



## [Home-Energy Monitoring Device to Track Electricity Usage, Save \\$\\$](#)

Saturday, April 23rd, 2011

**Why use an energy monitor?** by Catherine Rust

**When you know how much things cost, you're more likely to switch your behavior.**

Right now you might leave the room the TV, computer, and lights on — with no concern about how that affects your next electricity bill. If you knew how much it was costing you, you'd probably think twice before leaving the unwatched TV unattended.



We've all got lots of devices that suck up electricity — even when we're away, or sleeping, or however and whenever we're not using them. Refrigerators and freezers run constantly. Most of our electronics are placed either on stand-by or have a low current running through them at all times so that we — the generation of instant gratification — don't need to wait an extra minute to watch our favorite show.

credit: [www.makeyourhomeenergyefficient.com](http://www.makeyourhomeenergyefficient.com)

This latter power is referred to as “phantom power.” Translation: **Your appliances' power is on even when it's off...** if you follow me! They might draw as little as one Watt per hour — but **multiply that by 24 hours/day, 365 days/year by 5-10 appliances by hundreds of thousands of millions of households — and you get a lot of wasted power.** In fact, Consumer Reports estimates that [8% of all power consumed by households is standby power](#), or more than 108 billion Kwh in the US.



## Kill a Watt

**Using an energy monitor gives you the knowledge you need to help you figure out where you're using the most power.**

**There are a few ways you can measure your electricity use.** The first one is the “frugal” way – which I myself am partial to. It involves a little math, some counting and a [Kill a Watt](#) or other watt measuring device.

1. **Count the lights in your home**, measure their wattage, estimate the number of hours per day they're turned on and multiply by the cost per kilowatt hour your utility company charges to calculate the number of kwh's your lights

consume.

2. **Identify appliance loads and electronic loads using an energy monitoring device.** This action is particularly important to do for your electronics when they are on or off (TV, stereo, computer and any surround-sound systems).

**Here's what I found for my house:** In standby mode my computer and accessories use about 8 kilowatt hours per year. The TV, digital box, and VCR consume 116 kilowatt hours per year when turned off.



## Blue Line Power Cost Monitor

**The easier way to measure your electricity consumption** is to use a device that hooks up to your power meter, such as the [Power Monitor by Blue Line Innovations](#). One end connects to your meter, and the other is a wireless device that “talks” to the one outside attached to your meter. You shut all appliances off in your home, put in a few required numbers, and turn on each specific device to determine just how much electricity each appliance or light(s), draws — and how much each one costs.

In either case, by knowing how much you use, you can decide just what isn't necessary to keep on when you're not using it.

When was the last time you actually used your VCR, anyway?



### Cathy and her family

**About Cathy Rust:** Cathy holds a LEED AP (Leadership in Energy and Environmental Design). She has a B.Sc. in Biology (specialist, Human Genetics) from McGill University, and an M.A. in Political Science and Environmental Studies from the University of Toronto. Before becoming a mom, she worked as an environmental consultant, in the 90s, “which was pretty much like talking to a brick wall.” You can find her at <http://becgreen.ca> and follow her on Twitter @becgreentoronto.

## 6 Comments to 'Home-Energy Monitoring Device to Track Electricity Usage, Save \$\$'

**adinaINdc**

April 24, 2011

you have a VCR?

**Jonathan (EcoDad)**

April 24, 2011

The Kill A Watt is great and cost less than \$25. For the even more frugal, check if your local library checks them out, I know quite a few libraries that do.

Make it fun and challenge the kids to do the math.

In Massachusetts, 1 Watt on 24/7 365 days a year totals to:

- 8.76 kWh
- \$1.43
- 11 lbs of CO<sub>2</sub>

<http://www.greenlifestyleconsulting.com/2010/04/what-impact-does-1-watt-have.html>

Happy Greening!

Jon

**Sarah Finnie Robinson**

April 24, 2011

Oooh, great idea to check libraries or otherwise share these devices.... thanks!

**Peter Porteous**

April 28, 2011

Cathy, thanks for the mention. We have as well just recently introduced a plug and play WiFi Gateway accessory for the PowerCost Monitor. We have partnered with both Microsoft Hohm and Google PowerMeter which are applications. So now in addition to viewing your real time energy consumption portably in the home you can chart, trend, benchmark and analyze on line and through mobile devices. Much more information is available at <http://www.bluelineinnovations.com>

Thanks again

Peter Porteous  
CEO  
Blue Line Innovations

**Cathy Rust**

April 28, 2011

Jon, love that statistic! Especially the 11 lbs of CO2!

Peter, I will definitely check out your new accessory. Our home has a smart meter, so knowing when and how we're using our electricity is key to our getting our family's electricity use down....now convincing my sons to use the PS3 a little less is "a whole 'nother challenge!"

Cathy.

**[Weekly Round Up of Eco Building and Other Eco News from around the Web »](#)**  
**[BEC Green](#)**

May 1, 2011

[...] use an Energy Monitor: <http://blog.practicallygreen.com/2011/04/top-action-save-money-avoid-surprises-when-you-use-a-home-e...>: I couldn't write a weekly round up without pointing to my own article, could I? For