

The alt-fuel trash truck trend: Big upside

By Jim Johnson

Fuel pricing pressures as well as the global warming debate are helping push the market for alternative fuel vehicles around the country.

And that includes the garbage truck industry.

New research yet to be published estimates there are now more than 2,000 garbage trucks using natural gas on the nation's roads.

While that might not seem like much at first glance, the amount of such vehicles has risen dramatically just since the turn of the century.

"The number of natural gas trucks, which we reported about two years ago at about 1,500, is now over 2,000," said Joanna Underwood, chairwoman and president of Energy Vision.

Underwood's organization expects to come out later this year with a third in a series of reports examining the green garbage truck business.

The most recent report, which contains 2005 numbers, estimated there were about 1,500 natu-

thor of the first two studies.

Underwood created Energy Vision to concentrate solely on the issue of sustainable energy, including challenges in the transportation sector. Garbage trucks, thanks to the current research, are a focus for her group this year.

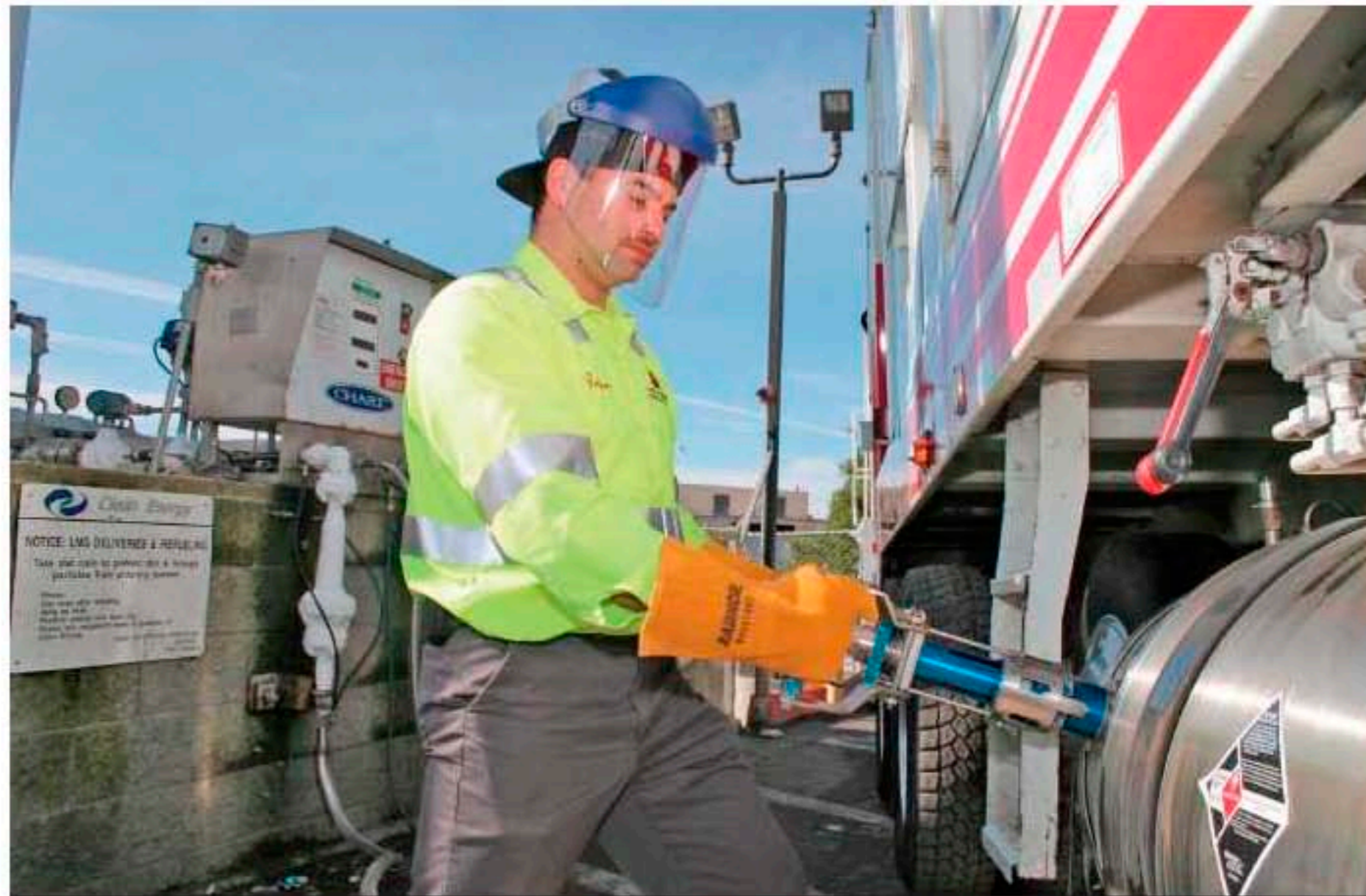
Liquefied natural gas and compressed natural gas are the most popular forms of alternative energy fueling garbage trucks, but by no means are they only way to travel.

Closing the loop

There's plenty of talk around about using hybrid-electric technology or landfill gas in trash trucks. The latter approach would help garbage companies close the loop regarding air emissions from their disposal operations.

Prometheus Energy Co. earlier this year began production at the world's first landfill gas-to-liquefied natural gas plant at the Frank R. Bowerman landfill in Orange County, Calif.

