



# IMERY GROUP

PROMOTING SUSTAINABLE LIVING

[www.imerygroup.com](http://www.imerygroup.com)

## Make more Green By Selling Green

How can you benefit financially by selling green homes

# Agenda

- Introduction
- Objective
- What are Green Homes
- Quick review of Green Building Programs
- Market Penetration
- Do they cost more to built? Do they save money?
- How do we recoup the upfront cost?
- Green Mortgages
- Making more \$\$\$
- Other Benefits
- More on EEM
- Questions

# Introduction

- Construction & Development
  - *Custom Homes & Built To Suit*
- Green Programs Certifications
  - *EarthCraft House, Energy Star and LEED Homes\**
- Home Energy Assessments
  - *Georgia Power Partner*
- Energy Code Compliance & Testing
  - *New Georgia 2009 Energy Code*
- Real Estate
  - *Associated broker with Chastain Jenkins & Leathers*

# Introduction

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- Construction &
    - Custom Homes & Built To Suit
  - Green Programs Certifications
    - Earth Advantage Home Energy Star LEED Homes\*
  - Home Energy
    - Georgia Energy
  - Energy Code Compliance & Testing
    - New Georgia 2009 Energy Code
  - Real Estate
    - Associated brokers: Sustain Jenkins & Leathers

# Objective

- How can we make more money by selling a Certified Energy Efficient or Green Home?
  - Increasing your buyers purchasing power
  - Selling a higher priced home
  - Referrals from Satisfied Customers

# What are Green Homes

- Is a home that has been designed in a system approached, delivering a building that is **healthier, more comfortable, durable, and tout performs homes built to meet code by at least 15%**.
  - Voluntary programs
  - Third Party Verified
  - Requires Builder to undergo training and to partner with the program
  - At least two inspection done through construction process, including an air leakage test
  - HERS Index lower than 85

# Most Popular Green Building Programs



- ENERGY STAR<sup>®</sup> :Government backed program developed by [EPA](#), DOE and Private Business



- EarthCraft House: Is a partnership between the Greater Atlanta Home Builders Association, [Southface Energy Institute](#), the government and industry partners

