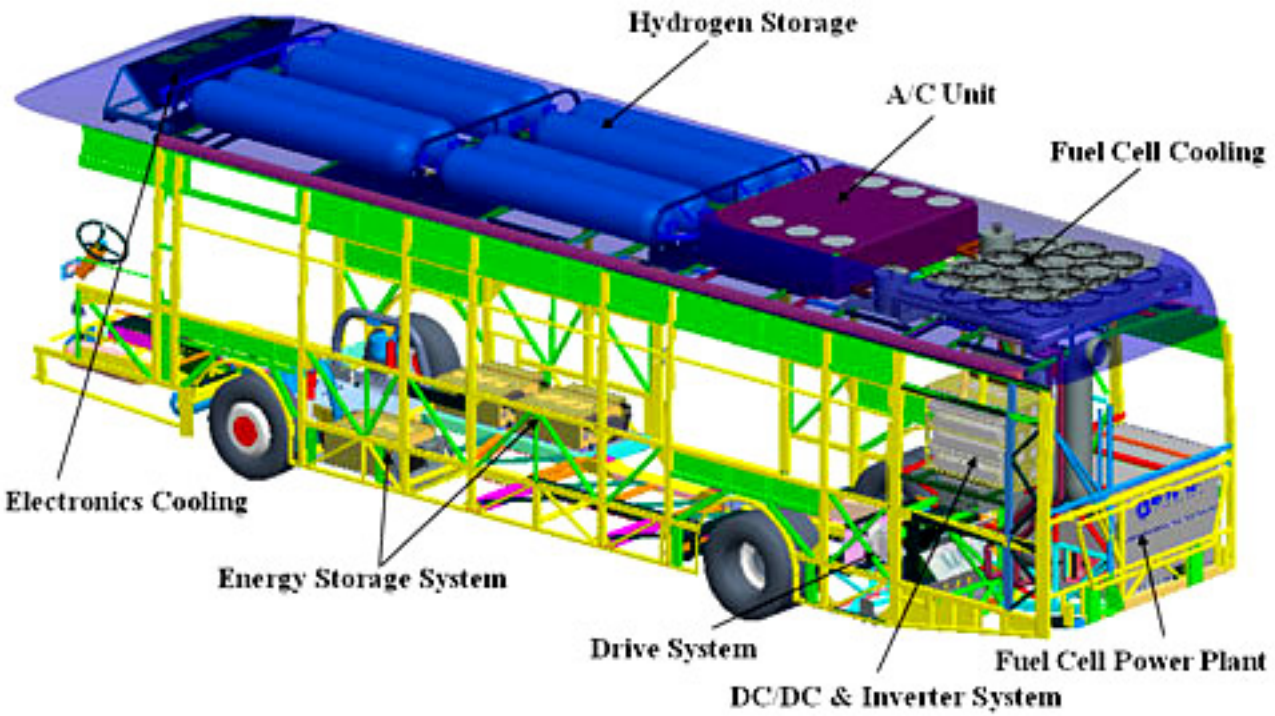
How Innovative Fuels Can Meet Your System's Needs



As alt fuels technology advances, the number of options available also grows. In this collection culled from the web site, Alternative Energy News, we offer some of the more unique community and public transportation alternative fuel technologies and strategies. Though we understand that the following list includes entries likely impossible to implement for some of our readers, we offer it to provide some insight into where the alt fuels industry may be headed and how future technologies may be applied to the transit field.

In the last hundred years we have made monumental advances in our transportation technologies. Wonderful inventions such as the train, bus and airplane have allowed us the freedom to travel and explore this great planet for a lower price. Industrialization gave us the ability to mass produce public transit vehicles so that everyone could be free to move. Unfortunately we are still using primitive and environmentally harmful petroluem fuels to propel our mass transit services. This page explores alternative methods of public transportation that seek to lessen the environmental impact of public transit.

