# Best Fuels For Off-Grid Survival

In this article I'd like to review some of the most common sources of fuel for heating your home, cooking meals, heating water, and powering various machinery. Ranging from refined fuels such as gasoline, diesel and propane, to natural resources including animal dung, wood and coal, there are many sources of fuel available for use off the grid or after the SHTF.

# Gasoline

For <u>powering generators</u> or fueling cars, gasoline is great, but it presents a number of problems to the steadfast prepper. First and foremost, production of gasoline requires extensive treatment and refinement of crude oil. That means if the grid goes down or SHTF in a big way, gas supplies are apt to be quite finite. Second, gas doesn't store very well over long period of time, even with the addition of stabilizers and other fuel additives.

Typical shelf-life for gas with appropriate stabilizers is anywhere from 6 – 18 months, but gas can potentially be stored for 4 – 6 years under the best circumstances. For the longest storage times, look for gasoline with little or no added ethanol and store your gasoline in gas-tight containers to limit water contamination that will spoil the fuel.

# Diesel

Diesel fuel is indispensable for use powering diesel generators, diesel trucks, various farm equipment, and for use as heating oil for a home, especially in a short-term disaster. While diesel, like gasoline, requires treatment and refining from straight crude oil, diesel is generally cheaper than gas and can usually be stored for 2 - 3 times as long as

gas, or longer. Treated with stabilizers and other additives, diesel has been known to last upwards of 10 years while retaining good viability.

#### Propane

<u>Propane fuel can also be stored</u> for use in heating and cooking, especially if you have a larger tank that is stored in a cool area and has proper seals. As far as fuels go, propane is pretty awesome in that it practically never goes bad.

Properly stored, propane can last for 10 – 20 years, and potentially longer. Unfortunately, the tanks and valves used to store and contain the propane are at risk of rust and corrosion.

For the best storage results, propane should be stored in a cool, dry place in tanks that are verified to be in good condition, with high quality valves and gaskets. Virtually all tanks will suffer from some degree of leakage, but high quality tanks and valves will reduce leakage.

#### Wood

Burning wood for warmth and cooking is a habit that has been with humans since time immemorial. Indeed, until well into the 1800s, wood and various wood byproducts constituted the main source of fuel used by most people for heating their homes and cooking meals. To this day, many traditional wood-burning ovens can be used for cooking and heating the home. andwood-fired furnaces and boilers also exist. Overreliance on wood as a fuel source can lead to harsh deforestation, though, so replanting and prudent management of this resource are needed.

Before being used as fuel, wood generally must be dried, a process sometimes known as seasoning or curing the wood. The drying process typically lasts 6 months or longer, depending on how wet the wood is and how much moisture you wish to remove. For many people, this can be easily accomplished by storing split firewood in a woodshed to protect it from excess water and environmental changes. Stored in a dry place and kept safe from termites, wood can keep for many, many years and can be steadily replaced as necessary.

## Coal



Coal has been a valuable source of fuel around the world for thousands of years; it forms within coal beds or coal seams amidst the layers of sedimentary rock, with much of its earliest use occurring in China.

While it's mostly used for industrial applications and electricity generation, coal is still an immensely important fuel source to this day.

Ranging in color from shades of brown to matte black and polished jet black, types of coal range from lignite coal to bituminous coal and anthracite. Low-grade coal is typically used for heating or cooking, and for electricity production, but the highest grade anthracite coal is generally used for industrial purposes like smelting metal.

Where coal seams are found lying near the surface, coal can often be mined in open pit mines. This involves removing any topsoil and surface stone that lies above the coal.Shaft mining can also be carried out underground, but bears with it additional associated risks. Coal can be mined as needed or stored in open piles or under cover to keep it dry and readily available for use.

## Animal Dung

Dried animal dung has been used throughout history in many

cultures as a source of fuel for heating and cooking when other fuels were scarce or unavailable. To this day, animal dung is regularly used as a fuel by billions of people worldwide for heating their homes and cooking their food, a practice that is not only effective but also economical. As a natural byproduct of owning or managing livestock, animal manure is also a renewable resource.

Most commonly, cow or buffalo dung will be dried, and in many cases mixed with straw or hay waste left over from the harvest, to be used as fuel. Camel dung, horse manure, and in some places yak or sheep manure can also be dried and used as fuel.You can make dung cakes for burning, by mixing dung with some water and additional straw or hay waste, or other crop material left over from harvesting. After mixing and forming the cakes, let them dry thoroughly and then use them as fuel chips.

Wind or solar power are not the most typical of fuels, and they won't power your gas or diesel-guzzling machinery (unless you do some crazy alterations to it), but they can produce an adequate amount of power when properly set up and operating under good conditions.

A battery array can be used to store excess energy generated on good days, and to supplement on more inclement days. Functioning lights and a few basic electronics can help a lot when the rest of the grid is down, especially if you have medical equipment that needs to stay powered.



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