

Building Off-Grid

Q: If I wanted to build an off-grid cabin, what are my costs going to look like in addition to building the actual structure?

A: The extra costs, assuming you want running water, would include the cost to drill a well, install a septic system, and have a power source, which could be a generator or a solar setup. Here is an approximate breakdown of those costs:

- Well:
 - o Costs can vary significantly based on the depth of the well:
 - \$10,000 - \$25,000 for wells 100' – 400'
 - This can go over \$55k if the depth gets closer to 1,000'
 - Can do a geomagnetic survey first to determine best place for well and what the depth would be, but these are not cheap (\$600+). However, this can be worth it as well depths can vary significantly from one drilling location to another.
- Septic:
 - o Costs can vary significantly based on system type, system size, site conditions, and location
 - Size is all based on number of bedrooms in the home
 - Obviously, location matters – how accessible is it?
 - Conditions that can cause price increase include rocky soil
 - Prices typically range from \$8k - \$25k depending on these things
- Solar:
 - o Much of the cost of solar depends on the size of the cabin, what you are trying to power, and how much sunshine your solar panels get. As a general idea, you should be able to power a well, refrigerator, and all lighting and electrical in a cabin for roughly \$6,500 - \$7,500 in parts. Labor costs are not included in that price. If you have other items that require more power usage, like a washing machine, this cost could increase.
- Generator:
 - o Similar to solar, the size of a generator will largely depend on what you are powering. A 7,000 watt generator can power most items needed in an off-grid cabin, and those cost approximately \$4,500.

Q: What do I do when I don't have access to natural gas?

A: You will need to use propane to power several other things instead of natural gas, including a water heater, stove, oven, and potentially a refrigerator (or you can use an electric refrigerator with solar). If you want to have a washer and dryer, a dryer could also use propane. In addition, if you want to have a furnace, it will need to run on propane.

Q: What are my options regarding propane tanks?

A: Propane tank options include smaller 40lb or 100lb propane tanks that you can refill on your own, or larger propane tanks like a 250 gallon or 500 gallon that would be permanent and would need to be refilled by a propane truck. Deciding on which of these to use should be based on how many items you are powering with propane and if there is a propane company that would be willing to refill your tank for you.