

By Matt Campbell
Reporter

Hydrogen: Viable energy source or a bunch of hot air?

Stuart Energy Systems Corporation has just been given a \$300 000 grant from Natural Resources Canada to research on whether or not it's feasible to set up hydrogen fuelling stations in three Canadian cities. Among the three is none other than Charlottetown, Prince Edward Island.

But is there really a possibility of a hydrogen fuelling station on our small island? What is this new company all about? Hydrogen is the most abundant element in the universe, but isn't this hydrogen fuel likely to spontaneously burst into flames like the Hindenburg in 1937?

First of all, our province was chosen in part due to interest by the Binns government in searching for renewable energy resources, such as the wind turbines located in Alberton. Subsequently, the Sierra Club of Canada has recently given the island an A-, leading the country in efforts to address climate change.

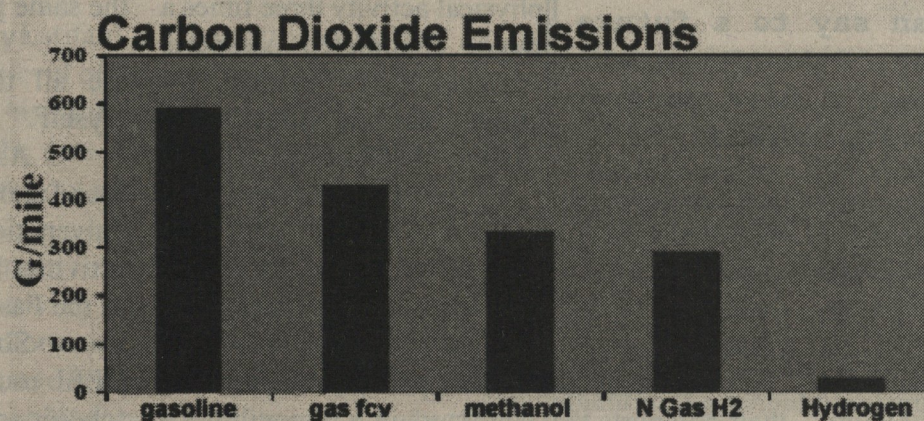
Holding the reins is Stuart Energy Systems, a hydrogen infrastructure company based in Missauga Ontario, with firms in Russia, China, Belgium, Germany and India. They were chosen by the Canadian Transportation Fuel Cell Alliance (CTFCA) to develop a market for this new energy source and increase public acceptance of the technology.

I know what you're thinking. "Seriously though, the Hindenburg!"

There has been a primarily false concern with the safety of hydrogen in recent history which stem from this particular disaster.

Scientists have since discovered that although the hydrogen did burn, it did not cause the explosion, nor did it enhance the burning of the vessel. When the airship was landing, an unexpected electrical discharge ignited the Hindenburg's canvas, which was unknowingly treated by German engineers with two major components of rocket fuel.

All passengers who remained in the airship survived while thirty-five of the thirty-seven casualties died from jumping to the ground.



"But since it's being used for fuel, what if the hydrogen does somehow ignite in a car?"

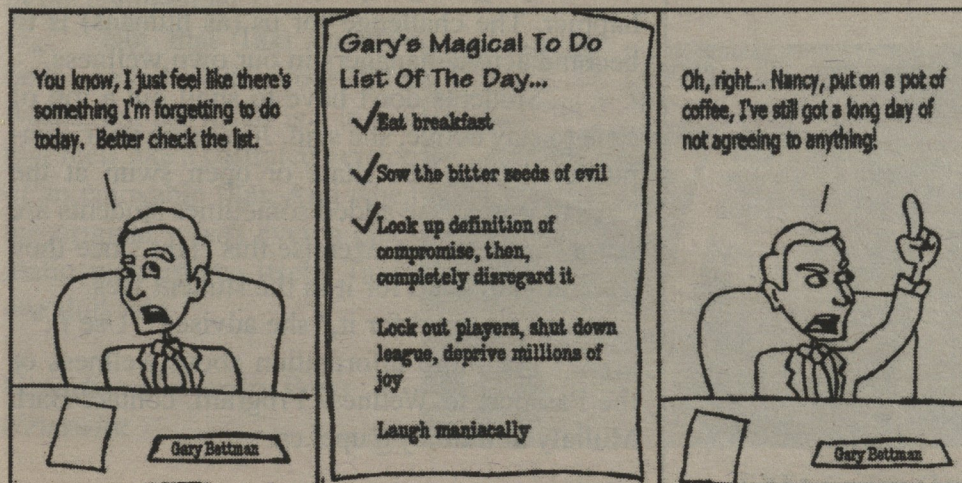
There have been numerous tests conducted at the College of Engineering at Miami University which set fourth to answer this question. 3000 cubic feet per minute of hydrogen was leaked from a vehicle tank and set alight. Over the course of the burn, temperature sensors inside the vehicle did not measure an increase of more

than 1 or 2 degrees inside the vehicle, while the temperature outside of the car did not incur an increase.

The CTFCA is a \$33 million federal government initiative hoping to demonstrate and evaluate fuelling options for fuel cell vehicles in Canada. We're seeing an increase in interest today, and current issues such as global warming and the Kyoto accord are advancing the process. With the help of Stuart Energy Systems Corp and the Government of Canada we can fundamentally change our relationship with the natural environment.

'94 Canucks

By Brian Shirlaw and Chris Baxter
The Peak (Simon Fraser University)
CUP Newswire



For all of those of you working some 'crummy' job in order to afford to come to school: The customer is always right!



By: Dan
McNeill
Contributor