

The Continuing Challenges for Propane as an Engine Fuel

Although propane has made great progress as an engine fuel in the United States, many challenges remain. Propane engine fuel conversion companies spend millions each year certifying kits, but the certifications only last one year. The Streamline Alternative Fuel Vehicle Conversions Act (S. 1809) was introduced in the U.S. Senate this past October to address that problem, but the bill is still at the committee stage as of press time.

Another challenge is that many marketers still use diesel- or gasoline-powered vehicles in their own fleets, while promoting the benefits of propane. Peter Gordon, vice president and co-owner of Technocarb (Abbotsford, B.C.) has strong opinions about that.

“Use your own product, guys,” Gordon said. “How are you going to convince someone else to do it when you don’t?”

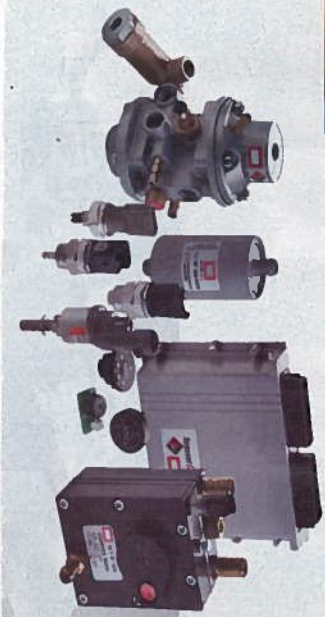
Those are just some of the issues the industry faces as it looks to sell more gallons of engine fuel. Gordon, along with Tim Standke, director of automotive operations, IMPCO Technologies (Santa Ana, Calif.); and Curtis Donaldson, founder and CEO of CleanFUEL USA (Georgetown, Texas), spoke with *BPN* about the state of the propane engine fuel industry and addressed the continuing challenges in convincing more companies and individuals to use propane as an engine fuel.

Proponents of propane as an engine fuel have also seen plenty of good news: Propane as an engine fuel is a good economic value for companies that operate vehicle fleets. It is gaining nationwide respect as a clean fuel, and the recent \$33.5 million in government stimulus money directed toward dedicated propane projects is strong evidence



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of that. More propane systems are becoming EPA-certified. And the Propane Education & Research Council (PERC) is working on various projects to promote the future of propane as an engine fuel, such as a research study approved in April to assess the market potential for a heavy-duty propane engine.

But many challenges must still be overcome. Standke acknowledges that because his company sells bi-fuel systems, his views are colored in favor of those systems. The \$33.5 million in stimulus awards are directed toward dedicated propane projects, but Standke feels that most people prefer bi-fuel vehicles over dedicated because “it gives them the peace of mind that they will not get stuck in a situation where they cannot get fuel” and hedges them against infrastructure shortfalls.

The problem is that government stimulus money and most other incentives are for dedicated vehicles, Standke noted. Governments around the world that have achieved a high amount of propane engine fuel use did so because of legislation to make it possible for people to convert their vehicles. IMPCO converted about 800,000 vehicles globally in 2008. Seventy-five percent of those were LPG, and virtually all of those were bi-fuel.

“Remember, vehicles are in the field for 15 years. You need to be able to convert your car. The structure we should be focusing on, both legislatively and locally, is how do we help people convert their car today to use a lower-cost fuel? If we do that, everything else falls into place,” Standke commented. Infrastructure will increase because of the increase in clientele. Jobs will be created.

“We have to go out and buy a brand new vehicle from a very small select group of vehicles to be ‘green,’” he remarked. “You can’t expect people to do that. You’re offering them cheaper fuel, telling them they need to run on it, but they can’t do it because they can’t afford to buy a new vehicle.”

So if propane is working so well as an engine fuel in other countries, why isn’t it more prevalent here? Standke notes that people in other countries ask him that same question. “I hate to say it, but in America we have this habit of saying that it’s good for you guys, but we’re different. We of anybody have the ability to do this so well. We’re kind of almost arrogant about it. We don’t want to make a plan to get there. We just want to set the target and figure industry will get there for us.”

IMPCO produces systems for propane and natural gas, and Standke sees an arm wrestling match between the two fuels vying for market share. Natural gas makes more sense in some locations of the world, while propane makes more sense in others. Fifty-eight percent of all the propane in the U.S.



Technocarb 2010 Ford 6.8L V-10 LPG Injection System

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comes from natural gas wellheads. “You can’t have one without the other.” Heavy-duty trucks and buses have gone more to natural gas, but propane looks to be strong in the car and light truck segment, he commented.

Gordon agreed with Standke that the government is a major obstacle in furthering the cause of propane as an engine fuel. “Our future is totally clouded by [the U.S. Environmental Protection Agency] and [the California Air Resources Board],” he commented.

“The single biggest thorn in the side of the industry is regulation.” He noted that Technocarb, which sells bi-fuel and dedicated propane systems, obtained about 23 separate certifications last year at a cost of hundreds of thousands of dollars, but those certifications expired this year. “The costs associated with it have become so ridiculous and so redundant in some cases,” he remarked. “You’ve got to go through all the hoops again to do exactly the same thing you just did and paid a fortune for. It takes weeks and sometimes months to get exactly the same test results and exactly the same test data.”

He also agreed with Standke on the problem of government agencies funding new-vehicle conversions, while not funding conversions for the heaviest-polluting vehicles. “You take the cleanest vehicles that have ever been produced in the history of the world, and want to convert them,” he observed. “You’ve got 130 million vehicles going around the U.S., and you only want to convert the cleanest ones. It doesn’t make a lot of sense.”

Donaldson and Standke believe pricing is another big challenge. If the price of propane can remain low, it will compete well with gasoline. But Donaldson pointed out that when fleet managers see the average retail price of propane around the \$3-mark in some areas of the country during certain times of the year, when they were charged \$1.50 elsewhere, that hurts propane’s credibility.

“One of our challenges is going to be continuity or consistency in pricing for this segment,” he remarked. “One of our barriers or limiters is, can we as an industry rally and figure out some kind of pricing for this particular market segment that makes sense so it’s a win-win for the marketer who is selling the gallons and also for the fleet manager to pay off his investment of switching over to propane?”

Propane’s economic value is going to be a key consideration for fleets. “I’m encouraged because we’ve got the government support and grants like we’ve never gotten before,” Donaldson pointed out. “I think a lot of that is the respect that our fuel has deserved over time, and we’re finally getting it.”

The government stimulus money toward dedicated propane projects opened a new chapter for the industry. “We’ve at least reached some level of respectability, and now I think we’re going to get to a point where, ‘What are you going to do with it?’ Are we going to take this to the next level and get more engines available and work collaboratively to make sure there’s more product available? Certainly our competitors—the other fuels—are going to,” Donaldson commented.

He praised the efforts of PERC to become involved in projects such as safety and training videos about filling station operations. The videos “will also help as we go out to customers and say ‘Propane is not that bad, it’s easy to use, watch this video,’” he remarked. “It’s an industry-sponsored deal, but it’s very professionally done.”

Overall, Donaldson sees more opportunity than ever for propane as an engine fuel. Energy prices aren’t coming down, he noted. The trend of “going green” is more popular than ever. “It all sounds exciting, but to take advantage of it,

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we’ve got to polarize and make sure we have enough product and the industry support that we need to build this particular market segment.”

Standke also sees reasons to be optimistic. “From an infrastructure standpoint, in the short term, it is a lot easier and a lot less expensive to implement an LPG infrastructure,” he commented. “So I see real good possibilities for LPG as a motor fuel in the near future.”

—Daryl Lubinsky