

# Generators - Solar versus Fuel

## Solar

### Cost of Generator, Fuel & Maintenance

Purchase cost is about five times that of a fuel powered generator. It can be configured with additional solar panels, wind turbine and batteries to give you longer use. Fuel is free. No moving parts means maintenance is low. Voltage and frequency generated remains stable, protecting surge damage to your appliances.

**Noise Level** Whisper quiet.

### Carbon Monoxide, Refueling & Fire Danger

They do not generate poisonous carbon monoxide.

There isn't the same chance of fire as there is for a fuel powered generator (during refueling or from storage of fuel).

### Setup Location (rain/heat, surface)

Generator needs to be in a cool dry shady spot outside or inside. It needs protection from rain.

### Green Energy/Save the world

It does not emit carbon dioxide or use fuel. Clean energy in, clean energy out. Solar panels do contain Nitrogen Trifluoride which is 17,000 more harmful than carbon monoxide. This gas will be released if a solar panel is broken.

### Recharging

Plan on six to eight hours for recharging. Some cannot be used while recharging. Some charge even when it is cloudy. Charge using sun, wind turbine, car battery or electric outlet.



## Fuel

### Cost of Generator, Fuel &

### Maintenance

Purchase cost is one fifth that of a solar powered generator. There will be fuel costs. There are moving parts, so there will be maintenance costs. Voltage and frequency varies as engine speed change which can cause surge damage. Look into buying a good surge protector. Look for power generated for fuel consumption (efficiency).

**Noise Level** Loud enough to disturb sleep & neighbors.

### Carbon Monoxide, Refueling & Fire Danger

Carbon monoxide is generated. That is why they must be placed outside with exhaust away from doors and windows. Carbon monoxide detectors should be placed near sleeping areas (additional cost).

Gasoline goes bad in time because of, condensation and evaporates if exposed to air. This doesn't happen to propane.

There is a chance of fire during refueling or from storage of fuel. Allow generator to cool before refueling. Store fuel at least 10 feet from the generator and anything that is flammable or generates heat

### Setup Location (rain/heat, surface)

Generator needs to be outside in a cool dry spot, in the shade on a non-combustible surface (cement). This may add to cost. Protect from rain.

### Green Energy/Save the world

It generates carbon dioxide and requires fuel which is processed and driven to consumer location (using more fuel).

### Recharging

Does not need recharging.