#### RE86R14 -

### HIGH PERFORMANCE GREEN HOMES IN RESIDENTIAL REAL ESTATE

#### I. INTRODUCTION:

- A. Introduction to the background of high-performance construction and retrofits
- B. Current trends in the residential home marketplace.
  - 1. Increased consumer demand for more energy-efficient houses
  - 2. Government support of energy efficiency and distributed generation
- C. New complexities for residential real estate agents licensed in Massachusetts.
- D. All market participants will benefit from better educated agents.

# II. CREATING POLICY IN THE FACE OF CLIMATE CHANGE:

- A. Legislation that balances the challenges of New England's demand for energy with policy that meets the needs of the rate-power, the power grid, and the environment is, arguably, one of our region's most difficult tasks.
- B. Potential economic impacts of climate change in the Northeastern United States alarms even the most casual observers.
- C. One of the few solutions that relieve stress on the ratepayer, the regional energy grid, and the environment is energy efficiency.

#### III. DEVELOPING MARKET AND INCREASED VALUE FOR GREEN HOMES:

- A. Green developer, builder, homeowner
  - 1. Current market conditions and projections
  - 2. Overview of home energy ratings:
    - -Residential Energy Services Network (RESNET) Home Energy Ratings Score (HERS)
    - -Energy Star for Homes
    - -Leadership in Energy & Environmental Design (LEED) for Homes
    - -Passive House
    - -Energy Performance Score (EPS) Home Energy Score Home MPG
    - -Concept of *net zero*
    - -Background on building codes International Energy Conservation Code (IECC), International Code Council (ICC)
    - -Introduction to asset ratings versus operational ratings
  - 3. Case study: Massachusetts Energy Performance Scorecard (EPS) example

# B. Professional Development Opportunities

- 1. National Association of REALTORS (NAR) Green Designation
- 2. EcoBroker
- 3. LEED Green Associate, LEED Accredited Professional

# C. Green Multiple Listing Service (MLS)

- 1. U.S. Green Building Council (USGBC), MA Chapter
- 2. Updates to MLS of green data fields
- 3. Better reflect the regional marketplace

### D. Appraiser and Lender

- 1. Appraisal Practices Board of the Appraisal Foundation released a First Exposure Draft for its *Valuation of Green Buildings: Background and Core Competency* 
  - a. Value premium for green buildings
  - b. "Potential for obsolescence, also known as the "brown discount" for existing buildings that don't green up" (*Valuation of Green Buildings: Background and Core Competency, September 2013, page 6*). Multiple studies indicate high-performance (or 'green') labeled home sell at higher prices with less days on market (DOM)
  - c. Appraisal Institute's (AI) Green Addendum
  - d. Price premium for solar photovoltaic (PV) is being recognized

## 2. Financing current events

- a. Federal Housing Authority (FHA) 203k Rehab loans for EE upgrade
- b. HEAT Loan
- c. Energy Efficiency Mortgage (EEM)
- d. Property Assessed Clean Energy (PACE)

# 3. Owners of Energy Efficient Homes Less Likely to Default on Mortgages

a. Principal Interest Taxes and Insurance (Energy Spend) – PITIES

#### IV. GREEN BRAND AND STRATEGY

- A. Future buyers' focus on operating costs as energy prices rise
- B. Future buyers' focus on climate change impacts at home
- C. Opportunity to be part of the solution
- D. Growth of green certification for brokers and homes
- E. Avoiding green litigation greenwashing
- F. Customer loyalty
- G. Increased legislation promoting and mandating more energy efficient homes

#### V. MASS SAVE® - RESIDENTIAL

- A. Mass Save funding comes from 3 sources:
  - 1. Energy efficiency surcharge on all of our utility bills
  - 2. Regional Greenhouse Gas Initiative (RGGI)
  - 3. Forward Capacity Market administered by ISO-NE (the electric grid operator in New England)

#### B. Residential

- 1. No-cost home energy assessment (or energy audit)
- 2. Educate homeowner on incentives for energy efficiency (EE) work
- 3. Case study: Springfield Home MPG Customer

#### VI. COMMONWEALTH OF MASSACHUSETTS' ENERGY MARKET

- A. Rate-payer stress
  - 1. New England's high electricity and energy costs
  - 2. Case study: 2012-2013 heating season analysis
  - 3. Prevalence of oil as heating fuel in Massachusetts
  - 4. Natural gas versus oil heated homes and the premium natural gas commands in the marketplace
- B. Updating the 'Energy Features' MLS field with regionally specific and appropriate fields

# VII. MA LEGISLATION PAST & PRESENT SUPPORTING MARKET TRANFORMATION

- A. Renewable Portfolio Standard (RPS) (2003), Regional Greenhouse Gas Initiative (RGGI) (1997-98), and the Systems Benefit Charge (SBC)
- B. Green Communities Act (GCA) passed 2008, Stretch Code and Net Metering for distributed generation
- C. Solarize MA 2011
- D. May 7, 2013 Boston Energy Ordinance passed
- E. SAVE Act (U.S. Congress) incorporates 'energy spend' in load evaluation criteria