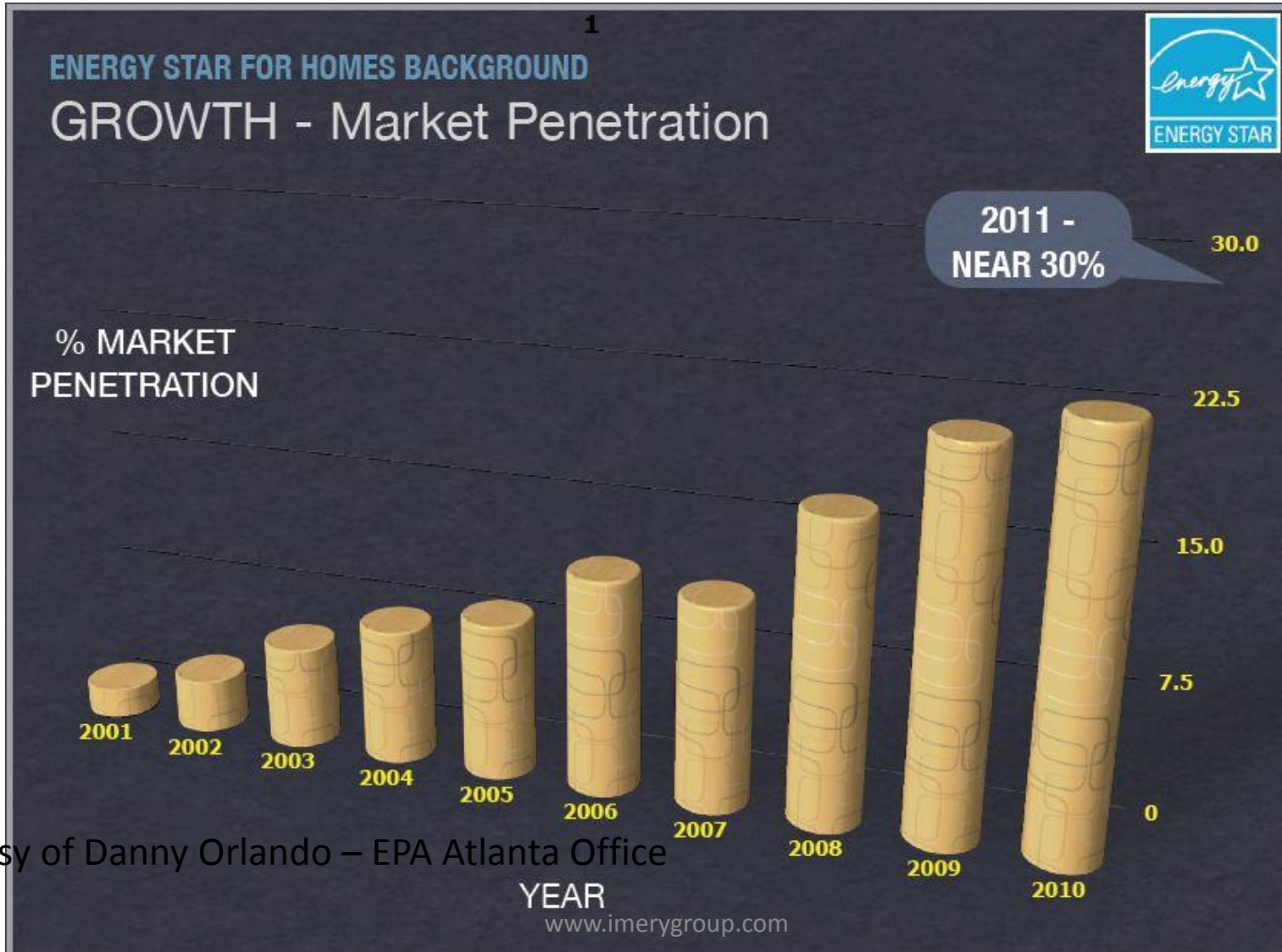


- LEED for Homes: Developed by the [U.S Green Building Council \( USGBC \)](#)



- Developed by [National Association of Home Builders \( NAHB \)](#) and the [International Code Council \(ICC\)](#) . Program also known as ICC 700 National Green Building Standard<sup>™</sup> which receive approval from the American National Standards Institute (ANSI).

# Market Penetration



\* Courtesy of Danny Orlando – EPA Atlanta Office

# Construction Cost

## From a builders Perspective

For New Homes

	Standard new home	Same home with energy improvements
Home price (90% mortgage, 8% interest)	\$150,000	\$154,816
Loan amount	\$135,000	\$139,334
Monthly payment*	\$991	\$1023
Energy bills	\$186	\$93
The true monthly cost of home ownership	\$1177	\$1116
Monthly savings	-	\$61
<p>* Estimated mortgage payments are based upon principle and interest only and do not include taxes and insurance. Values indicated here are for example only and will vary from home to home.</p> <p>Source: "Energy Efficient Mortgage Home Owners Guide," Federal Citizen Information Center.</p>		

**3% cost increase**

**50% energy reduction**

**\$ 732 savings per year**

### True Cost of Home Ownership

# Case Study 1 -New Home Home Owner Perspective

	Meet Code	PLATINUM HOUSE	
HOME PRICE	\$ 165,000.00	\$ 181,500.00	\$ 16,500.00
FHA LOAN (3.5% down. 4.5%rate 30 year fixed)			
<b>LOAN AMOUNT</b>	<b>\$ 159,225.00</b>	<b>\$ 175,147.50</b>	
ESTIMATED MORTGAGE PAYMENTS *	(806.77)	(887.45)	
ESTIMATED MONTHLY TAX PAYMENT	(242.96)	(196.22)	
ESTIMATED INSURANCE	(28.00)	(25.00)	
ESTIMATED ENERGY BILLS	(175.67)	(112.58)	
ESTIMATED HOA	(89.00)	(65.00)	
<b>TOTAL TRUE COST ON OWNERSHIP</b>	<b>(\$1,342.40)</b>	<b>(\$1,286.25)</b>	
SAVINGS		\$56.15	
	Net Present Value		(\$10,460.12)
<b>Assumptions</b>			
*Estimated mortgage payments are based upon principle and interest only.			

Taxes from ACC website	\$2,915.54	\$2,354.59
HOA from Navica	\$89.00	\$65.00
Power Bill ( actual consumption / energy model)	\$2,480.00	\$ 1,351.00
Insurance	\$28.00	25.00

# Case Study 2\* -New Home Home Owner Perspective

2,200 FT<sup>2</sup> HOME

Home	CZ	Location	Stories	Foundation	HVAC Equipment Type	Heating Fuel
1	1	Miami, FL	One-story	Slab	Air-Source Heatpump	Electricity
2	1	Miami, FL	One-story	Slab	Gas Furnace / AC	Gas
3	2	Daytona Beach, FL	One-story	Slab	Air-Source Heatpump	Electricity
4	2	Daytona Beach, FL	One-story	Slab	Gas Furnace / AC	Gas

Home	CZ	Location	Annual Utility Bills		ENERGY STAR Version 3 Upgrade Cost	ENERGY STAR Version 3 Cash Flow Impact			
			Costs	Savings		Monthly Mortgage Cost	Monthly Utility Savings	Monthly Mortgage Cost	Net Cash Flow
			2009 IECC	ENERGY STAR Version 3	Total Cost	Cost	Savings	Cost	Flow
1	1	Miami, FL	\$1,706	\$1,402	\$4,243	\$23	\$25	\$23	\$3
2	1	Miami, FL	\$1,603	\$1,303	\$3,952	\$21	\$25	\$21	\$4
3	2	Daytona Beach, FL	\$1,674	\$1,404	\$4,011	\$22	\$23	\$22	\$1
4	2	Daytona Beach, FL	\$1,589	\$1,317	\$3,720	\$20	\$23	\$20	\$3

