



Powering your home during an outage: **Fossil fuel backup vs solar + batteries**

Power outages are annoying for everyone. They can be a disaster for some. Electricity is crucial for those relying on medical equipment, first responders, and low-income communities that are particularly sensitive to outage-related financial losses. Solar panels with a battery backup are now a viable solution to power outages. Let's look at the differences between solar with storage and other generation options.

Benefits of Resilient Solar vs. Fossil Fuel Backup Generators

Solar + Storage



- Provides value every day
- Fueled by the sun
- Quiet and clean
- Eligible for tax credits and incentives
- Little maintenance
- Often cheaper than grid power

Fossil Fuel Backup Generator



- Runs only during outages
- Requires gasoline, diesel or natural gas
- Polluting, noisy and dangerous
- No tax credits, limited incentives
- Requires regular maintenance
- More expensive than grid power

>> WHAT TO DO WHEN YOUR POWER GOES OUT

Power outages lead many people to seek emergency solutions, often in the form of a gasoline or diesel fueled generator. These are sometimes called BUGs (for Back-up Generators). BUGs may come at a low initial cost, but they are noisy and polluting. They can cause carbon monoxide poisoning and start fires. Since they are only used during emergencies, they provide no value at other times.

>> SOLAR POWER + STORAGE'S ADVANTAGES OVER BUGS

The good news is that there is an alternative: Solar panels with battery back-up. Together, distributed solar and storage create "resilient solar." If the grid goes down, resilient solar can provide you with backup energy for your critical power needs. Resilient solar is clean, quiet, and safe, and provides clean energy every day. It saves you money on your monthly electric bill, unlike dirty BUGs.

>> HOW SOLAR + STORAGE KEEPS YOUR HOME POWERED

When there is a power outage, your solar system has to shut off. This is a safety mechanism to prevent it from sending out electricity while workers are repairing power lines. To supply backup power, your system must be able to "island" itself by disconnecting from the grid. It can then supply power to your home while the sun shines, or store the power with a battery for use after dark.

While millions of homes and businesses have gone solar across America, many are only recently adding batteries. Thanks to falling prices and new state and federal incentives, batteries are becoming more cost effective and more common in solar installations. Some utilities will pay to use customers' batteries to provide services to the grid. Certain car companies are now making electric vehicles that can provide backup power to a home.

With these options, solar and storage can provide a clean and cost effective way to provide secure energy for your home and business.

**TO LEARN MORE ABOUT SOLAR WITH
BATTERY BACKUP VISIT:**

solarunitedneighbors.org/learn-the-issues/solar-storage/

