

Response to 2011 Energy Star

1. Intro

mandatory
= loss of
tradeoffs

- a. Energy stars approach of making items mandatory rather than preferred or recommended or incentivizes will make less builders likely to participate in energy star
- b. Rather than make these mandatory give builders a better score for using them.
- c. In our market there are 3 builders using energy star and we collectively build about 10-30 homes a year these new requirements will mean it's less likely new builders will participate in the system.
- (d.) Energy star needs to figure out if it's trying to be a green building guideline or an energy guideline.
- e. Part of the reason for "energy star for homes" success is because of the brand labeling but part of it is because of the amount of builders in the program and the ease of the average home owner being able to find the product in the market.
 - i. If the product becomes more scarce then the consumer will not know it exists. Inherently the consumer will choose a different product.
 - ii. Currently we are able to offer every home we build as energy star because the cost is not too great and all our homes have a score of 69⁰ or below. We do not offer LEED homes for no cost because the cost involved in producing this product is more expensive. I have never had a non custom consumer ask for a LEED home, but I have had them ask for an Energy Star home.
 - iii. The reality of the situation is that cost does matter. And non custom consumers are shopping on price as well as quality.
- f. We do not want energy star to have some unintended consequences
 - i. Many builders in my area do one thing to pass code inspection and then changed back to another to satisfy the homeowner and not to get more call backs
Like GFCI outlets behind refrigerator required by code by not good long term for home owner relations

loss of
growth
aggressively
growing
market

could sell
but should have
options on which to
install

2. Water efficiency

local contractors
not aware have
no price structure
No focus on irrig
stopped at blots
envelopes

- a. Energy Stars goals for hot water heating are great
- b. Home run plumbing, wet wall, and occupant activated circulating should be rewarded not mandatory.
- c. Cost will make energy star homes for expensive
- d. but the real waste of water is leaky faucets and toilets and wasted water in irrigation system
 - i. using water sensing shut off valves

tradeoff for super eff hot water heater
on water
eff. effort

3. Complete water-managed check list

- a. Bulk Water management is very important for the eastern half of the US and the western coast line but almost half the US gets 30 inches of rain a year or less 25% gets 10 inches or less
 - b. In these parts of the US selecting products and using practices that control wind driven dust are more important. *-should be some flexibility for local geographic concerns*
 - c. Also select product and using procedures that make the home less susceptible to sun damage
 - i. Like more brick and less siding
 - ii. Lighter colored roofs or more durable roofs like metal or tile
 - iii. Better quality paints on soffit and fascia for less sun fading and bleaching
4. Alp Lighting or Energy star bulbs in 80% sockets *- \$2K in covered ES bulbs*
- a. these bulbs make the home very costly
 - b. can be change back by home owner unlike other products used in home
 - i. would like to see the home owner change the windows or HVAC system to not energy star item
 - c. Many of the current energy star light bulbs to not work with RF dimmers for whole house lighting systems.
 - i. The use of dimmer can be an effective way to use less energy
 - ii. An incandescing bulb dimmed 20% can save 50% of the energy.

What are the options for sit. like this where Ef holds back consumer demand & progress

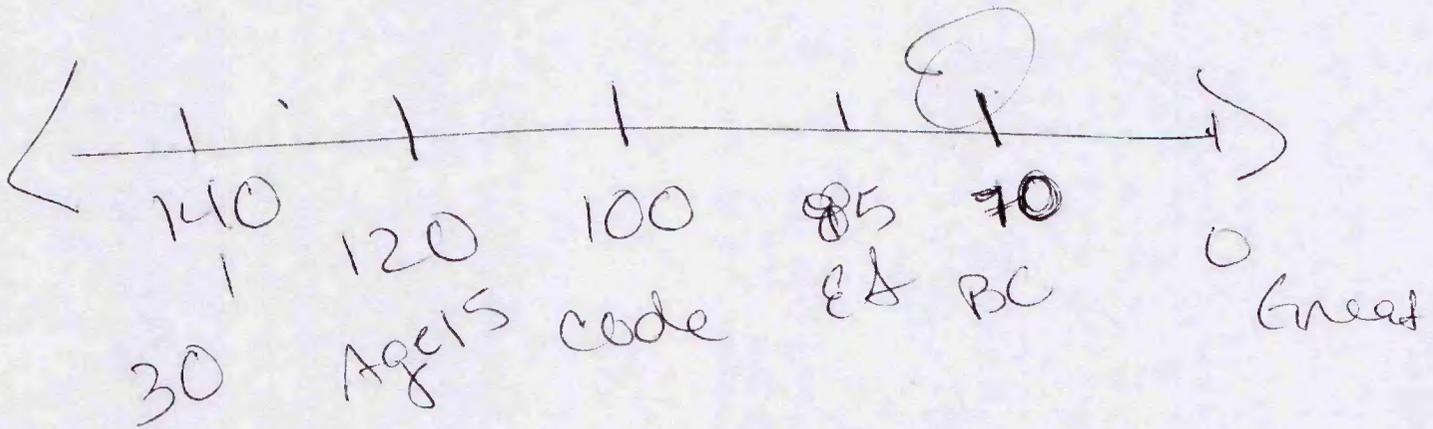
- d. Energy star needs to consider these options as well as ever changing technologies in this area like LEDS
5. Benchmark home size *- expecting major pushback / might change depending on gov.*
- a. The understanding is that Energy Star is trying to do make the carbon foot print of the bigger home equal to that of the smaller home.
 - b. This technique makes many assumptions about the usage of homes
 - i. Most occupants are a part of a nuclear family
 - 1. if you have three generations in one home there might be the need for additional place like a
 - a. second living area or
 - b. small kitchenette or
 - c. double master suites
 - d. all this could make the home larger that the benchmark home but maybe more efficient that two homes
 - ii. Most occupants commute to work/school
 - 1. the occupants might work from home and need additional office space
 - a. this families carbon foot print might be lower because one occupant does not drive to work
 - b. but the home is larger than bench mark

