# Solar & Electric

# Environmental IMPACT: Solar Systems Save the Planet

Lic. # 972276

www.addysolar.com

1

Solar & Electric

# **An Introduction**



For all of time, the sun has risen each morning. Its rays have contained enough energy to power the universe a million times over. Yet not until recently has the sun been considered as an energy resource in the earth. Unfortunately, we've relied heavily on coal for energy and the effects have damaged both our world and our wallets.

So, what makes "going solar" an earth saving decision, and how can you make the world around you a cleaner place to exist?

# Coal vs. Solar

lt's important to realize the differences hetween sunlight as an energy solution versus a material solution such as coal. Today, coal powers 40% of all generated electricity. This 40% is down remarkably from years past, especially ลร environmentalists have marketed the positive results they're having on the planet.



Solar & Electric

Before renewable energy sources like solar have started going mainstream, we were using heaps of coal. If you get your electricity from PG&E, chances are this is what they are using to power your home.

#### The Darkside of Coal



half of all toxic emissions in the U.S.

From it's harvesting process to the power plant, coal mistreats the environment. This process involves clean stripping mountains of their trees, blowing them up with dynamite, and collecting the coal inside them. The current energy structure in the U.S., with coal as the leading generator, emits 381,740,601 pounds of toxic air pollution annually. This makes for

Solar & Electric

Simply put, energy solutions like coal destroy the environment in an effort to provide the country with cheap power. Yet, what is cheap about coal is free with solar. The sun cannot be bought or controlled and rises as an energy solution for anyone with a solar system. As humans populate the earth at a speed we've never seen, it is important that we steward the earth to contain them. This includes, but is not limited to, clean renewable energy like sunshine.

Sure, coal may be a cheaper month to month energy solution, but is it worth it? You'll never stop relying on the electric company and even causing damage to the earth. Wouldn't you rather take five year's of electric bills, put them towards a solar system, and be powered freely by the sun every year after?



Solar & Electric

## Solar: America's Energy Enlightenment

The conversation Americans are having about energy in the U.S. is shifting. In Michigan, state legislature has signed that coal be eliminated as an electricity generator by 2040. Michigan's governor states, "as a state, we must stand for something more than profits. This decision is about us stewarding the natural resources we already have."

The current energy structure maximizes profit and minimizes common sense. The sun is free, and it will always be. It's also more powerful than all the coal earth holds burning at once. Why do we go to all the trouble of cutting down trees, blowing up mountains, and polluting the atmosphere when energy exists right above us?

Fortunately, 268 coal plants have closed since 2010. Energy is cleaning up its act, and finding a more sensible way to respond to all the sunshine.

Though the sun may not create jobs, it is providing enlightenment into earth-saving solutions. What if humanity focused its efforts towards saving the earth and not destroying it? If we have to destroy the earth to create more jobs, then we've stopped living for solutions to live for profit. As resources like coal are dropped from the energy conver-



sation, jobs can be redirected towards the harnessing of our greatest natural resource: sunshine.

Solar energy takes advantage of the sunshine by building a structure that garners its rays and converts it into electricity. The sun of course is free, and rises freely to anyone that has paid off their solar system. Solar panels are made with elements like silicon, gallium, and arsenic. When the three of them are combined together, they pull energy from the sun like no other



Solar & Electric

elements. A homeowner can spend 5-7 years paying what they always paid a month for electricity (\$183 is the average bill), but towards a solar system. At the end of the five years the homeowner owns a solar system. When a person goes solar, they are reducing toxic emissions by not participating in conforming energy solutions (coal).

## Can a State Really Go Solar?

California leads the country in solar efficiency and solar usage. Last year, the state collected more energy from the sun than it could use, and ended up giving the excess away to Arizona. Why? California will never lack for sunshine. Yet some states don't experience the amount of sunshine that states like California do. How does a state like New York, one that experiences much more cloudy weather, create solar solutions for their homes and businesses? Studies show that the homeowner that saves the most by switching to solar isn't the homeowner with the most sunlight, but the one with the highest utility prices. New York, NY is currently ranked as the number one place for saving with solar energy. How? Because non-renewable energy solutions cost so much more than they do somewhere like sunny Redding, CA. This goes to show that, by default, solar energy works anywhere you're paying too much for electricity, not just in places of plenteous sunshine.