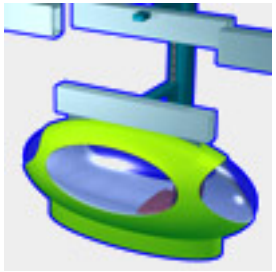
Prototype Solar Power-Assist for Buses

Sunpods Inc., is California-based manufacturing company. They produce modular, fully integrated and tested solar power generation systems. Recently they have come out with an idea of the first solar power-assist system for buses. They should be applauded for developing it in a mere six weeks. Their partner is Bauer Intelligent Transportation. The system developed by Sunpods will help Bauer to meet strict anti-pollution standards laid down by the State of California. California state law since 2008 has disallowed diesel vehicles to remain idle for more than five minutes. Now more than 25 states across the United States have anti-idling laws.

The Toyota Bus-Train

A dual mode road/rail vehicle is being tested in Japan by Toyota and its truck-manufacturing division Hino Motors. The bus bridges the gap between road and rail with four rubber tires for road use and four steel wheels for riding on rails. It can hold 25 passengers and is based on the Toyota Microbus. The bus has been in service in Japan for the past 18 months, and there are plans to produce a newer version by June of 2008. Hino spokesperson Kenichiro Baba has stated that the bus "is expected to be another step toward more practical use of the dual mode vehicle." This could be the mass transit vehicle of the future for Japanese commuters.

JPod Transportation Concept



Minnesota based JPods LLC and Swiss-based Festel Capital have signed a letter of intent to begin raising capital to commercialize JPods' patented form of Personal Rapid Transit (PRT) in Germany, Austria, and Switzerland. The JPod system supplies power to the JPod vehicles via power conductor cables supported from the rail support structure. The system is designed to endure the worst extremes of weather and can travel at speeds up to 30-40 miles per hour. The load capacity depends upon the type of vehicle. A standard people JPod can carry four people with a generous margin on normal weight.

Advantages of Biodiesel Fuel for Transportation

Modern diesel engine technology has advanced to the point where the advantages of biofuel usage are becoming much greater than the disadvantages. Modern diesel engines produce less noise, smoke or vibrations and they are more fuel-efficient than older model engines. Diesel engines have the added advantage of greater acceleration when compared to gasoline engines on the same model of vehicle. The use of biodiesel fuel may be the solution to the increasing transportation energy crisis, particularly in the farming and shipping transportation sectors.

Diesel-Electric Hybrid Train

Trials will start next year on what is being billed as Europe's first hybrid high-speed train, which can cut emission levels by up to 50 percent. The system, which has been developed by Hitachi in Japan, consists of a battery-assisted diesel-electric traction engine. The traction unit uses the battery when the train is at rest and in the early stages of acceleration up to around 30 kilometres an hour (19 mph), at which point the conventional diesel engine kicks in.

Sustainable Public Transport Systems

Growing transportation problems, including gasoline prices and carbon dioxide emissions, are forcing urban governments to consider implementing better public transportation initiatives in an effort to reduce the impact of the declining oil economy on our environment and financial markets. Research and development of renewable energy sources will require increased funding commitments from municipalities already struggling to overcome their congestion and pollution problems. The United Nations hopes that these initiatives will help reduce energy costs, pollution and even urban poverty.

Hybrid Electric School Buses in New York

The State of New York is buying two hybrid electric school buses through a unique purchasing program. The buses will be powered by Enova Systems' post-transmission 80-kilowatt hybrid drive system. Financial support for the project is being provided by a consortium of energy agencies, school districts and transportation providers throughout the United States. There are almost 50,000 school buses in the state of New York and energy groups hope to encourage more energy efficient transportation throughout the system.

Hydrogen-Powered Bus in Winnipeg

Winnipeg is showcasing it's latest technology innovation, an energy-efficient hydrogen powered bus. Unfortunately this vehicle cost too much money to make it practical for use in the short-term future. The only emissions produced by the bus are water. The bus is worth between $1 and $2 million, according to Manitoba's hydrogen specialist Bob Parsons, and is a big improvement on earlier versions of the hybrid. "It's the only one of its kind that exists in the world at this time," said Parsons.

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SUN small urban network

CTAA's Small Urban Network has formed and needs your help. If you represent an agency or organization that provides transit in a small-urban community, the SUN has created three committees that could use your expertise. They are: 1. Legislation/Policy; 2. Communications; and 3. Training/Education. Send an email to sampson@ctaa.org and volunteer with the SUN today.