Penalize
potential racial
religious + dis.
to have penalties

- 2. one or more occupants may be home schooled or the they may have extra children in the home and need additional space to accommodate this leading to a home larger than the bench mark
 - iii. Most occupants do not have special needs
 - 1. multiple occupants may share the same bedroom
 - a. a family with 10 kids 5 boys and 5 girls
 - i. family wants a 3 bedroom home
 - 1. parents in one room
 - 2. boys in one
 - 3. girls in one
 - ii. room sizes are large to accommodate
 - iii. home is more efficient and used less material and an 11 bedroom home but fails the benchmark
 - b. occupant has special medical needs
 - i. needs larger hallways
 - ii. needs special rooms for therapy
 - iii. needs additional room in other rooms for equipment or functionality
 - c. EPA and energy star could be not complying with ADA or could have a discrimination lawsuit for showing preference to certain family types - small ? fair housing
6. energy star is product neutral
 - a. energy star that mandated certain products be energy star
 - b. these product in conjunction with local codes or market driven requirement eliminate all products except one
 - c. Energy star 2011 requires energy star vent fans in bathrooms local code or customers require a secondary heater in bathrooms. The only energy star heat/vent combination is manufactured by Panasonic.
 - d. The alternative is to use energy star vent only and an addition resistance heat source which combined together use more energy that a non-energy star heat vent light.
7. Conclusion
 - a. Updating energy star is a good idea
 - b. Use carrot not stick to get results (reward or incentive rather than mandates to get results)
 - c. Remember about unintended consequences
 - d. Thank you for asking for comments
 - e. Where is energy star going?
 - i. Do we really need yet another green building standard?
 - ii. Should energy star homes be more common or less common?
 - iii. Should it be easy to get or hard? - mkt threshold but it stalls growth in small new emerging markets

Need a 5 sec sales story

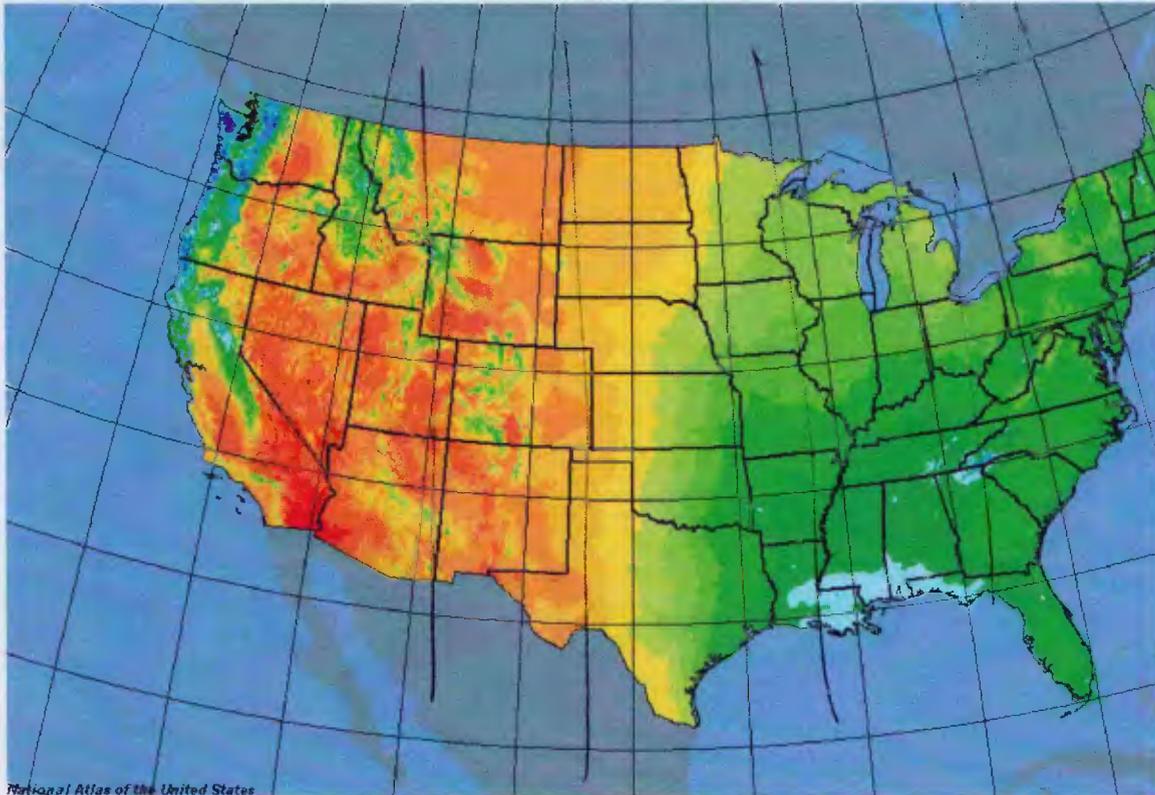
- iv. HERS index score should be like the sticker on the new cars every new home should have them and let the numbers speak for itself.
- v. Finally the idea is to use more energy star products or to be a more efficient home?



Realtor Assoc
Carol ~~King~~ Wall

Type of Const

EA cert const



Average Annual Precipitation
(in inches) 1961 - 90



Lack of precipitation zone
- Need Grid of climate US precipitation

Source: <http://nationalatlas.gov/natlas/Natlasstart.asp>