



## Superior Propane sees ROI with propane-powered fleet



At Superior Propane, we've witnessed the benefits for our customers who have made the switch to propane to fuel their fleets. From construction and courier companies to taxicabs and school buses, running their fleet on propane has helped these companies reduce the overall cost of ownership.

We know first-hand it pays off, which is why we've started growing our very own auto propane fleet. Today, almost half of Superior Propane's service vehicles run on propane and our commitment is to outfit all new service vehicles introduced into our fleet with this system.

### How it Works

The propane liquid injection conversion system enables our service vehicles to run on propane with either gasoline or diesel in reserve. To operate a vehicle on propane as either a dedicated fuel or dual-fuel vehicle (i.e. switching between gasoline and propane) requires only a few modifications. While some of our large bulk trucks that have been outfitted with the dual-fuel system run on a combination of diesel (80%) and propane (20%), our light duty dual-fuel vehicles use propane as the primary fuel at least 95% of the time, reserving gasoline only as a backup in case drivers are in remote or unfamiliar areas with low propane tank levels.

### Proven Performance

#### *Reduced fuel expenses*

Superior Propane analyzed the cost and performance of five of its dual-fuel 2016 Ford F350 service trucks, which run on propane 99% of the time and gasoline 1% of the time. Within just seven months of use, Superior's National Fleet Manager Jaye Jackson reported a 34% decrease in fuel costs for each vehicle, resulting in an annual savings of almost \$5,000 per vehicle. Jackson estimates that the company saves approximately 11 cents per kilometre using propane compared with gasoline.

#### *Payback*

The cost to convert one of Superior's Ford F350 trucks to dual-fuel was approximately \$5,700, but the fuel savings quickly made up for the initial cost. "The savings on one dual-fuel service vehicle running 40,000 kilometres typically covers the conversion cost after about one year," says Jackson. "After that, we start seeing a return on our investment for the remaining life of the vehicle."

#### *Reliable and high performance*

Superior Propane drivers attest that their propane-powered vehicles are similar to the gasoline counterparts when it comes to power, acceleration, cold start properties and driving range. In fact, of all alternative fuel options, propane offers the longest



driving range. When comparing octane ratings, propane has a higher rating at 104 compared to 87 for gasoline.<sup>1</sup>

In terms of safety performance, auto propane tanks are 20 times more puncture-resistant than gasoline tanks and propane has the lowest flammability range of all alternative motor fuels.

#### *Greener Fuel*

Propane contains less carbon per unit than either gasoline or diesel, resulting in as much as 26% fewer lifecycle Greenhouse Gas (GHG) emissions than gasoline.<sup>2</sup> For light-duty vehicles fuelled with propane, the reduction in GHG emissions is as much as 11% per vehicle when compared to a light-duty vehicle on gasoline, according to the Propane Education & Research Council (PERC). Harmful toxic substances such as Benzene and Formaldehyde are reduced by as much as 96% when using propane versus gasoline.<sup>3</sup>

#### *Convenient refuelling options*

Propane is the most practical alternative fuel because it can easily be transported to areas beyond the natural gas mains. It is 270 times more compact in its liquid form and therefore economical to store and transport.<sup>4</sup> Because of its portability, auto propane drivers can find refuelling stations across Canada and at many major gas stations. In fact, propane has the largest refuelling infrastructure of any alternative fuel in Canada. This is partly due to the fact that refuelling station installation costs are up to 95% less.<sup>5</sup>

Depending on fleet size and other refuelling requirements, customers can also set up a fuelling station directly on their site. In this case, each driver is given an access card to fill up at the private station; when the drivers are on the road, they have the option to fill up at stations located across the country.

“The filling time is the same with propane and gasoline,” says Superior Propane Driver Jason Cimbron. “In fact, it’s easier and faster to fuel up using the propane dispenser in our yard.” Superior drivers now spend more time on the job rather than driving and waiting to fill up at a gas station, resulting in greater cost savings.

#### **Zero compromises**

Using propane as a primary fuel for Superior’s service vehicles has proven to be an investment that pays back quickly while reducing the environmental impact of our operations. Another key benefit is the increase in driver productivity by providing onsite refuelling dispensers that enable them to be ready to go when they leave the yard.

Overall, the switch to propane delivered the advantages our fleet managers need without having to sacrifice performance and reliability.



**For more information call 1-87SUPERIOR or visit [superiorpropane.com](http://superiorpropane.com)**

1. The Alternative Fuels Data Center (AFDC), a resource of the U.S. Department of Energy’s Clean Cities Program
2. Canadian Propane Association, *Auto Propane: A Smart Fuel Solution* Fact Sheet
3. Canadian Propane Association, *Auto Propane: A Smart Fuel Solution* Fact Sheet
4. Propane Education & Research Council, *Propane Facts* Fact Sheet
5. Canadian Propane Association, *Auto Propane: A Smart Fuel Solution* Fact Sheet

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