≤ 4,000 ADDITIONAL (OVERSTATED)

NET CASH FLOW FOR CLIENT - ALWAYS POSITIVE

\* Courtesy of Danny Orlando – EPA Atlanta Office

# Green Mortgages

- Takes a home's energy efficiency into account increasing the loan amount that the buyer can borrow, giving the ability to buy a higher quality home due to the lower monthly operating costs.

- [Energy Efficient Mortgage EEM \(click here\)](#) –  
Lower operating costs increases the buyer's purchasing power.



# Making more \$\$\$



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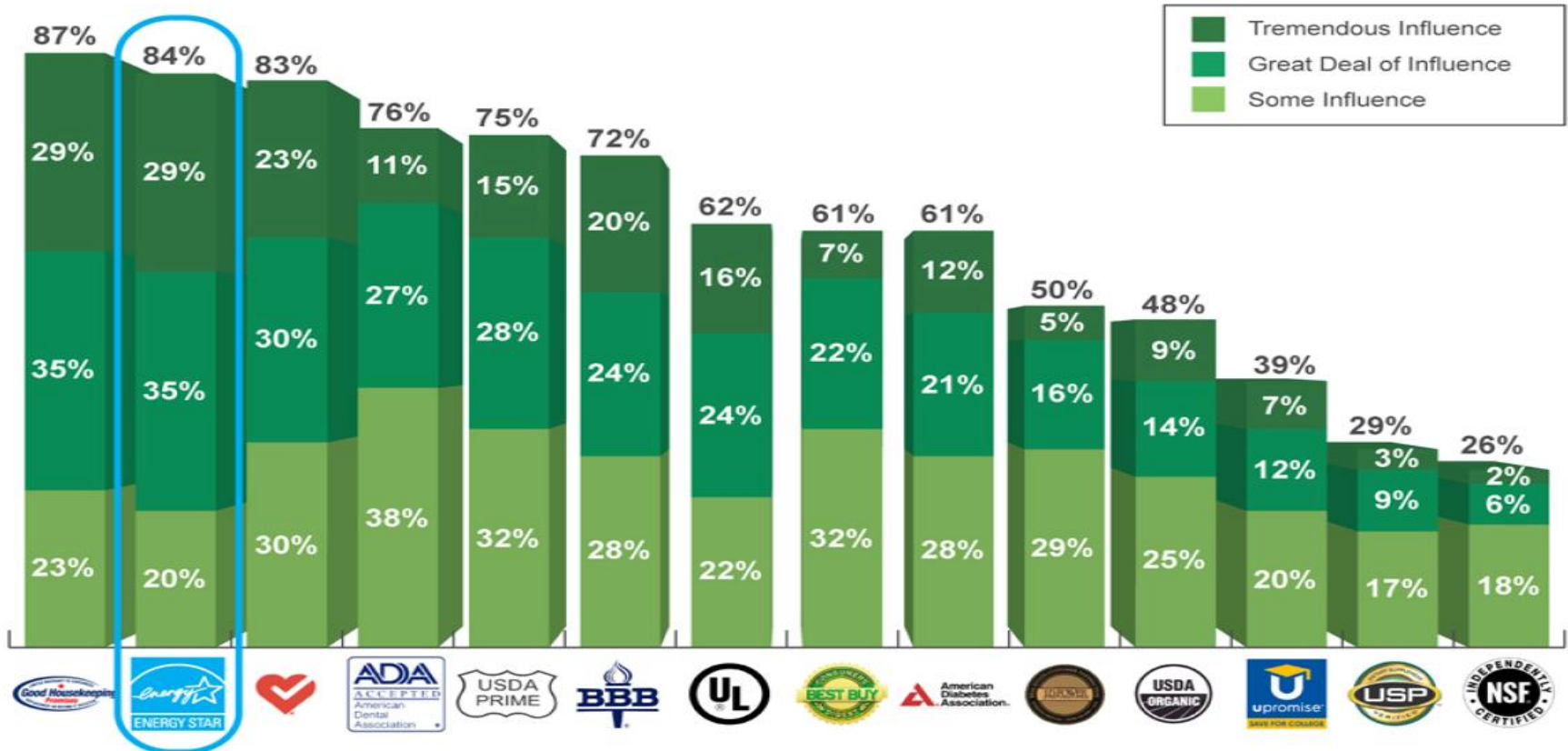
Commission ( 6%)

\$ 9,900

\$ 10,890

10%

# Other Benefits – Brand Advantage



Source: Fairfield Research, Summer 2007



The ENERGY STAR mark ranks among the highest level of influence on product purchase among all consumer emblems, similar in ranking to the *Good Housekeeping Seal*.

