

VILLAGE VIEW

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Much to the surprise of figure-watchers in this broad land (but not raising many eyebrows among individual citizens), the rising cost of energy has curtailed its use. What's surprising to some of us is that more people aren't helping themselves to the energy-saving (and therefore dollar-saving) opportunities available.

People have lowered thermostat settings and shivered through sub-freezing temperatures all winter but failed to take steps to insure cold-weather comfort. They've resisted spending money to beef up their home-insulation. If they felt chilly after turning in for the night, not one of them would hesitate to pull up an extra blanket though; why isn't it worth the investment to put a blanket between them and the snow and ice outside?

National Home Builders Association Research Foundation president, Ralph Johnson, cites energy saving techniques result in a pay-off period of between five and nine years, on the average, based on a recent study conducted for the Department of Energy. He also points out that costs of products and materials to save energy are themselves rising almost as fast as fuel costs. The study reveals the short five-to-nine year payback period makes energy conservation good sense.

The Foundation's research program involved building two essentially identical, single-story, three-bedroom homes, side by side; one was built along conventional lines; the other incorporated over sixty energy-saving techniques. Two adults and two young children occupied each house for a year and kept the thermostats at 70° in winter and 78° in summer when air conditioning was used. The smallest differences in energy-use were measured and monitored in each dwelling.

The more energy-efficient house cost \$5,382 more to build, but certain of the measures and devices, such as air-lock vestibules and a kitchen-family room retreat (cost-effective only in the event of a power failure), added \$2,927. Had these not been included, payback period would have required an initial outlay of less than \$2,500 additional, and would have reduced payback period to 5.2 years.

Forty-nine per cent less energy was consumed by the more efficiently-built home during the one-year study. The family occupying that house saved \$545 at current utility rates.

Owners of existing homes should be interested in some study-findings. The most effective conservation measure, for example, proved to be a reduction in hot water temperature from 160° to 120° F. This simple adjustment of the hot water supply thermostat-setting resulted in 28% of the total saving, and 50% of the total heating cost.

Energy-saving appliances produced 2% of the total saving. Exposure and the type of window glass used played a large role in containing costs. Because south-facing windows provided solar heat during the day, and were equipped with insulated draperies to prevent excess heat-loss at night, passive solar heat was credited with most of the rest of the savings, although double-glazed windows in winter, and a roof overhang to shade south-facing windows in summer, were also judged to be contributing factors.

The more efficient house clearly demonstrated the savings to be achieved with careful caulking and sealing of holes and joints. Fluorescent lights proved four times as efficient as incandescents. Seven-and-a-half foot ceilings, instead of nine, accounted for a 7% saving.

You and I paid taxes to finance this study, of course. Like a great many other government-sponsored studies, it simply confirms what "common sense" tells us. But common sense is a commodity hardly worth mentioning, today, even in passing.

Long before the government set itself up as the only entity qualified to conduct studies, common sense (and, we must admit, a certain amount of trial-and-error) guided our actions. Foundations were banked with pine needles to help keep our houses warm; wooden storm windows and doors were put on each fall to reduce heat loss; there's evidence still to be found in some of Cape Cod's oldest houses that spaces between ceiling rafters were sometimes filled with corn cobs, a primitive, but probably effective form of insulation.

Since the government has gone to all the trouble and expense to confirm what most of us already know, it's somewhat baffling to find there are still plenty of houses lacking adequate insulation, storm sash, caulking, and lower thermostat-settings on hot water heaters.

A year or so ago, you may recall, there was lots of talk about rationing gasoline. Then someone used some common sense and, instead of making a study, came up with the idea of raising fuel prices. There were many who derided the idea, believing the American public would continue to joy-ride and live in 76° F. comfort, no matter what the dollar-cost. Those people were wrong; the ones who believed Americans would respond to higher prices by curtailing their fuel-appetites were right.

The American Petroleum Institute reports significant decreases in consumption of domestic and imported oil during 1980. Nationwide, petroleum products sales dropped 7.7% overall; gasoline sale decreased 6.3%. Prior to the 1973-74 oil embargo, gasoline sales in the United States were increasing annually by a minimum of 5%.

With 1980's conservation efforts, our country imported 18.3% LESS crude oil and 17.7% FEWER refined petroleum products in 1980 as compared with the previous year. That's not yet enough to make us independent of foreign oil, but it has had a positive effect on our bargaining power with OPEC nations. Reduction of our imports has not gone unnoticed. Even though high inflation rates continue to plague us, if our consumption of foreign petroleum products had continued at its previous level, our inflation rate would have been appreciably higher.

While there is, as yet, no cause for great rejoicing, it could be a lot worse than it is. Energy credits on income taxes are still available to those who invest in government-approved energy-saving tactics such as insulation of walls and ceilings, caulking compound to seal cracks and holes, solar hot water heating systems, greenhouses to supplement home-heating systems, more efficient furnaces storm windows and doors, and weatherstripping. But time is running out. The present administration doesn't look with favor on extending tax credits for investments such as these once the program has run its course.

Some of the conservation measures are no more than old-fashioned common sense techniques; others, such as solar hot water heating and greenhouse heating supplements are new rinktums. Many people who could invest in such measures, and benefit from the five-to-nine-year payback, haven't done so. Their reasons, apparently, boil down to one pervasive fear. They are shying away from these energy-conservation measures because they're not convinced the techniques are perfected. And they may be correct. They probably ARE correct.

Why, I ran into an old duffer the other day who bragged he'd never owned an automobile because the gasoline engine hasn't yet been perfected and is only about 35% efficient (he said). He told me his horse-drawn vehicle cost considerably less to "feed than any car on the road, required no tune-ups, needed replacing only once or twice in a life-time," and that he could buy a horse capable of pulling him wherever he wanted to go for about 10% of the cost of a new car on today's market and good for ten or twelve years dependable service.

And, because he'd always used only horse-power transportation and always done the manual labor involved with keeping horses, he wasn't yet ready to invest in one of those new-fangled cars.

Maybe he's got the right idea.