

Re: Solid oxide fuel cell car?

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- *From:* Dan Bloomquist <public21@xxxxxxxxxxxx>
 - *Date:* Tue, 14 Mar 2006 16:16:55 GMT
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d wrote:

I could dig up some links but the advantage of solid oxide over membrane fuel cells is the ability to internally reform fuel.

You need water as the source of hydrogen. The fuel cell combine oxygen ions with the hydrogen regenerating the water.

http://www.people.virginia.edu/~jfg6e/groves/Masters/Chen_2003/Chapter_01.introduction.pdf

There may be some ' $\text{CO} + \text{H}_2\text{O} = \text{CO}_2 + \text{H}_2$ ' going on but the major contribution is $2\text{CO} + \text{O}_2$

The difference between PEM and SOFC is that PEM is by proton transport and SOFC is by oxygen ion transport.

Google is your friend.

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"We need an energy policy that encourages consumption"
George W. Bush.

"Conservation may be a sign of personal virtue, but it is not a sufficient basis for a sound, comprehensive energy policy."
Vice President Dick Cheney

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