

GREEN TECH THE SERIES COLUMN FOR NOVEMBER 9, 2016

HEADLINE: HYDRO REALITY....WE HAVE TO CHANGE HOW WE LIVE

One of the hot topics from readers, over the past weeks and months, is the escalating costs of what is, in fact, a necessity; electricity. The media stories and interviews are simple fact, hydro is eating into every budget and the government, in my opinion, is past where it can effect much change. They simply allowed this to get way out of hand some "X" number of years ago. I can remember on a job site near Tweed, in early March nearly 20 years ago, the hydro forestry crew arrived to clear the bush for the new power line. I knew the foreman, personally, and he took me to one of their bucket trucks and opened the side boxes to show off a half dozen new chain saws. He said every truck in the yard got new ones. When I asked what happened to the old ones, he said that, while the other ones were only just over a year old, they had to spend the budget or it would be cut. He said that they had sold the year-old saws for pennies on the dollar! Just one example of how out of touch Ontario Hydro was, and still is, for that matter.

We are left to find our own savings and the obvious way to do that is to reduce consumption, but that is not the only solution. Right now, the hydro rates from 7:00 PM to 7:00 AM, including holidays and weekends, are 8.7 cents kWh. It's over double that from 7 to 11:00 AM and from 5 to 7:00 PM, so some things can be moved, like doing laundry later in the evening. There are other things that can be changed, as well. The media and internet is packed with good energy saving tips and all can save you some money. There are some, however, that can save considerable dollars.

There are also a couple of myths that should be debunked. Firstly, turning electronics and appliances off will eliminate energy use; wrong. Most appliances today are simply on "sleep" mode, the power is still there. One study shows that this "Phantom" power can add 10% or more to a household electrical bill. Inexpensive, conveniently placed power bars, where televisions and entertainment equipment are located is the answer. Home offices are the other area where similar improvements can be made. The second myth is that leaving a light on uses less energy than turning it on and off. While there was a time that this was true, with today's light bulbs, that is no longer the case. In an average home, lighting can account for upwards of 10% of the hydro bill. This is one area where LED lighting and motion sensors are worth the upgrade. We have long ago accepted exterior motion lights on the garage or entrance. Today, there are

dozens of interior options, including actual light bulbs with built in light sensors, sensor units that can be screwed into a light socket and, the best one of all, the light sensor built into your standard room light switch. LED lighting has come of age, using 75% less energy than conventional bulbs, along with thousands of operating hours versus the LCD bulbs. They are worth the switch, alone.

It has long amazed me that we maintain 40 gallons or so of hot water 24 hours a day, whether they be electric water heaters, or, in fact, any tank style. Water heaters can account for upwards of 20% of an electrical bill. I often see them set at 140 F. The default setting for most water heaters is 120 F and that should be ample. Every 10dF you lower your water heater can result in nearly 5% savings on the cost of heating that water. With that, it's time to look at a timer controlled supply for electric water heaters. This control can be set for your home use, to come on when you need it and go off at night or while you are work. The next upgrade is to wrap your water heater in a blanket. There is a long list of coupons on the web site: www.saveonenergy.ca, including one for a water heater blanket. Some are included with this week's column. One area that many forget is the actual water supply lines; inexpensive foam fitted wraps are available. If you can do at least 10 to 15 feet on the hot side supply pipe coming from the water heater, it will save money.

Electric heat was popular in the late 70's, but those days are gone. That said, there is no cheap heating method today, unless you own 40 acres and can cut your own wood. Small plug-in electric heaters are strictly meant for zone heating. They are not efficient for any area much over 50 to 75 square feet. Homes with baseboard heating need specific attention when it comes to saving money. It is well known that the old "dial style" wall thermostats are far from efficient. New electronic thermostats not only allow you to set your room temperature, recommended to be 16C at night and 20C during the day, you can set for the time you are at work, too. The biggest advantage is that they work by checking the temperature every few seconds, often around 5. The thermostat turns the baseboard heater on and off more frequently and more efficiently. This on-off cycle maintains the heater in a warm operation, rather than the full-off, full-on cycle. The element does not get cold. Again, there is a coupon for new thermostats on line. A daytime temperature of 20C, might seem low, but socks, slippers and sweaters will save the day and the budget certainly will thank you.

There are a number of other suggestions, one being to invest in ceiling fans for every room. Set in a slow, constant fan speed on the down air flow setting during winter, they can make a huge difference in room comfort. Newer fans operate

with efficient DC motors, again reducing operational costs. Window coverings are nice and, for an electrically heated home, essential. Properly fitted “honeycomb” style are the most effective, still allowing a reasonable level of natural light in. Keep any existing drapes at least a foot above your baseboard heater and any furniture or storage should be kept away from the front of the heater.

Changes, such as these, will have an immediate effect on your hydro bill. It’s down to how we use electricity in an effort to control energy costs as best we can. It’s up to each and every homeowner.

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