



KGO San Francisco, CA

Fuel cells: The future of everyday power

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By Richard Hart

Nov. 25, 2007 -- Cars and spacecraft aren't the only things being powered by fuel cells these days

Today, when somebody says, 'fuel cell', you probably think, 'fuel cell car'. In reality, there are many more non-automotive applications.

On the back, where you would normally find a battery, there is a fuel cell. It is fueled by a cartridge filled with hydrogen.

"What we've done now, with some of the advances we've made here," says Lee Arikara, founder of Jadoo Power, "is taken it down to something this small. Same power, and it's only going to get smaller from here."

Lee Arikara is proud of his company's technology. Jadoo's innovation isn't so much the fuel cell box that turns hydrogen into electricity, but a standardized cannister that contains the hydrogen. It beats a battery 4 ways.

First, it is not filled with toxic chemicals. The hydrogen can be refilled over and over. Second, it's smart. Its microchip identifies itself, records a log and reports how much juice is left. Third, it packs more punch per pound. The US Army is replacing 80 pounds of field-radio batteries with 15 pounds of fuel cells. Finally, the only pollution is water and heat.

In the aftermath of Hurricane Katrina, satellite links, computers and water pumps were powered by this 100-watt fuel cell you could carry in one hand.

The challenge isn't the technology; it's regulations that haven't keep up with it. Government bodies are so swamped with new energy technologies, that Jadoo's cartridges have been granted only a temporary exemption, and still can't be carried aboard an aircraft, even though they are safer, lighter and more convenient than many batteries.

"The result is, it could take anywhere from two to four years for us to get some of the regulatory approvals."

Until then, the military and first responders will continue to fuel their fuel cell sales.

More Information:

HYDROGEN FUEL CELL

A fuel cell is an electrochemical energy device, like a battery, that generates electricity for powering motors, lights, buildings, computers and other electronics. Fuel cells convert hydrogen and oxygen into electricity and heat.

JADOO POWER

Technology: Develops and sells energy storage and power generators for portable and mobile power markets which include broadcasters, first responders and the military.

Web site: www.jadoolpower.com

Toll Free Phone: 888-523-6648

THE ELECTRIC POWER RESEARCH INSTITUTE (EPRI)

WHAT: EPRI was established in 1973 as an independent, nonprofit center for energy and environmental research.

[Web site](#)

Toll Free Phone: 800-313-3774

FUEL CELL GLOSSARY

United States Fuel Cell Council Web site: www.usfcc.com/Glossary2.pdf