

## IMPCO To Re-Establish Bi-Fuel Conversion Business In U.S. After Long Absence

*Company Says Time is Right to Begin Marketing Kits to Add Natural Gas Capability to Conventional Vehicles*



*By John O'Dell, Senior Editor*

A California-based company that has played a major role in popularizing bi-fuel cars and trucks in Europe and Latin America is bringing its technology home.

[IMPCO Technologies](#), manufacturer of a bi-fuel conversion system that can enable cars to run on natural gas or propane as well as gasoline, plans to announce this morning that it is establishing a new U.S. automotive division to take advantage of what it sees as a growth market for technologies that can help reduce greenhouse gas emissions and dependence on petroleum.

The company's Automotive Alternative Fuels Division initially will concentrate of the fleet market with conversion kits for popular domestic pickup trucks and vans, said Tim Standke, IMPCO's director of automotive operations. The company also will show a converted Chevrolet Impala sedan - a popular government fleet car - at its press conference today.

IMPCO - a subsidiary of [Fuel Systems Solutions](#) - could expand its product line into the general passenger vehicle market if demand is there, Standke told *Green Car Advisor* in an interview earlier this week.

"Our goal is to open up to all markets," he said. "We want to be there, to be ready, when gas prices go up and the demand for alternative fuels grows."

The company already manufactures conversion kits for a wide variety of passenger cars sold in Europe and South America, including vehicles from Ford Motor Co. and General Motors Corp.

The big drawback to a widespread introduction in the U.S. passenger vehicle market is the cost of testing and certification, Standke said.

It costs about \$50,000 to perform the tests needed to obtain federal Environmental Protection Agency certification for a kit for a specific model, he said, and almost \$500,000 per model to gain certification from the California Air Resources Board, which requires far more testing than the EPA.

CARB certification is a necessity if the company wants to be able to sell its product in states that use California emissions rules rather than federal standards - the list includes many of the country's most populous states.



The company's system (*left*) consists of a separate fuel injector rail, a control valve, fuel filter, new fuel lines for the under-the-hood portion of the system, pressure and temperature sensors and an injector control module that works with the vehicle's original engine control computer to permit seamless switching from gasoline to natural gas or propane.

Customers also must purchase pressurized fuel tanks and tank-to-engine bay fuel lines, typically from a licensed IMPCO installer.

The entire system, which is added to the vehicle in parallel with the existing gasoline fuel system, can run from \$7,000 to \$8,000, with the cost of the fuel tanks and pressurized fuel lines representing more than half the price.

Converted vehicles often are eligible for state and local tax breaks and clean-air incentive programs.

Natural gas has far fewer impurities and lower carbon content than refined gasoline and when burned in an internal combustion engine produces about 95 percent fewer smog-causing emissions and 25 percent less carbon dioxide and other greenhouse gases than does gasoline.

The company, headquartered in Santa Ana, Calif., sold conversion systems in the U.S. from its founding in 1958 until the introduction of the federal on-board diagnostic system (OBD) rule for emissions control in 1993 made it too expensive to qualify individual systems for every model, Standke said.

Since the mid-'90s, IMPCO has concentrated on foreign markets, establishing a major presence in Italy - where its European arm, BRC Gas Equipment, is headquartered. The company said BRC sells about 800,000 conversion systems annually around the world.

In addition to Europe, IMPCO and BRC sell industrial and passenger vehicle systems in Canada, Mexico, India, Pakistan, Australia, Brazil, Japan and Korea.

IMPCO also has a big industrial customer base in the U.S. and has continued marketing conversion kits for pre-1993 autos to independent installers, said Standke.