

February 13, 2014

Winter Energy Bill Woes: Do You Know WATTs Up?

By **SmartLiving™ Research**

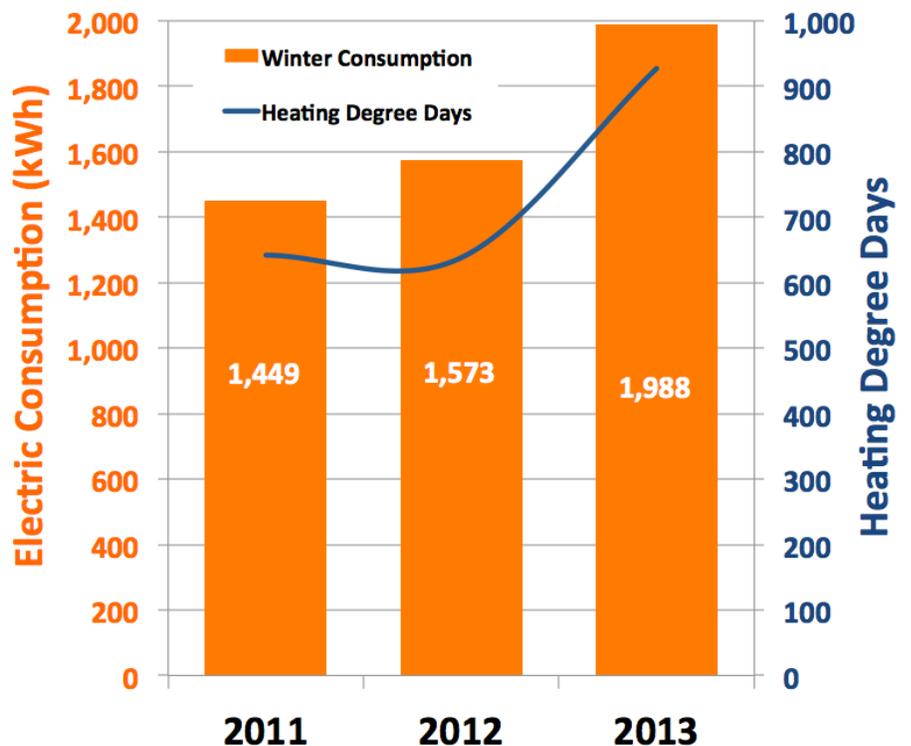
As we trudge into a brisk February, most of us have probably already received our utility bills for December and January. And, if yours were anything like ours, you may have experienced some surprising sticker shock. Utility bills usually peak during San Antonio's hot summers, with characteristically mild falls and winters offering a break from air conditioning use and often little need for heating. However, this winter has been anything but typical. Many of us even had to run out recently and buy what friends from up north might call "a real coat."

Our research director, might we add-a tremendous nerd, has faithfully tracked his home energy use and utility bills for the last three years as part of our case study. During his first year living in a new home, his household was using energy at a rate equivalent to about 11,000 kWh per year,

pretty efficient for San Antonio standards! Challenged to save energy, during the second year, our director managed to reduce his household energy consumption to a rate of about 8,600 kWh per year simply by keeping a better check on the thermostat settings and replacing the standard light bulbs with high efficiency ones. Since then, his household had been cruising along at the same energy use rate (8,600 kWh per year).

That all changed in December of 2013. It turns out that the winter we are currently shivering through has been more than just a bit colder than normal. Going back to our handy research datasets, we were able to compare his home's energy usage for the past 3 winters (November to January) to the San Antonio weather during the same time frame.

As we can see from the graph, our director's energy usage correlates quite well to the winter variations over the past 3 years. Our last three winters have gradually cooled off, thus the increase in heating degree days. We have experienced more days requiring heating this year in comparison to the previous two. As a number of winter storms continue to roll through the country, we can't help but to be thankful to live in South Central Texas, where a "real coat" only occasionally comes in handy. Graupel now is part of our vocabulary. Do you know WATT's up with your utility bill?



NOTE: Energy consumption and heating degree-days were calculated for the period between November 24 and January 28. Heating degree-days indicate how winter weather affects building heating energy use. They are calculated using 65 degrees Fahrenheit as the reference temperature.