

Express New Article
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Perhaps the most pressing financial challenge on the minds of many people today is how to cope with the rising price of energy. The country has faced this before, first in 1973 when oil went from \$3 to \$12 a barrel in one day. Those numbers seem inane now but the effect in 1973 was huge. Now we are just about at \$100 a barrel and beginning to see unease. However, there are many folks out there telling us how they can help us use less oil, gas and energy in general, and that will they save us lots of money. Let's take a look.

A dramatic example is a radio commercial I have heard twice while driving to work. It urges drivers to get their auto's engine tuned up, and claims that this can save them \$100 to \$200 a month in gasoline. Time for a little math.

Let's use the \$100 figure. At current prices this represents about 30 gallons of gasoline. My commute to work typically take me about 33 miles a day, or 1000 miles a month. For a while I drove my Navigator to work. It gets about 13 miles per gallon and used about 75 gallons of gas a month. I now have an Audi which gets over 20 miles per gallon and uses about 45 gallons a month. This is almost precisely the picture that the radio commercial presents. Am I to believe that a tune up on the engine of an old car could raise mileage from 13 mpg to 21 mpg, or 61%? That's exactly what it would take for the tune up to save you \$100 a month in gasoline. For the \$200 a month we need an episode of The Twilight Zone.

Another rather common claim of large financial savings from increased efficiency in energy usage is in the area of air-conditioning. Again, I've seen commercials where a homeowner is telling me that, after installing a new, high-efficiency air-conditioning unit, he is saving 30% on his electric bill.

My house has two a/c units; each of which have been replaced in the past two years one in 2005 and one 2006. The new units are both touted as "high efficiency." But, I've yet to see that 30% saving.

There are two parts to the situation. First is the cost of energy; oil, gas and coal. Prices have crept up since 2005, and "crept" is genteel. Realizing this I looked at the kilowatt-hours my home has used for the past three years.

The only thing that stands out is that August and September of 2005 show electric usage over 6000 kwh. The other summer months in all three years top out around 5500 kwh. However, August 2007 saw more kwh than August 2006, and this pattern repeated in other months this year. My conclusion is that, first, my electric bills have not been lowered since I installed "high efficiency" air-conditioners, and there is little evidence that my house is using fewer kwh than it did with my old air-conditioners.

Interestingly, my air-conditioning contractor, who is a good friend, has told me that he is delving deeply into this problem because he has observed exactly what I have experienced.

The lesson in these incidents is that things like automobiles and air-conditioners have been around for 80 to 100 years. Their efficiency has grown over that time. And now, engineers may be able to make them a few percent more efficient, but not 30% more efficient.

As I've noted before, automobiles can perhaps be almost reinvented if auto companies can perfect the plug-in hybrid. That would dramatically affect consumption of gasoline. Air-conditioners, on the other hand, are a mature technology; not the kind of thing subject to dramatic technological breakthrough.

So, what's the best way to confront rising energy prices? For cars, we already have an example. In the 1973-74 crisis, consumers' actions forced auto companies to offer more vehicles with higher mileage. We are probably sending that message now. Air-conditioning is tougher, but probably the best course is to slightly raise the thermostat setting in summer and lower it in winter.

And, do not be taken in by claims of immediate, large savings from a process or product. In this arena, there are no magic bullets.