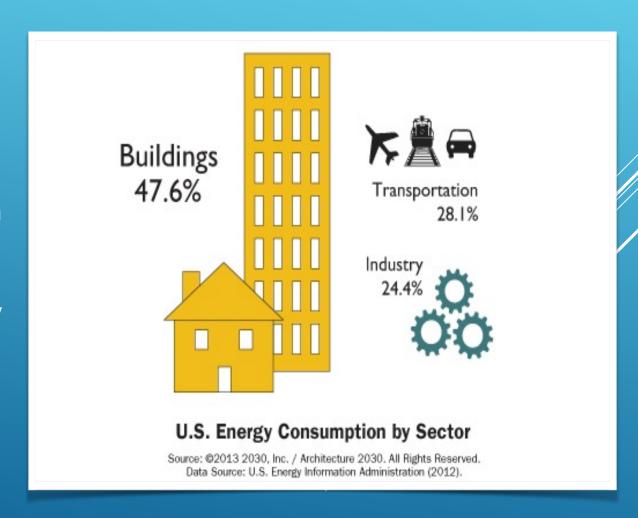


DISRUPTION: ENERGY

Issue

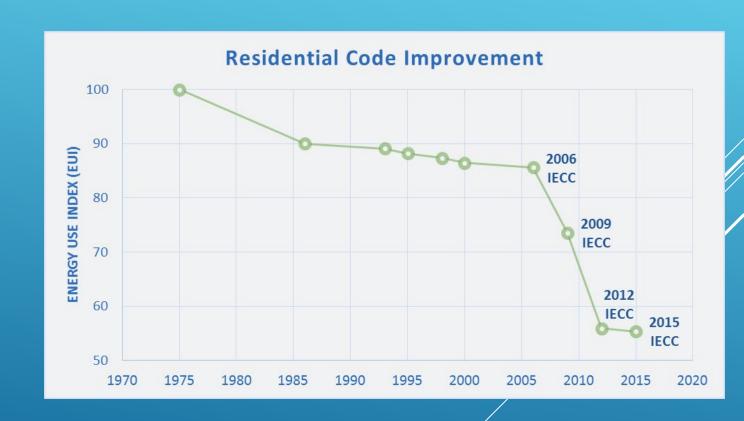
- ▶ 50% of Energy Consumed by Buildings is wasted
- ► Buildings consume the most energy of any sector in the US
- ► Energy Efficiency can improve individual affordability > \$100,000
- ► Energy Efficiency can reduce Utility cost > \$1.2 Trillion



DISRUPTION: ENERGY

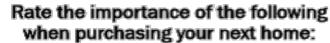
▶ Response

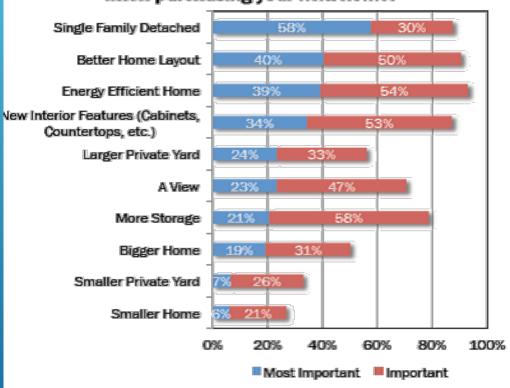
- Regulatory Codes increasing new building requirements
- Lack of value recognition in MLS / Realtors
- ► Lack of value recognition in Appraisals
- ► Lack of value recognition in underwriting



DISRUPTION: BUYERS

- ▶|ssue:
 - ▶ Buy Home every 5-7 years
 - ▶ > 90% of transactions resale
 - Green Washing
 - ► Competency of Buyer's Realtor





CREATING CHANGE

▶ Awareness

► Validation

▶ Evaluation

INFLUENCE



OUR CUSTOMER



TRUSTED EXPERT (THAT CARES)

- ▶ What is the Best Home for my Family?
- ▶ How do I find the Best Builder Partner?
- ▶ How would an Expert Choose among homes choices?
- ▶ How should I evaluate other choices?
- ► Will I have made the right choice?

DISRUPTION: BUYERS

▶ Response:

- ► Benefits, not features
- ► True cost of ownership
- **▶** 1:20
- ► Influence the influencers





REDUCE AND RENEW

Homes to the Power of **ZERO**



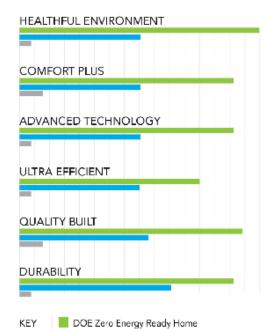
What is the DOE Zero Energy Ready Home™ Label?

It is a Symbol of Excellence for energy savings, comfort, health, quality, and durability met by a select group of leading builders meeting U.S. Department of Energy Guidelines.

What is a Zero Energy Ready Home?

It is a high-performance home so energy efficient, all or most annual energy consumption can be offset with renewable energy. In other words, it is the Home of the Future.

A Symbol of Excellence



This graphic comparison chart domainstrates relative performance of this DOF Zero Energy Boady Home to existing homes (built between 1990 and 2010) and ENERGY STAR Cartified Homes. Actual performance may vary.

Existing Home

■ ENERGY STAR® Certified Home





WIFIM

- ▶ Reduced Operating Cost
 - ► Energy Efficiency
 - ► Renewable Energy
 - ▶ Durability
 - ► TOU
- ▶ Comfort
- ▶ Health
- ► Security
- ▶Investment





► During 2008, the number of things connected to the Internet exceeded the number of people on Earth.

By 2020, there will be 50 billion connected devices



- Enhance4d Dfunction and Safety
- All work as a normal component without internet at the home
- Each Component can operate through a stand alone app









MOVING THE ENERGY DEMAND

- A. Smart ventilation (off peak)
- B. Thermal mass / phase change
- c. Thermal storage (heatpump HVAC precool off peak)
- D. Low solar heat gain (reflective / vented cladding materials)
- E. Smart appliances
- F. Large hot water storage w/ heat pump.
- G. West facing solar.

