Subject: Hydrogen Fuel Cell, Electric Cars Posted by mision08 on Sun, 12 Feb 2006 03:24:42 GMT View Forum Message <> Reply to Message

As Herbert Simon wrote in Computers, Communications and the Public Interest in 1971, "What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention, and a need to allocate that attention efficiently among the overabundance of information sources that might consume it."

Amen to that, All the major automobile manufacturers involved in this movement. Road trip, 2 new stations FAQ from the California Fuel Cell Partnership site Big brother has some useful info

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Apache on Sun, 12 Feb 2006 04:00:06 GMT View Forum Message <> Reply to Message

Personally, being a rabid car fan, I think that hydrogen is totally the wrong direction to be taking. It requires massive rebuilding of infastructure, and is actually VERY dangerous too. Hydrogen gas is extremely explosive, and I definitely wouldn't want to be sitting on a tank of it!

The right course of action they need to take is ethanol, and bio-diesel.

Ethanol is very easy to produce, and runs just as well as gasoline does. The only infastructure, and engine changes required to run ethanol is to replace aluminum fuel rails with stainless steel, injectors with ethanol compliant versions, rubber fuel lines with Teflon inside coated rubber lines, and a stainless steel fuel tank.

The only reasons for these changes is becuase being an alcohol, Ethanol is corrosive, and will eat through aluminum, rubber, and plastics.

With these changes, a guy can run 100% ethanol on any current V8 gasoline engine. Ethanol burns extremely clean, producing basically no CO, nor oxides. Infact, Ethanol is the fuel of choice for top fuel dragsters. Ethanol is a high octane fuel, which would allow automakers to make very high performance engines, and still get better emissions than current engines do.

It'd be very cheap to switch all vehicles over to ethanol, as compared to switching to hydrogen, it'd also provide farmers with work, and wean North America off of it's oil additction.

Infact, much of Brazil already runs ethanol vehicles!

Bio-diesel is also another very good fuel to use. It can be run in any mechanically injected diesel engine with no modifications to the engine, or in any electronically injected diesel engine with very minor sensor / chip changes. Again, a far cleaner burning fuel than petro diesel, and it is produced from waste oil, or fresh clean oil too. It'd give all the restaurants something to do with their grease,

again give the farmers something to grow, and again, just as importantly, wean North America off petrol oil.

There is absolutely no reason why we need to be running oil, or spending billions trying to get Hydrogen working. We've got tried and true solutions right now, that could be cheaply, and easily implemented to replace petrol fuels.

Oh, and did I mention just how CHEAP ethanol and biodiesel would be if they were mass produced? I'm talking like .15 cents a gallon of home made biodiesel cheap

And yes, I know all this works cause I run a bio-diesel rig myself. Its an old Chevy 6.2 diesel with a 6.5 turbo slapped on it. Run it on bio-diesel made from Canola that local farmers give to me for free (go ask for a truck box full from every farmer in the area, and you can wind up with a LOT of canola, lol) and yeah, she may smell a bit like McDonalds, but the truck runs just as well if not better than it did on dino oil, and is very cheap.

Only dissadvantage to these fuels is in cold weather situations such as here in Canada, below -10C, neither Ethanol, or Bio-Diesel remain in a liquid form, and gel up. I imagine some minor reasearch could easily turn up an additive to keep that from happening though

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by cmatt42 on Sun, 12 Feb 2006 04:21:13 GMT View Forum Message <> Reply to Message

Apache wrote on Sat, 11 February 2006 22:Oh, and did I mention just how CHEAP ethanol and biodiesel would be if they were mass produced? I'm talking like .15 cents a gallon of home made biodiesel cheap

Holy shit, that is astronomically cheap! Unless of course, you mean 15 cents, which is still cheap anyway.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by jonwil on Sun, 12 Feb 2006 04:48:16 GMT View Forum Message <> Reply to Message

One problem with ethanol and bio-diesel and such is that if everyone started using it, could we produce enough crops to satisfy both the demand for food AND the demand for fuel?

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by csskiller on Sun, 12 Feb 2006 05:18:38 GMT More plants = less CO2 in the air More plants = more fertilizers needed = more polluted water = bad for Earth's ecology

Unless of course fertilizers aren't needed, but they're almost always used.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Aprime on Sun, 12 Feb 2006 05:32:43 GMT View Forum Message <> Reply to Message

@Ethanol: That's not the only problem, Ethanol is far from being a global solution, considering the whole climate change factor and such. You can't really rely on something that relies on something that's getting more and more unstable over the years.

@Hydrogen: Yeah, but liquid Hydrogen (nobody said anything about using its gas form) isn't unstable. Driving a vehicle that's powered by liquid Hydrogen is just as dangerous as driving one that's powered by either gasoline or diesel.

@csskiller: Pesticides are more of an issue.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by warranto on Sun, 12 Feb 2006 06:53:15 GMT View Forum Message <> Reply to Message

Comrade wrote on Sat, 11 February 2006 22:32@Hydrogen: Yeah, but liquid Hydrogen (nobody said anything about using its gas form) isn't unstable. Driving a vehicle that's powered by liquid Hydrogen is just as dangerous as driving one that's powered by either gasoline or diesel.

