# **10 WAYS** TO LOWER YOUR UTILITY BILL

A practical, up-to-date guide for saving money on your energy bill in 2018



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## **1.) INSTALL ROOFTOP SOLAR**

Are you surprised we listed solar energy as #1 ;) Well, it's not just because we're biased (though we may be, a little bit). The truth is, when it comes to saving money and going green there are very few home improvements that can out weigh the benefits of solar panels.

Our systems save an average of 50-100% off your utility bill on a monthly basis, depending on your utility company.



#### Why Does Solar Make So Much "Cents"?

The costs of solar technology has also significantly

dropped making it more available to residential markets. Today thousands are enjoying the benefits of solar power, while government programs are giving tax credits and rebates to incentivize homeowners by paying for 30% of the system.

If we look at this from a purely financial standpoint, your return on investment (ROI) from solar energy in Arizona or Florida is unbeatable and it is simply a function of living in the right place at the right time.

#### Solar ROI

With a PE Solar solar ownership program, homeowners see an average savings of \$8,000 - \$14,000 over 10 years, and a staggering \$60,000 - \$80,000 savings over 20 years.

#### Why PE Solar?

PE Solar is confident we offer the best solution and value when it comes to solar and whole-home energy-efficiency, which is out "ZERO up-front ownership program."

Our business model is simple: Instead of investing our marketing budget into radio, TV or billboards, we invest it into certain homes in certain neighborhoods generate our future customers.

However, you're not a guinea pig by any means. PE Solar has done over 5,000 installs and \$45,000,000 in projects between Arizona and Florida combined.



What we're offering: For qualified homeowners, PE Solar will not only cover the upfront/out of pocket expense including the permitting, engineering and installation of the panels. We also include blown-in R-30 insulation at no additional cost (or Hybrid Water Heater or Variable Speed Pool Pump - dependent on what generates more savings, and what the home already has).

What we ask in return: What we ask for in return is, 12 months of after billing data, a small sign in the yard for 90 days, and a written testimonial. It is precisely this data that we use to bring future customers into the PE Solar family.

## 2.) TAKE ADVANTAGE OF OFF-PEAK RATES

#### **Using Appliances During Off-Peak Hours:**

Your utility company offers multiple plans for different reasons and lifesyles. It's important to know what plan you're currently on, and to do laundry, heat water and run the dishwasher before or after your on-peak hours (on-peak are the hours you are paying 2-4x more on your energy costs).

#### **Pre-Cooling During Off-Peak Hours:**

In the summer months, air conditioning alone can account for 50% of your energy costs. With this whopping statistic, it's important to know what plan you're currently on and to pre-cool your home during the off-peak hours associated with your plan.

If you don't already have a programmable smart thermostat, you can buy one and set it to automatically pre-cool your home.

3 hours before on-peak hours begin: Set your thermostat 3 degrees below your preferred setting. For example, if you are on the 3pm-6pm on-peak plan and usually set your thermostat to 74, set it to 71 during these 3 hours.

During your on-peak hours: Set your thermostat 3 degrees above your preferred setting. For example, if you are on the 3pm-6pm on-peak plan and usually set your thermostat to 74, set it to 77 during these 3 hours.

When on-peak hours end: Set your thermostat to your normal preferred setting (74 degrees, if using example above)

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## **3.) SWITCH TO LED LIGHTBULBS**

Change out your CFL or incandescents for LED Bulbs. LED's are the most efficient, have the longest life, and don't cost much more than CFL's these days.

Buy Energy Star-certified products if possible. Energy Star is the partnership between the EPA and the U.S. Department of Energy that identifies energy-efficient products.



This also goes for TVs, clothes washers, refrigerators, furnaces and fans so we always suggest Energy Star products - the EPA won't grant the Energy Star label unless its figures show you'll recoup your initial investment in 5 years or less on electricity costs.

## 4.) ADD ATTIC INSULATION

PE Solar knows its insulation, our crews have installed over 1.3 million square feet of insulation in thousands of Arizona and Florida homes. We love a good attic to crawl around in and enjoy seeing the tremendous impact a properly insulated home can make on a households energy costs.

Proper and adequate attic insulation can make all the difference when trying to keep heating and cooling costs low. The typical attic is severely under insulated which allows the transfer of heat and cold to the home from the unconditioned attic space. Insulation acts as a barrier between the extreme temperatures.



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There are several types of insulation available to homeowners. PE Solar recommends blown in insulation over rolled batts or foam. Blown in insulation is superior in providing consistent coverage when compared to a fiberglass batt.

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PE Solar uses a 100% fiberglass blown in insulation. Fiberglass offers several benefit over blown in cellulose. The benefits of fiberglass include a better level of fire protection, and moisture resistance. Fiberglass is less likely to settle over the years from moisture absorption when compared to cellulose. This ability to repel moisture allows fiberglass to stay thick and maintain its original R-value throughout its life. A higher R value will mean a better insulating quality. Typically, the thicker the insulation the better the R value and ability to keep your home comfortable.