The plant is designed to have a capacity of 5,000 gallons of liquefied natural gas per day, enough



FILL HER UP: A collection truck driver in San Francisco fuels up with liquefied natural gas before heading out on his route.

LARRY STRONG / SUNSET SCAVENGER CO.

ed there were about 1,500 natural gas-powered vehicles.

And that number was more than double the 697 that were hauling trash back in 2002, research indicated.

"I think it's a combination of factors that has done it," Underwood said, pointing to diesel prices, tax incentives, technological advances and global warming. "The combination of these have led to a real acceleration in the use of natural gas trucks."

New markets

A burgeoning trend Underwood sees is the use of alternative fuel garbage trucks in new locations. California, with its pollution concerns, has long been the leader in the use of alternative fuel garbage trucks.

But Underwood said locations in other parts of the country are now embracing the technology.

fied natural gas per day, enough fuel to reduce carbon dioxide emissions from the landfill by the equivalent of 10,000 tons per year, the company said.

That's like taking 150,000 cars off the road each year, the Seattle-based company said.

Two hauling companies — Norcal Waste Systems Inc. and 1-800-Got-Junk? — also both recently came out with alternative energy news.

"This is something that doesn't need technological breakthroughs, it just needs to happen. I think this is very much in the minds of the haulers."

*Joanna Underwood
Energy Vision*

Every Norcal truck serving San Francisco earlier this year began operating on a biodiesel blend of

cent vegetable oil.

Norcal also is involved in two research projects that aim to turn food scraps into fuel that eventually could run trash trucks.

The company 1-800-Got-Junk? has franchised operations around the United States and Canada that travel to locations to remove unwanted items.

The Vancouver, British Columbia-based company is in a trial with Izuzu Commercial Truck of America to use biodiesel fuel in ten 1-800-Got-Junk? trucks.

That testing program is aimed to measure the ability of the vehicles in a variety of climates and driving conditions to handle the fuel blend.

"We're really excited to move this forward

and pioneer whatever we can. We want to move forward and push the envelope wherever we

Holtsville, N.Y., said his business supplied nine natural gas-powered trash trucks to two haulers working in Smithtown.

He's boiled down the influences on the market concerning the use of alternative fuel vehicles.

"The four E's I look at are environmental, economic, environmental justice, and energy security," he said.

With some businesses, property owners and municipalities seeking out greener alternatives to traditional trash collection, Hallahan said, "there is a pull-through going on right now."



Haulers who want to capture business from those concerned about air emissions and noise pollution — natural gas trucks run more quietly — can look to different technologies, he said.

But cost is always going to be a big factor in determining whether haulers will change to alternative fuel systems. "We feel that it's going to always be the dollars. The bottom line is going to dictate a change," he said.

With an extended period of higher diesel fuel prices and uncertainty in the future, there is an opportunity to look at other fuel sources.

Using alternative fuels also is a way for companies to differentiate themselves from their competitors, save money and receive an environmentally friendly label, Hallahan said.

Underwood said she believes that the trash industry is on the precipice of embracing the use of landfill gas as a vehicle fuel source.

Smithtown, N.Y., required that trash haulers start using natural gas-powered vehicles. And that move has spurred interest from other nearby communities about also possibly adopting that requirement.

Underwood also pointed to several locations in Texas, including San Antonio, where the technology is being embraced.

"You have real hubs of activity and change," she said. "I think one of the things we're seeing is hubs of activity in different parts of the country."

The upcoming green garbage truck report will be the first authored through Energy Vision, a New York-based group Underwood formed just about a year ago after founding and spending 31 years at Inform Inc., the au-

fuel or liquefied natural gas.

The move is cutting the company's carbon dioxide emissions from the vehicles by 21 percent, or 5,400 tons per year.

"Part of the reason is that the city of San Francisco, which is our No. 1 client, wants everyone to take steps to help reduce air emissions," Norcal spokesman Robert Reed said.

Norcal, through its subsidiary companies Sunset Scavenger Co., Golden Gate Disposal & Recycling and S.F. Recycling and Disposal Inc., has been powering 13 vehicles with liquefied natural gas for a few years.

The latest move switched the balance of the 385-truck fleet, which burns diesel fuel, to run on B20. That's a blend of 80 percent low-sulfur diesel fuel and 20 per-

cent," said Craig Jooste, corporate operations manager for the junk removal company. "Hopefully we can do some good here."

Testing is set to take place in New York, California, Vermont, Minnesota, New Mexico, Michigan, Oregon and Pennsylvania during a six-month period. Both B5, containing 5 percent renewable fuel, and B20 will be used, and the results will be analyzed.

The study, an Izuzu spokesman recently said, raises the overall public awareness of the importance of using biodiesel fuel.

Boiling it down

Greg Hallahan, vice president of sales for his family's business, Hallahan Truck Center, in



LARRY STRONG

STRAIGHT UP: A storage tank that holds natural gas used to fuel collection trucks.

"I think this is right on the horizon. This is something that doesn't need technological breakthroughs, it just needs to happen," she said.

"I think this is very much in the minds of the haulers," Underwood said.

The number of trash and recycling vehicles in the country measures about 200,000 or so these days, Underwood said. So the estimate of 2,000 natural gas-powered vehicles is still just about 1 percent of the overall fleet.

"The market, I think, could be very large," she said. "It could be tens of thousands of trucks." ■

Contact Waste News senior reporter Jim Johnson at (937) 964-1289 or jjohnson@crain.com