Many commercial retailers with sizeable transportation fleets are exploring the prospect of transitioning their vehicle fleets from diesel fuel to liquefied natural gas (LNG). The decision is not an easy one, since it’s necessary to balance conversion costs against potential fuel savings.

It’s also important to consider how popular this conversion is, since a critical number of companies have to decide in favor of this transition in order to make this gas alternative energy delivery system cost-effective. Here’s where this situation stands right now, together with the pros and cons of changing a fleet over from diesel to LNG:

**A Surge in Popularity**
The number of natural gas vehicles ordered nationwide between January and September of 2013 is 70% larger than the number ordered during the same nine-month period in 2012. Every day seems to bring news of another large company that has decided to make the leap.

One major home improvement retailer that has already converted part of its nationwide fleet said, “Our goal is to replace all of our diesel-powered dedicated fleets with natural gas trucks by the end of 2017.”

Texas oil billionaire T. Boone Pickens created a company called Clean Energy (CLNE) 14 years ago because of his faith in “America’s natural gas highway,” banking on what he feels is a sure thing financially. CLNE already has partnerships with some giant companies with substantive transportation assets, including Frito Lay, Procter & Gamble, Ryder, and United Parcel Service.

Along with the benefits, there are also challenges to making the switch, as outlined on the next page.
Pros

- **Cheaper fuel:** Natural gas offers better gas mileage, with one expert estimating the savings at $1.50 per gallon of fuel. The price of natural gas has dropped by 45% in just the past year.

- **Environmentally cleaner:** Natural gas fuels, such as LNG and compressed natural gas (CNG), release 23% less greenhouse gases than diesel, as well as fewer particulates.

- **Green brand position:** Conscious of consumers’ concern with clean energy and the carbon footprint of transporting products over long distances, more companies are seeking to demonstrate their environmental responsibility.

- **Locally produced:** 98% of the natural gas used in North America is produced here on this continent, so production is politically sustainable and requires less transport.

- **Sustainability:** There are known reserves of natural gas in North America for more than a century of use.

- **Government encouragement:** A high-profile study found that the use of natural gas for transportation could help make the U.S. energy-independent by 2030, making this a high priority for the federal government.

Cons

- **Smaller fuel delivery infrastructure:** This is starting to change. Some states are providing grants for the construction of natural gas fueling stations, to make fleet conversion more realistic for business owners.

- **Modifications to existing fleet vehicles:** Though conversion kits are available, with base prices ranging from $7,000 to $12,000, engine overhaul parts and the cost of labor create a serious expenditure.

- **Division between CNG and LNG:** Both have significant, but different, advantages. This results in the need for two different delivery systems and two different sets of production plants and fueling stations.

- **Need to keep LNG trucks moving:** Because LNG slowly heats up and is released, LNG-powered truck drivers need to stay on a tight schedule to minimize fuel loss.

- **Expensive new vehicles:** One company acknowledges that each natural gas-powered truck costs $30,000 more to purchase, but also points out it expects each of the new trucks to save $27,000 per year in fuel costs.

- **Additional training required:** Drivers will have to master specific, required training in order to safely manage a natural gas-powered fleet.

The Green Truck Association says that natural gas “may well be the most important alternative fuel to the transportation industry.” Although there are a range of excellent reasons for choosing natural gas, including cleaner emissions and local production, the moving force behind real change is always economic. After closely balancing the pros and cons, Scott Perry, a vice president at Ryder, says, “The economics favoring natural gas are overwhelming.”