HIGH SCHOOL, ENERGY POLICY AND OTHER MUSINGS

By Rick Phelps

If "Energy Efficiency" and "Renewable Energy" were personified as high school students, one would be pretty dull and the other really cool. The cool one would wear the latest styles, have the biggest allowance, and get invited to all the best parties. The dull one would wear pretty scruffy clothes, never seem to be able to afford anything, and would not be welcome at much except nerd parties ... but would always get the best grades. At the inevitable reunion, Cool is still looking for the next big deal, while Dull is still just plodding along, but does seem to live very well.

Cool is renewable energy and Dull is energy efficiency. In reality, energy efficiency and renewable energy are complementary and are part of meeting our energy future, but communicating that message means changing perceptions — always a big challenge in any marketing campaign.

An example is last year's Southern California Edison-sponsored Small Business Direct Install program that the High Sierra Energy Foundation helped market and promote in Mammoth Lakes, Bishop and Inyo and Mono counties. More than 400 small businesses were retrofitted with new lighting and other basic efficiency measures and the annual savings of those 400 businesses was about \$225,000. That's a lot of money to save each year, but since it only averages about \$550 annually for each business, there were no great celebrations or major news stories.

That \$225,000 annual savings is equivalent to about 125 solar home conversions, which would have been major news across the country. The headline: "Small California counties lead the way to a solar future." (Solar home estimate is based on the average solar home in the Sierra saving about \$1,800 annually.)

So, how do we get the same kind of excitement about nerdy energy efficiency for those that can't afford a solar home? Perhaps the first step is to embrace the "Small is Beautiful" ethic, articulated by British economist E. F. Schumacher in 1973. While those words relate more to global economics than energy efficiency, there is a parallel worth exploring. Often individuals don't take the first step to be more energy efficient because it seems too complex, expensive or lifestyle limiting.

I can't count the number of times people have said to me things such as, "We really can't afford a solar home and don't think all that light bulb stuff will make much of a difference," or "We'd have to

live like medieval monks to reduce our 'carbon footprint' sufficiently." The fact they are thinking about energy is a great first step. The second, often a baby step, is to get them thinking about energy efficiency and the aggregate impact of thousands of baby steps in thousands of households.

Three words keep the conversation going: lighting, thermostats and caulking (a.k.a weatherization).

Lighting: Where, when and how do we use light? Is exterior lighting for security or ambiance and how many hours each day does it need to be on? Is the quality of the light important; i.e. cold versus warm tones? Are some uses inflexible such as the use of traditional light bulbs to apply makeup? Note each use of lighting, and determine if the light can be replaced with a compact fluorescent lamp or connected to a timer, or both. Install the lamps and timers. And don't touch those lights that might require prying the traditional bulbs from someone's "cold, dead hands." Granted, you might leave some potential saved kilowatthours on the table, but you have made a start, and you will be saving energy and money, as well as reducing power plant pollution.

Thermostats: If you still have a thermostat with just one non-programmable setting, you'll have to develop the discipline to turn it up and down as you go to sleep, get up, and come and go during the day. Doing that can be a great pain and not likely to happen consistently. The better alternative is a programmable thermostat that allows you to change the time and setting for several activities a day such as wake, leave, return and sleep. The tricky part is determining what is the comfortable range for each family or individual, which usually

involves a little trial and error. Some people don't want the temperature any lower than 60 while sleeping while other are comfortable at 50. It's all a personal choice and reliving the life of a medieval monk is not a requirement. Using a programmable thermostat, however, has one drawback: you have to read the manual and figure out how to set it. As about 75% of our energy use in the Sierra is for heating, thermostats have a huge payoff. Some people have told me their heating bills have gone down by as much as 35% after programming.

Caulking (a.k.a weatherization): This is not glamorous, and is sometimes messy and seemingly trivial. But many of our residences, particularly the older ones, have the equivalent of an open window that needs to be "shut" with caulk. To get a feel for the process, it might help to start small – try it in just one room. Feel around the windows and doors, and use tape to mark the places where you can feel the air. Then, using



HSEF Executive Director Rick Phelps the correctly colored caulk, fill in the holes. After a little practice, it goes very quickly. That open window will be closed ... and you will be saving energy.

And you'll now get invited to all the cool parties.

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