

# BEYOND THE BOX

“Every revolution was first a thought  
in one man’s mind.”

RALPH WALDO EMERSON

by SARAH SANTIAGO

## How Smart Is Your House?

**W**e’re all looking for ways to save money and some of the biggest expenditures can be electricity and gas. On a standard electrical outfit, we pay for power to be present in our homes and businesses even when we are not using it. Every appliance and outlet has a small dormant charge running 24/7. As long as your electricity is on, you’re accruing charges for minor voltages and those many minor charges can add up quickly. This is an antiquated system from the 1890’s! Shouldn’t we be more advanced in 2014? The answer is: YES! And we have the technology available right now. Our government is currently implementing new standards and regulations to smoothly transition the nation into a smarter, less consumptive society. The change will be total within the next couple decades, lowering energy costs for everyone by paying only for energy that we use directly.

The Smart Grid concept is multi-faceted, affecting everything from your electric meter to your microwave. What the Smart Grid aims to do is provide optimal user-to-provider connectivity and therefore greatly increase the efficiency and application possibility of our energy

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network. Simply put, the technology will allow the user and the provider to monitor and adjust usage levels in real-time at the touch of a button. This is called Smart Grid technology.

Most of our current infrastructure was built in the 1960’s with even older technology. As we grow and continue to enjoy more and more energy-hungry devices, the need to reinvent the nation’s electrical system becomes more and more urgent. By simply expanding without a drastic change in infrastructure (such as proposed by Smart Grid concepts), the people face an estimated \$1.5 trillion needed to meet demand. Between 33 and 50 percent of your current electric bill is the cost of keeping the greater

system active and not at all attributed to your personal energy use. Imagine your bill payment if we accrued another \$1.5 trillion in housekeeping.

Don’t panic. We are making steps in the right direction. While implementing the Smart Grid won’t eliminate the cost of expansion entirely, the long and short term benefits make the choice a no-brainer. Because users are able to monitor usage constantly, the Smart Grid will allow them to choose when they’d like to shut down unused applications. So, during peak usage, such as the middle of a sweltering summer day when you only want to stay cool and read, you can choose to reduce or eliminate all electrical currents not used by the air conditioning. You’ve just saved the world the otherwise wasted energy, and you’ve saved yourself the unnecessary cost of that un-used energy.

The applications in this field are limited only by the imagination. Imagine being able to control every volt that runs through your home. Imagine the savings in gasoline and carbon emissions. Imagine the savings on your tailor-made power bill. Now isn’t that smart? **HCHA**

