and others that also provide gasoline and diesel, White said.

Inglis suggested stations be built in large cities such as New York and Los Angeles. That would give carmakers the necessary market to begin building hydrogen-fueled vehicles.