

Energy Efficiency ~ Barriers & Opportunities

I would like to share some thoughts with you on conservation, on building Energy Efficient (EE) housing and on the ENERGY STAR HOMES Program (ESH).

I am an Independent Energy Consultant
Home Energy Rater
Model Energy Code “Expert”

ENERGY STAR HOME ALLY
House Doctor
Conservationist

Some homebuilders call me a tree hugger ... most builders just don't call me, *but that is changing!* I don't have an identity crisis; I work in a relatively new field and simply practice what my mother preached ...

Waste Not, Want Not and A Penny Saved is a Penny Earned.

If it is obvious that *Conservation Saves Money... and that Conservation Saves the Environment*, then why do we persist in our current wasteful energy habits?

The common barriers to energy efficiency that I see are

- Ignorance
- Indifference
- Inertia

- People are frequently *Ignorant* about or unfamiliar with EE technology. Buyers assume that all new homes are EE. They are not. If properly designed and built, homes can save 50 - 90% in Energy consumption over standard construction practice.
- *Indifference* comes from *perceived cheap energy... perceived cheap energy* is a sedative. With it's pervasive economic and environmental impact Cheap Energy is a misconception. *Low cost energy is not “cheap”*.
- Like *Inertia*, most people resist change. Many builders have been building the same for decades, ignoring techniques that can dramatically lower energy use.

I think energy conservation suffers from a Lack of Awareness. Would you crack six eggs for a three-egg omelet? This simple egg question highlights our nature to conserve and refutes the notion that we squander energy because it is cheap. Eggs are cheap, but we are educated to conserve them. Is Energy any different? Its use may be intangible, but its pollution and added cost is not.

What is the greatest cost in home ownership? I contend it is utility use!

1. It continues for the life of the home.
2. On average, 50% of utility expenses are unproductive wasted dollars (we buy two and throw one away)
3. 80% of utility dollars typically leave a community
4. And energy production has immeasurable hidden costs
The average home produces twice the pollution of an automobile!

Energy production and consumption have *the* single greatest impact on our world today ... with a few changes, we can significantly reduce that impact.

How do we fix it?

1) *Education is still the most important fix. While we have been *talking the talk* for a generation, we need to connect environmental benefits to wallets, energy efficiency to saving money, and connect saving money to securing our future.*

Tree hugging is great but selling a tree as a free air conditioner is even better.

2) We need to design and implement *workable EE programs* that have *demonstrable benefits...*

3) We need to develop a *Comprehensive Community Wide Housing Program*.
Housing is a family's single largest expense, if mismanaged
it is a burden on both the family and the community ...
Housing must be included in any community economic development program.

My **strategy to increase EE in housing** starts with ENERGY STAR HOMES.

1. We need to establish demand.

Buyers need to know there is a meaningful choice, a *real* energy dollar savings potential. The brand awareness campaign around the ENERGY STAR logo will heighten EE awareness.

2. We need to enable builders.

Enabling builders requires a mechanism to *pay, require, and train* them to build the better product. The ENERGY STAR HOMES Program provides that opportunity

- The ESH mortgage stretch allows energy upgrades to be profitable

- The rating process provides for 3rd party verification
- The compliance process both identifies performance problems and offers possible solutions for better building techniques

As prudent business people, builders will respond to profit opportunities.

3. We need to establish financial resources and local lenders.

ESH Mortgages should fit neatly into a bank's CRA program and present legitimate new business opportunity. There are also advantages for the banks in larger, more secure loans, and in an increased buyer pool. Builders and homebuyers will respond best to local lenders. The national companies lead the market, but local lenders write the volume.

Where do we start?

- We can start by reviewing the current required Model Energy Code worksheet filed with each building permit, and insisting on minimum code standards.
- We can promote the ENERGY STAR HOME and the HERS Rating programs.
- We can help housing agencies and others understand that the traditional search for support from government funds, foundation grants, and utility co-ops, all ignore the obvious. Housing costs can best be lowered by recapturing wasted energy dollars.

Those of us in the business have been preaching this for years. I believe the market is finally starting to listen.

Having children has made me realize that everything we do, we do for our children ... some just do it more carefully than others. Let's all start by being more careful. The footprint we leave should be that of a child, after all, it soon will be their world.

We must re-learn that each of us makes a difference. No, not the other guy ... you!