

Prep Blog Review: How To Generate Power Off-Grid

America's power grid is ancient and in an advanced state of decay. The modern technology allows us to adopt a more eco-friendly attitude regarding energy and also to save money and become more independent and self-sustained.

After an EMP, you will have to know how to use natural resources – sun, wind, water, wood – to produce your own electricity. So, why not starting preparing right now?

For this week's Prep Blog Review I've gathered some useful posts on this topic.

1. How Future Technology Impacts Energy Saving

"The technology of the future that will allow for a more eco-friendly relationship with our environment is rapidly approaching. In order to better understand the impact of these technologies, we have outlined them into two distinct areas: saving at home, and saving on the road.

It was reported that there has been a 44% increase in primary energy consumption across the globe over the past 16 years (statista.com). As such, we are not likely going to make a drastic departure from our behavior of having high-powered homes and frequent use of transportation.

These technologies will allow us to curb energy usage without having to alter our accustomed style of living."

Residential Energy Consumption

8.86% increase in residential energy consumption since 2012

Energy Information Administration

These new technologies are aimed to help people save money by conserving the amount of energy their homes use during the day.

While the battery asks a high cost up-front, it promises large potential long-term savings with its ability to generate and store solar energy as electricity.



Tesla Powerwall
replaces your
primary energy,
saving up to \$500/year



Builds your temperature preferences into a schedule



Allows for smart phone integration



Provides monthly savings reports

- Use 75% less energy
- Last 15x longer
- Lifespan of 15,000 hours

- Use 70% less energy than incandescent bulbs
- Last years longer
- Can be purchased for under \$2 per bulb

- Use 90% less energy
- Heat up slower, reducing fire hazards
- Last up to 50,000 hours, or 5 times longer than comparable bulbs



- Use 25-30% less energy
- Last up to 1.8 years longer
- Provide a nostalgic feel based on their glow

Smart Road Technology

Smart Road Technology

A major factor in the transportation sector is the energy used to power cars and highways. Finding new ways to save energy in this sector will be imperative to conserving natural resources and avoiding waste and high energy costs.

Transportation
15,981
Trillion BTUs

Industrial

18,212

Trillion BTUs

Built-in LED lights



Luminous road ma



Charge on the



Motion-sensor n

Solar Roadways

- Commissioned by Federal Highway Administration
- 18.5% efficiency
- Built strong to handle weight
- 2026 (20 years)
- Can withstand high heat (257 Fahrenheit)
- Create a source of renewable energy
- 250,000 potholes
- 250K
- Solar panels and high tech technology

Glow in the Dark Road Markings

- Light illuminates the road
- Currently implemented in the Netherlands
- Glow for 10 hours
- Allow for removal of street lamps

Electric Parking Lanes

- Use embedded magnets
- Being tested in Germany
- Inc. duration of use of battery

Interactive Lighting

Light up when cars approach

Provide long-term energy savings

Sources:

Sources:

- <http://www.eia.gov/>
- <http://www.statista.com/>
- <https://www.teslamotors.com/>
- <http://www.energycenter.com/>
- <http://invest.about.com/>
- <http://findafield.com/33488.html>
- http://businessnews.energy-saving-choices-improved_incentives/
- <http://theenergyintel.com/the-light-bulbs-on-tesla-are-on-a-massive-roll-out-as-tesla-unleashes-batteries-while-the-ford-led-nasa-and-the-future/>
- <http://www.solarandweq.com/news.html>
- <http://www.energystorage.com/articles/news/tesla-plans-to-create-smart-batteries-to-produce-clean-energy-and-save-time-and-money>
- <http://www.hartlight.com/blog/smart-tech-technology/>
- <http://www.solarandweq.com/>
- <http://theenergystorage.com/>

 SaveOnEnergy

Read more on [Save On Energy](#).

2. Reasons Why Every Household Must Have A Backup Generator



“In the recent past, we’ve witnessed extreme weather-related calamities that have caused immense destruction regarding property damage and loss of human lives.

Scientists are warning that massive disasters are not only currently occurring at an increased rate but also increasing in magnitude. To ensure your family stays safe all the time, you must invest in a good electric generator.

An electric generator, other than supporting your lighting systems, will support important appliances in your home, among very many other functions. Loss of electric power brings about many difficulties to homes, more so, households with persons with disabilities.

A generator provides an exceptional way of cautioning your family members against sudden lose electricity.”

Read more on [Dave’s Homestead](#).

3. Do You Know Why Your Emergency Generator Won’t Start in



the Winter?

"So, you've been diligent about starting your generator on a regular basis, you've kept fuel stabilizer in the tank, and then one cold winter day you go out to fire up your generator and it just won't start.

You might be wondering what you did wrong so let me take a minute and explain what might be going on.

During the 8 plus years that our family lived off the grid our only source of electricity was a generator. Starting certain types of generators in the winter can be a real bear at times."

Read more on [Preppers Illustrated](http://Preppers Illustrated.com).

4. Which Batteries Are Best for Survival Situation?

"When it comes to most survival situations, batteries are often overlooked. Too many people assume that all they need to do is make sure their battery operated survival gear is ready

to go with new alkaline batteries and that they have a fresh pack of spares. This is an unfortunate assumption!

There are five primary battery sizes in the United States: D, C, AA, AAA and 9 volt. Most batteries fall into three categories: alkaline, lithium and nickel.”



Read more on [Ask a Prepper](#).

5. Relax and Enjoy the Next Power Outage



“For the past few years, Survival Life has shared valuable information with readers on how to prepare for and survive a major power grid collapse.

The number of power outages continues to grow, and people shake their fingers at the government and say, “Shame, shame”—blaming elected or appointed government officials—for not fixing the shaky electrical grid.

Those experiencing loss of electrical power are quick to

condemn utility companies for not preventing these outages, but this may not be warranted.

The federal and state governments have known about these risks for decades, but they are slow to act. Utility companies can't afford to rip out and replace expensive power lines, substations, and power generation plants."

Read more on [Survival Life](#).



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Darkest Days and find out how to
survive more than an EMP!**

*This article has been written by **Drew Stratton** for
Survivopedia.*