

NGV USA – Industry Leaders' Thoughts

Raven Transport – LNG Trucking Case Study



STEVE SILVERMAN IS CHIEF OPERATING OFFICER OF RAVEN TRANSPORT, A TRUCKLOAD CARRIER BASED IN JACKSONVILLE, FLORIDA, AND WHICH MAINLY SERVES THE SOUTHEAST, MID-ATLANTIC, MIDWEST AND NORTHEAST USA. STEVE HAS BEEN WITH THE COMPANY SINCE 1985, WHEN HE HELPED START THE BUSINESS. HE HOLDS AN UNDERGRADUATE DEGREE FROM BRADLEY UNIVERSITY, AND FOLLOWING THIS HE EARNED AN MBA FROM THE UNIVERSITY OF MICHIGAN.

What are the key reasons for your decision to invest in heavy duty LNG trucks for your fleet?

Steve Silverman: The main reason is that we're trying to reduce the cost of fuel for our customers in the best way possible. I heard T. Boone Pickens, the chairman of Clean Energy, speak about it around two years ago. I got enamored with the idea, about what we could do to reduce dependence on Middle Eastern oil, and started looking to get more and more involved. We went to a number of different meetings, but at the time they did not have a truck available for us. The trucks were either too heavy or too light – the engines were either 9-liter or a 15-liter, which were either too big or too small, so we waited until the 12-liter came out.

We made a decision to do this with a customer that was willing to participate in the significant cost of the engine as compared to the diesel. Without a customer willing to make that commitment, it's not cost effective to do anything today.

What were the major considerations your company made when considering your investment in LNG, and what was your major concern?

Steve Silverman: The issue it comes down to is that the \$60,000 cost, the upcharge, for the 12-liter engine versus the 12-liter diesel engine is significant. If the customer isn't willing to participate in that cost before the fuel differential, then it doesn't work.

The other problem that we faced, when we initially talked to manufacturers, or the guys that were financing the equipment, is that they weren't giving any value to that \$60,000 cost. That \$60,000 lost opportunity was a real problem until we sat down with our second largest customer, MillerCoors, and they wanted to be involved in being as green as possible. They were also thinking about running their plants on natural gas, so this was a great add to it. When they stepped up to the plate, to agree to natural gas, and then gave us a five-year contract, it made it worthwhile to go and spend the differential.

Why did you choose LNG as a fuel over CNG or a Dual Fuel fleet option?

Steve Silverman: The product that we haul is based in a 275 mile radius. And it's a product that grosses out instead of cubing out, and the format

is hauling up to 55,000 pounds of payload. So in order to do the 55,000 pounds of payload, number one, we would have to put in more racks for the fuel, on our trucks, and number two, with LNG we can fast-fill without losing any capacity, whereas with CNG if we fast-fill we lose about 30%.

What fuel savings do you hope to make with LNG versus Diesel?

Steve Silverman: I don't think we're going to have any fuel savings. I would say our mileage per gallon would be about 15% less. Running natural gas versus diesel, we're talking, conservatively, about a difference of anywhere between \$1.20 and \$1.35 today, in cost per gallon. And we'll make it up in the cost per gallon.

On an internal level within the company, were there any major changes which needed to be made to accommodate your new LNG fleet?

Steve Silverman: Our fleet is in Ohio, and we don't have a facility there. So what we did is bring in Clean Energy, Agility, Cummings Westport, Rush, Peterbilt, and had two different one-day meetings, with films, and showed the drivers how to fuel them, making sure they knew what they had to do was bleed everything, and train the drivers, give them the gloves and the mask needed for fuelling. I think that it's going to be significantly different running natural gas in Ohio than if we ran it in Florida, because you can work on trucks outside in Florida whereas you can't, at least six months of the year, in Ohio.

Is there any advice you would offer based on your experience to other trucking companies looking to make the switch to LNG or CNG?

Steve Silverman: Be very careful. I think that this is the quintessential chicken and-egg situation. There aren't enough trucks, because Cummings Westport are charging too much upfront, so firstly, they're not selling enough trucks. I've discussed this with them before and said, you need to get the trucks down to a \$20,000 dollar differential, take it over a period of time, and instead of selling 2,500 trucks sell 10 or 15 thousand trucks, and make it up in volume.

I think it's imperative to understand that you need a number of fuel facilities available. We asked if the stations ever went down – and the second

day the station went down for three hours, and we couldn't deliver because we lost the delivery window. So that's another issue that is paramount. You have to have a backup.

And I think you have to have dealerships with mechanics that are qualified to work on these. Dealerships are very reticent today to go out and spend \$250,000 to put in a bay for CNG or LNG because of the venting issue. If it was in Florida, you could work outside. But most other places you can't work outside, and since we're running a 365 days a year business, it's an issue. I think this is something that, in five years, is going to be completely different than it is today. But when you're the leader and not the follower, you have so many more challenges. We're going through a maze – and it is a maze.

Looking to the next 2-3 years, do you see Natural Gas playing an increasingly important role in the North American trucking industry? And what major hurdles do you think need to be overcome in order to help accelerate adoption within the market?

Steve Silverman: I think it will, but it's dependent on more trucks being sold at a better price. And whether they want to listen or not, that's a key ingredient. I can buy ten diesel trucks and spend a million dollars, or for the same ten trucks spend \$1.6m dollars. It's not common sense.

The problem is that the natural gas guys are telling everybody you can save 25-30 cents a mile by the differential and the fuel surcharges, but they don't talk about the actual cost of the equipment. It's a significant cost differential to buy it, and everybody tells me it's going to be three or four cents more per mile to maintain it. I can't tell you if that's true or not because I've only had them for a month. But it is a significant consequence to this business.

I am considerably optimistic, but after a month I have a lot of questions. A lot of the issues we've had you can blame on the weather or whatever, but there's a lot of issues out there that we have to solve straight away.

Source: FC Gas Intelligence