Consumers and Energy Efficiency

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Presentation Outline

• Who is the Pulte Group?
• What is our experience with Energy Efficiency?
• What motivates consumers?
• What are the road blocks for energy efficiency?
• What do we need to succeed?
Who is the Pulte Group

• Only multi-branded national home builder
  - Centex => Entry Level
  - Pulte => Move-up / Second Time
  - Del Webb => Active Adult

• Nation’s Largest Home builder
• 25+ states / 35+ markets
• Over 500,000 homes
What is our experience with Energy Efficiency

• >100k Energy Star Homes (10% of market)
• Largest Builder of DOE’s Builder Challenge Homes
• Long history of partnership with DOE & Building America Teams (12+ years)
• Multiple Focus Groups and Research Studies
Products and Systems Experience

- Advance Insulation Products / Systems
- High Performance HVAC Equipment
- High Efficiency Hot Water Heaters
- SIPs, Panelization and Modular
- High Efficiency Windows
- Solar Thermal
- Solar PV
Green Building Programs

- Energy Star
- Builder Challenge
- Environments for Living
- LEED for Homes
- Local and NAHB Green Building Programs
What Motivates Consumers

• Financial Investment

• Comfort / In-door Air Quality

• Home’s Value / Quality Product

• Environmental Impact

• Risk and Safety

• Promoting Local Economy
1) Return of Investment  2) Cash Flow  3) Pay Back

- With savings accounts and CD luck to earn 1-3%, the stock markets up and down roller coast ride over the last few years selling the benefits of energy efficiency by emphasizing the Rate on Investment should be an easy sell for homebuilders and a no-brainer for homebuyers.

- In most cases, energy efficiency improvements have positive cash flow if financed over 10 years, let alone 30 years.

- Pay Back – Not an effective way to communicate to homebuyers as most think they will only be in their homes 5-7 years and payback in years.
Comfort / In-door Air Quality

- Less drafty / Quieter
- More consistent temperature
- Energy Use and Comfort Guarantees
- Mold, radon, carbon monoxide, and toxic chemicals have received greater attention
- Asthma and Allergies growing concern as well
Home’s Value / Quality Product

- Cutting edge features and products can help homes maintain their value as new building codes are introduced.

- Selling homebuyers on buying the home of tomorrow today.

- Despite declines in home values, homeownership is still the biggest investment for individual. Buying an energy efficient home can protect their investment.

- New Homebuyers are looking more for quality over quantity.
Environmental Impact

- As gas prices rise, more and more emphasis is put on the importance of driving an efficient car. Average home is responsible for more CO2 emissions than 2 cars.

- Installing a few cost effective energy efficient measures in your home can save more CO2 than upgrading from an SUV to a hybrid!

- Savings in Trees, Cars off the Road, lbs of CO2 removed from atmosphere, etc.

- Only ~20% care about environmental impact.
Risk and Safety

- Power vented, sealed combustion high efficient furnaces reduce risk of carbon monoxide poisoning.

- Tank-less hot water heaters reduce risk of catastrophic failure

- Air sealing the penetrations reduced insect and pests

- Proper sealing between garage and living space = less contaminants in home
Promoting Local Economy

- The US talks about energy independence from a national perspective, why wouldn’t homebuyers and local municipalities want to be energy independent as well.

- $ saved by homeowners on energy costs are likely to be spent in the local economy.

- Many energy efficient upgrades require additional labor which supports local work force.
What are the road blocks for energy efficiency?

**Consumer Perspective** - Homebuyers shop mortgage rates, but generally ignore utility bills?

Consumer believe a code built home is a good home, when it’s actually the cheapest home you can legally build.

Consumers make decisions emotionally and conform with social norms.

Banks and mortgage brokers have taught Homebuyers compare rates, but no one has shown them how to compare utility bills on homes.
What are the road blocks for energy efficiency?

**Labeling** - Lack of national labeling comparing homes.

**Information overload for consumers** - There’s a ton of information out there about energy efficiency – and what to do to capture energy savings – but it’s complex and challenging to wade through for your average homebuyer.

**Lack of and Weak Financing Products** – FHA Energy Efficient Mortgage – better than nothing, but we need additional products.
What are the road blocks for energy efficiency?

**Utilities and Municipalities** – Need to create builder friendly programs. Long-term predicable incentives for builders.

**Lack of Market / Product Development** – Industry doesn’t have Hybrid Car / Prius to attract and motivate homebuyers to act and demonstrate what is possible in terms of energy efficiency in new homes.

**Marketing Risks** – Advertising benefits of EE can lead to lawsuits. Builders must decide is the risk worth the reward?
What are the road blocks for energy efficiency?

**Consumer Priorities** - Although energy efficiency has been increasing in importance among home buyers, it isn't yet a crucial part of the decision-making process.

Location, safety of neighborhood, floor plan, quality of schools, interior finishes, remain the driving factors in owning a home.

Energy Efficiency might be the 4th or 5th most important factor for homebuyers when deciding to purchase a home.
What are the road blocks for energy efficiency?

**Lack of value for innovation** - Current business model for builders doesn’t support innovation. Appraisers use market comparison to support valuation. How do you introduce new products and get proper valuation for new products?

Every time there’s a code update or improvement in construction standard, how do the appraisers and lenders value those improvement? As a result of this lack of value industry typically doesn’t invest in R&D except to reduce risk related to liability.

**Influencers** - Experts in the industry aren’t really experts – realtors, appraisers and lenders need to support.
What are the road blocks for energy efficiency?

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What do we need to succeed?

- National Standardized Label
- Continued R&D support, helps create market transformation (create leaders in the market, others will follow)
- Examples include Energy Star Penetration in Vegas and Villa Trieste (current DOE project)
- Consumers need to see that this is where the market is headed
- Energy Efficient Homes are something that consumers need to experience.
What are the road blocks for energy efficiency?

• Experiences create word of mouth marketing.
• 3rd party independent data – buyers don’t trust car salesmen
• How about a Kelly Blue Book for Appraisers?
• Add E to Principal, Interest, Taxes & Insurance (PITI)
• More EEM options
How can New Homes Influence Retrofit?

• Demonstrate what’s possible – self-sustaining homes / communities
• Develop new products and drive innovation while reducing costs
• Move quickly to “Energy Sweet Spot”
• Carry over established practices in new construction to retrofit market
• Lead changes in utilities, realtors, appraisers and financing industries
Thanks for your time

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