

<http://www.canada.com/montrealgazette/news/driving/story.html?id=89d8cbf1-ba18-4b61-a8cd-fdcd1c262d08>

The hydrogen revolution

Technology is advancing rapidly. Many alternative-fuel vehicles are beginning to feel and drive like gasoline-powered models

TONY WHITNEY, CanWest News Service, Tuesday, May 09, 2006

At the recent Globe 2006 environmental trade fair and conference in Vancouver, transportation was centre stage, featuring many hydrogen fuel cell and alternative-fuel vehicles

It was not the sole focus of the event by any means, but it's a key area for anyone involved in managing the urban environment.

Several vehicle manufacturers offered delegates the chance to drive alternative-fuel vehicles. Three automakers brought out fuel-cell vehicles - Ford, Honda and Nissan. Since I'd already driven Ford's Focus fuel-cell car - several of which are seeing fleet service in British Columbia - I concentrated on two vehicles I'd never tried, Honda's FCX and an X-Trail FCV adapted for fuel-cell power by Nissan.

The Honda FCX is a nifty-looking little hatchback and my first impression when climbing in was that it seemed very much ready for production. It had none of the poorly fitting panels or bits and pieces out of the shop parts bin that often characterize efforts like this. It was well put together, tight and rattle-free, and generally imparted the same feeling of quality you get from the company's production Fit, Civic or Accord models.

Honda fuel-cell development staff were on hand to ride along and provide technical details, and they were emphatic that testers should get immediately behind the wheel and drive away. There is no complexity about these current-generation fuel-cell vehicles - at least as far as operating them is concerned. Just fire up the engine, put the shifter into drive and quietly head

off into the traffic.

The little FCX was a pleasure to drive with lots of pep and plenty of torque. Most people riding in one of these for the first time are amazed at the refinement and response they have. Electric motors react very quickly to a dab on the accelerator.

In addition to having several FCXs running around in California as evaluation vehicles, Honda has actually leased one to a family in Redondo Beach - the world's first fuel-cell car customers. They are said to be paying \$500 a month for their FCX, and it's used for day-to-day transportation - commuting to work, dropping the kids at school and so on.

Of course, one of the things holding back production of hydrogen-fuelled vehicles is the lack of a fuel supply infrastructure, but this will change. A Honda representative told me that he was serving on a committee with California Gov. Arnold Schwarzenegger, who is determined to create a "hydrogen highway" all the way from Southern California to Vancouver. Right now, head south from Vancouver on Highway 99 and Interstate 5 and the first hydrogen fuel supply you'll reach is in Sacramento, some 1,300 km away.

Nissan's Globe contribution was a hydrogen fuel-cell version of its popular X-Trail compact SUV, albeit with a few added body panels to give it a more "cutting-edge, high-tech" look. Like the Honda FCX, the Nissan FCV seemed ready for production, with a great level of quality and refinement. Again, the little truck was responsive and amazingly quiet - in fact, one of the dangers of these vehicles is that jaywalkers step off the curb without even a hint that a vehicle is approaching.

Nissan developed the motor for the FCV itself - indicating that increasing numbers of automakers are building their own systems, rather than buying them from suppliers. Nissan has leased fuel cell vehicles to corporations and municipal authorities, but not private individuals. As with other hydrogen fuel-cell vehicles, the only emission from these cars is water, which emerges from a stainless-steel tailpipe and can be safely drunk.

It will likely be many years before we'll be able to buy a fuel-cell vehicle, but the best contribution anyone can make to the environment right now is to buy a new car.

The current crop of models have never run cleaner, most pollution coming from older vehicles. Even so, it's good to know that automakers are well advanced with vehicles that produce no emissions at all.