

# Propane is a multi-purpose fuel, and it has many key advantages

By Matt McEachran

**P**ropane—or L.P.G. (Liquefied Petroleum Gas)—can be a wise fuel choice for you and your backwoods home, barn, or garage for a variety of reasons. It's fairly cheap, environmentally friendly, and best of all, you don't have to live near town, as with natural gas, because there are no pipes to run.

Propane is a by-product of oil. When you burn it, you are mainly releasing water, carbon dioxide, and hydrogen back into the air instead pollutants. It burns much cleaner in your car than gasoline, and a lot cleaner than your oil furnace.

It is also much cheaper to use in your home than electricity. Propane itself is not cheaper than natural gas, but to install natural gas pipelines in a backwoods home can cost thousands of dollars, compared to the couple hundred that propane will cost to install.

Where I live in Ontario, the price of propane varies from around 28 cents a liter to 40 cents a liter, depending on your usage and the local economy. It varies widely in the United States as well, from 80 cents per gallon to \$1.20 per gallon. Depending on your particular region, you may save a lot compared to oil.

Another factor to consider with propane is that most companies will give you a greater discount, the more propane you use in your home and vehicles. So buying more appliances that use L.P.G. will actively save you money.

Propane appliances today are much more efficient than they were even 10 years ago. You can buy propane-powered furnaces, water heaters, stoves, refrigerators, fireplaces, room heaters,

clothes dryers, barn/garage heaters, lights, and even air conditioners.

Another plus is that these appliances can be converted to natural gas very easily. If natural gas *does* come by your house in a few years, it's a lot easier and cheaper to convert your propane appliances than to sell your oil appliances and buy new ones.

Most propane appliances today offer high efficiency (80 to 85% efficiency). Also, direct vent appliances can be installed without the use of your chimney. Instead, they can be vented with B-vent directly through an outside wall. This is great if you are heating your house with a woodstove and can't share the chimney.

Another great thing about propane is this: if you heat your house with a woodstove but that one room in the

basement is always cold, it is easy to install a room heater.

Whenever possible, buy as many appliances as possible at once, or let the salesmen know that you plan to buy more in the near future. Most places give good discounts when you buy several appliances at once.

## Power failure no problem

Another great advantage of propane is if there is a power failure, you still have heat and a refrigerator and a cookstove that work. A couple of years ago, a winter storm knocked out the power in our neighborhood. We suffered no hardships, as our appliances burned propane, but our friends weren't so lucky. They called us around 8:30 AM to tell us that they were all in winter jackets and blankets. They had no heat and they could see their breath in their house. They came over and ended up staying with us until late that night, when the power was restored.

Propane fuel is great—but how much does it cost to get it? That too

will vary, depending on where you live. In Ontario, the average price to set in a tank and put 10 feet of copper underground to your house is around \$100. Then to be safe, add \$2 a foot to run copper from your furnace, stove, etc. to your outside wall. Depending on the number of appliances being installed, your hours of labor will vary, at an average of \$30 to \$45 an hour.

It's good to have a salesman give you an estimate. He should be able to come to your house and give an accurate estimate as to how long it will take to install and how much it will cost. He can also tell you the best locations for your appliances, according to safety regulations and cost.

When planning your system, be sure to allow for add-ons to your system. The salesman or installer should already have this planned, but be sure and ask. All this usually means is installing a larger size of copper pipe than currently required and adding a tee or two in the copper line near possible expansion sites.

## For your vehicles, too

Not only is propane an inexpensive and clean way to fuel your *home*, but it is also an alternative fuel for your *vehicles*. In Ontario, propane is almost half the price of gas, but in some states it is more expensive than gas. However, as with your home, a larger volume used will give greater savings. If you buy propane for your car from a gas station that sells propane on the side, they likely won't give you a discount at all. If you use 75 to 100 liters and up, go to a store that mainly sells propane. A discount of a few cents a liter can save a lot of money at the end of the month.

You may decide that your car does not use enough gas to bother to switch over to propane, and if it's anything like mine (which barely holds 30 liters), you'd probably be right. But that old pickup truck that gets 15

miles per gallon is a great candidate to save some major cash.

Propane is especially good for homesteaders because the tanks are usually much larger than a regular gas tank. My little car holds 30 liters, but it's not uncommon for me to pump 250 liters into a truck. Obviously, this can save on the trips to town. Also, because propane burns cleaner, you can save on oil changes, spark plugs, and engine tune-ups, and even have fewer muffler replacements.

## Pay attention to safety

While propane is perfectly safe to use in your home and vehicles, it can be dangerous if used improperly, just like any other fuel.

It's highly flammable but has an odor added to it so that you can tell if it is leaking. If you do smell propane in your house, turn off the tank and then call the company from your neighbor's house. Even the spark that sometimes happens when you turn off a light switch is enough to ignite propane.

When doing construction on or around your house, be sure you know where the propane lines are. You don't want to hammer a nail through a copper line as you hang a picture or put down a floor in your kitchen.

All lines in the house should be labeled as propane, and the copper from the tank to your house should be at least 15 inches deep, and you should keep this line in mind when digging or doing construction.

In a town not far from where I live, a man unknowingly drove a stake into his propane line, cutting it in half, while adding a porch to his house. The vapor eased its way through the ground and through a crack in the wall and filled his basement with vapor. When he went downstairs half an hour later to stoke the woodstove, a spark ignited the vapor, and both the man and his wife were killed. Windows exploded to 30 meters away, and the

first story floor was blown up to the ceiling.

## Things you can do yourself

There are some repairs that you can do yourself, and at \$40 per hour you can save a lot of money.

One easy way to save is to have the installer show you how to light the pilot light on your appliances. Pilot lights shouldn't go out unless you turn them off, but occasionally they do, and it always seems to happen after 5 pm on a cold winter night. It'll take you about a minute to light it yourself, which is a lot easier and cheaper than paying the after-hours call-out fee.

Another simple thing is to check the level of propane in your tank. Many propane companies have automatic delivery, but if your company doesn't, or if you live too far away, calling in a few days early, when your tank is around 25 to 30% full, can save you from running out on a weekend or at night.

By now you know that calling a repair man after 5 pm or on a weekend costs you extra. If your furnace or stove gives you trouble at one of these times, try to wait until the next business day before calling the repairman. It's amazing how many people call in on weekends for minor problems that could have waited until Monday, and therefore have to pay the extra call-out fee.

Paying bills on time is a good way to get breaks when you need them and even some discounts. Good customers get good deals on repairs and extra time when something comes up and they need to pay their bill a little late.

For the most economical, environmentally friendly, and convenient way to heat your backwoods home, cook your food, and even light up your porch, be sure and check out the advantages propane can give you. Δ