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Clean-burning hybrid power Shuttle bus among public transportation applications

People are climbing on board the propane bus as the industry steps up its efforts to showcase hybrid propane-electric transit vehicles. The buses thus far on the route are providing efficient, environmentally friendly service while attracting attention from government officials, the general public and potential investors.

Propane seems perfectly positioned as a driving force for the shuttles that shuffle crowds around ski resorts, amusement parks, university campuses and airports. Specialized community programs such as those that transport senior citizens and handicapped individuals are also good candidates for selecting hybrid buses, as are mainstream municipal bus lines.

"We see a big market for this," says Enzo Bauk, director of engineering at Ebus, a Downey, Calif.-based manufacturer of hybrid buses powered by a propane-fueled Capstone microturbine. The vehicles are rolling through Los Angeles and Monrovia, Calif. on a pilot basis. "They are working well," says Bauk. "We believe! And we have invested into this."

Advanced Vehicle Systems Inc. of Chattanooga, Tenn. also is achieving positive results with its propane-fueled, microturbine-equipped buses. "This is a major breakthrough for the industry," according to Alex Spataru, president of the ADEPT Group Inc., an engineering consulting firm based in Los Angeles.

AVS buses traversing the streets of Santa Clara, Calif. are an especially appealing venture because funding is coming from that community's own municipal electrical power system, Silicon Valley Power. Spataru sees much economic potential if other alliances are formed between propane bus proponents and power generating utilities wishing to diversify their offerings to the public.

With assistance from the Propane Education & Research Council and other entities, ADEPT proved successful at removing oily residues that were plaguing the fuel lines of these microturbines and threatening the success of several pilot

bus projects. "When you burn these residues you get crappy emissions," says Spataru.

A PERC/ADEPT project helped create a filter-like device with activated carbon and aluminum silicate media to strip the propane of the oily residues and certain sulfur compounds.

"They were all heading to the toilet, and we turned it into a success," says Spataru, who credits a number of participants including the Southwest Research Institute in San Antonio, Texas. "We're dealing with the top scientists in the nation," he notes.

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