Cough Pinto *Cough*

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Homey on Sun, 12 Feb 2006 07:37:58 GMT View Forum Message <> Reply to Message

Comrade wrote on Sun, 12 February 2006 00:32@Ethanol: That's not the only problem, Ethanol is far from being a global solution, considering the whole climate change factor and such. You can't really rely on something that relies on something that's getting more and more unstable over the years.

@Hydrogen: Yeah, but liquid Hydrogen (nobody said anything about using its gas form) isn't unstable. Driving a vehicle that's powered by liquid Hydrogen is just as dangerous as driving one

that's powered by either gasoline or diesel.

@csskiller: Pesticides are more of an issue.

It isn't a global solution, hydrogen will be the future regardless imo. It burns clean as you get and is quite powerful. They just need to learn how to harness it properly.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Doitle on Sun, 12 Feb 2006 09:41:35 GMT View Forum Message <> Reply to Message

If you are talking about the E-85 fuel that runs in flexible fuel vehicles then there is something you aren't taking into account here. It is cheaper than gasoline but you get less performance. It is the opposite of Diesal. On Diesal you pay a little more and get much better fuel economy. On E-85 you pay less and get worse fuel economy.

Quote:What is the range of a flexible fuel ethanol vehicle?

Ethanol has less energy content than gasoline. However, E85 also has a much higher octane (ranging from 100 to 105) than gasoline. FFVs are not optimized to E85, so they experience a 5% to 15% drop in fuel economy. This will vary based on temperature and driving conditions. For comparison purposes, aggressive driving habits can result in a 20% loss and low tire pressure can reduce mileage by 6%.

In short, you pay less and get less. Evening it out. :/

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by SuperFlyingEngi on Sun, 12 Feb 2006 16:31:35 GMT View Forum Message <> Reply to Message

http://abcnews.go.com/WNT/story?id=1518556

Too bad the U.S. government is influenced by big industry, or else we'd be making obvious choices, too.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by csskiller on Sun, 12 Feb 2006 16:53:38 GMT View Forum Message <> Reply to Message

Comrade wrote on Sat, 11 February 2006 23:32 @csskiller: Pesticides are more of an issue. Yes, you are quite correct. What the fuck is the point of electric or hydrogen vehicle when they're almosts two times the price of standard gasoline automobiles.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Hydra on Sun, 12 Feb 2006 22:53:23 GMT View Forum Message <> Reply to Message

They're so hippies with no understanding of basic economics can feel better about themselves in buying a much more expensive vehicle while using less fuel, supposedly being "better" for the environment.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Javaxcx on Mon, 13 Feb 2006 01:20:15 GMT View Forum Message <> Reply to Message

Comrade wrote on Sun, 12 February 2006 00:32 @Hydrogen: Yeah, but liquid Hydrogen (nobody said anything about using its gas form) isn't unstable. Driving a vehicle that's powered by liquid Hydrogen is just as dangerous as driving one that's powered by either gasoline or diesel.

The problem with liquid hydrogen is twofold. You can either pressurize the hydrogen to the point where there is so much pressure that the molecules break down and become a liquid. The alternative is somehow supercooling a tank to hundreds of degrees below 0C to make a liquid. Both solutions are very inefficient and potentially dangerous.

The only solution I can see to a hydrogen gas tank is having an outer chamber around it containing a chemical to react with hydrogen into a stable compound long before a combustion reaction can occur.

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by mision08 on Mon, 13 Feb 2006 06:30:53 GMT View Forum Message <> Reply to Message

Apache wrote on Sat, 11 February 2006 22:00Personally, being a rabid car fan, I think that hydrogen is totally the wrong direction to be taking. It requires massive rebuilding of infastructure, and is actually VERY dangerous too. Hydrogen gas is extremely explosive, and I definitely wouldn't want to be sitting on a tank of it!

The right course of action they need to take is ethanol, and bio-diesel.

A hydrogen bomb was the first thing I thought of before I saw the 10,000 psi Tank... DANGER. I was told that bio diesel was the new thing to look forward to. Hydrogen fuel cells took me by surprise, and I am completely ignorant on the subject. I am however, from a racing family and methanol is a big player in the modified series. The biggest concern with methanol is the amount of fuel consumed by the engine.

I think this may be a concern with ethanol as well.

the bed to Gold Digger is sang by Ray Charles, not Jamie Fox

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Doitle on Sun, 19 Feb 2006 08:13:40 GMT View Forum Message <> Reply to Message

Worst vehicles for the environment are Light Aircraft. Look into the lead that they release into the environment and you'll see lol...

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by csskiller on Sun, 19 Feb 2006 23:39:42 GMT View Forum Message <> Reply to Message

lawn mowers are up there for being the worst as well, but I'm not saying to throw out your mowers, and get out the manual one

Subject: Re: Hydrogen Fuel Cell, Electric Cars Posted by Renardin6 on Thu, 02 Mar 2006 13:09:15 GMT View Forum Message <> Reply to Message

Jaspah wrote on Sun, 12 February 2006 16:20What the fuck is the point of electric or hydrogen vehicle when they're almosts two times the price of standard gasoline automobiles.

If everyone uses that, the prices won't be so expensive. It's the network effect. (-> economic theory)