A typical home will see an energy savings of 15-20%, while an extremely under insulated home may see a reduction in cost as high as 30%. The biggest impact of an insulation upgrade is arguably the extended life it will allow the homes HVAC equipment.

If insulation is something on the home upgrade checklist, PE Solar can provide an insulation quote. However, if you qualify for our "ZERO up-front ownership program", PE Solar will cover the cost of the insulation. \*See "Install Rooftop Solar" section for more details.

## **5.) WATER HEATERS**

#### Install a Hybrid Hot Water Heater:



A hybrid water heater does not use natural gas power or electrical resistance heating to heat the water that fills up its tank. Instead, it uses electricity to power components that draw ambient heat from the outside air, and then applies that heat to the tank.

Hybrid water heaters are not only environmentally friendly by releasing fewer greenhouse gases than natural gas-powered water heaters, but a hybrid water heater can save an average household of 4 approximately \$330 a year on electric bills when compared to a standard electrical resistance water heater. Larger families can save even more: the payback period for a family of 6 is approximately 1.7 years, with a lifetime savings of around \$5,500.



#### Lower the Temperature on Your Hot Water Heater:

13 percent of your home's electricity goes to heating water. You can lower this percentage, by setting your hot water heater to 130-140 degrees. For even more savings, install an insulation jacket, and insulate the first six feet of piping that comes off of your heater.

#### **Remove Sediment From Your Hot Water Heater:**

Sediment builds up in your hot water heater over time and can reduce it's efficiency by making it work harder. This translates into a higher utility bill and shorter life span of the water heater.

This sediment should be drained out quarterly, but at the least once every 6 months. Use the valve on the side of your hot water heater to drain the sediment twice yearly.

If a water heater is something your home needs replacing, PE Solar can offer a water heater quote. However, if you qualify to be a Solar Model Home, PE Solar will potentially cover the cost of a water heater. \*See "Install Rooftop Solar" section for more details.

#### **6.) INSTALL BLACK OUT CURTAINS / WINDOW SHADES**

Cut down on your air conditioning use by closing curtains and blinds or installing window shades on the sunny side of your home. The darker/thicker the curtains, the more heat you'll keep out.

PRO-TIP: Use blackout curtains in your bedrooms to increase sleep quality if light shines through your windows at night, or on those bright mornings when it's not quite time to wake up yet.

#### 7.) COOK STRATEGICALLY

It takes a lot of energy to heat up your oven, which also heats up your home. The more you heat up your home, the more the AC has to work to keep it cool = the higher your bills. If you're cooking something small, a toaster oven can be very handy. Depending on the size, most toaster ovens can roast veggies, bake cookies, and reheat that leftover pizza from 2 nights ago. It also cuts down significantly on cooking time since toaster ovens have less space that they need to heat.

Microwaves and slow cookers (crock-pot) also use a fraction of the energy compared to your oven or stove top. Whenever you can, heat things up in the microwave and cook dinners in the slow cooker to save energy. This also allows for minimal prep and clean up giving you extra time to do more important tasks.

## 8.) PACK THE DISHWASHER AND HAND WASH LARGE PANS

When you use your dishwasher, never run a half load. Pack that thing to the brim!

No matter how many dishes are inside, your dishwasher always uses the same amount of electricity and water - so it's most efficient to wash as many dishes as it can hold, every time.

Pots and pans take up a lot of room in the dishwasher, so if you can wash these items by hand, you'll have room for smaller dishes and use the dishwasher considerably less.

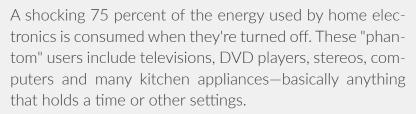


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How can you save even more? Turn off the "heat dry" feature and let your dishes air dry inside the dishwasher.

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A solution? Plug some of these items into power strips; then, get in the habit of turning off the strips between uses.

## **10.) ADD A CLEAN, DRY BATH TOWEL WHEN YOU PUT WET CLOTHES IN THE DRYER**

After about 15 minutes tumbling together, the towel will have soaked up a bunch of water from your clothes. Just take it out and hang it up to dry, and let the clothes finish drying faster than they would have otherwise.

## **FINAL THOUGHTS**

One of the simplest ways to lower your energy consumption and utility bill without spending any money is to be mindful about the way you use energy (we know, easier said than done with kids in the house).

When you leave a room, remember to turn off the lights. During the day when you might not be at home, turn your thermostat off and turn it back on once you get back, or use pre-cooling mentioned above.

There are lots of ways to cut down on energy usage at home and it all begins with bringing awareness to it and making small adjustments to your lifestyle. By changing these seemingly unimportant parts of your daily routine you can start to cut away at your utility bill and soon your high energy bill and stress level will become a thing of the past.

Lastly, if you have any additional questions, would like an in-home energy audit or would like to pre-qualify for PE Solar's "ZERO up-front ownership program," email Aaron at: **a.wolverton@pesolar.com** 

We'd love to show you how to use government incentives and rebates to increase the equity in your home, while reducing your monthly bill by 50% - 100%.

Chat soon, -The PE Solar Team