# CONSUMERS' BENEFITS



Typical  
Price  
Location  
Facade  
Floor Plan  
Amenities

+

Features

=

Additional Benefits

Effective Insulation  
Adv. Windows  
Tight Construction & Ducts  
Efficient Equipment  
Lighting and Appliances  
Third-party Verified

Quieter  
More Comfortable  
No Drafts  
Fewer Bugs/Pests  
Better Indoor Air  
Quality  
Higher Quality  
Less Maintenance...



# CONSUMERS' BENEFITS



Typical

+

Features

=

Additional Benefits

Price

Effective Insulation

Quieter

Location

Facade

Floor Finish

Amenities

Increase Client Loyalty

Stable

Repeat Sales

Pests

+ Referrals

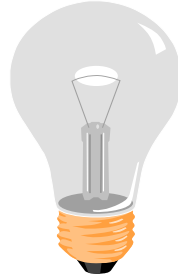
or Air

Higher Quality

Less Maintenance...

# Making the case for Green Homes

## ***Incandescent Lighting*** *(8 years)*



**Initial Investment: \$ .50**  
**Energy (lifetime): \$40.00\***  
**Bulb Replacement: \$ 3.50\*\***

**Total Cost: \$44.00**

## ***CFL Lighting*** *(8 years)*



**Initial Investment: \$3.50**  
**Energy (lifetime):\$10.00\***  
**Bulb Replacement:\$ .00**

**Total Cost:\$13.50**

*\*Assuming 1,000 hours/yr. operation and .097 cents/kWh.*

*\*\*All costs, except initial cost, are discounted over the products' lifetime using a real discount rate of 4%.*



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**More on Green Mortgages?**

# Players & Products

Player	Products
FHA / HUD	EEM – Energy Efficient Mortgages
VA	EIM – ( RESNET term)
Fannie Mae & Freddie Mac	203 (k)

Using an energy efficient mortgage you get a house with a higher up-front cost, but, because you're financing that cost and the operating expenses are lower, you end up saving money from the first month you're in the house.

# Other “Green” Mortgages

- National and local lenders offer their own green mortgages
- These usually don't count energy savings as qualifying income
- Examples:
  - Bank of America's Energy Credit Mortgage - \$1,000 back at closing for purchase of an ENERGY STAR qualified home
  - PNC Bank – local lender in MD offering special financing for homes undergoing improvements through MD Home Performance with ENERGY STAR
  - ENERGY STAR Mortgage Pilot Program – approved lenders offer borrowers a real financial benefit above energy savings (interest rate reduction, closing cost discount).

## Fannie Mae Energy Report

Monthly Energy Savings is ADDED to monthly income

Energy Savings Value is ADDED to the market appraisal value

Adjustments allow more purchasing power for a homeowner

## Important to Account for Energy Efficiency in the Appraisal

- Appraisers, lenders, realtors, builders, raters must communicate with each other
- Home energy rating report contains energy savings value that gets included in appraised value of the home
- Appraisal forms have places to account for energy efficiency features

## Energy Report For Fannie Mae Desktop Underwriter®

Use this Energy Report to show the Energy Savings (for underwriting purposes in accordance with the requirements of the Energy Efficient Mortgage product) to determine the Energy Savings related to the property. This Report is to be completed by the Energy Rater and submitted to the Lender. This Report must be retained by the Lender in the Loan file.

Borrower Name(s): Cantin Builders  
Property Address: 5168 Brunswick, Port Charlotte, FL

### Energy Savings

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Monthly Energy Savings

Enter Monthly Energy Savings Value into Section V "Monthly Income and Combined

### Energy Value

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#### New Homes or Energy Efficient Existing Homes

Energy Savings Value

Enter Energy Savings Value into "Additional Data" in the Desktop Underwriter®

OR

#### Energy Improvements to Existing Homes

Energy Savings Value

Enter into Section VII "Details of Transaction". Add to Line B "Alterations,

AND

Enter Energy Savings Value into "Additional Data" in the Desktop Underwriter®



Rater's/Provider's Signature \_\_\_\_\_

Date 7/29/2008

Example of Home  
Energy Rating Report



# Important to Account for Energy Efficiency in the Appraisal



General Description	Foundation	Exterior Description	materials/condition	Interior	materials/condition
Units <input checked="" type="checkbox"/> One <input type="checkbox"/> One with Accessory Unit	<input checked="" type="checkbox"/> Concrete Slab <input type="checkbox"/> Crawl Space	Foundation Walls Concrete/New		Floors Wool carpet/Linoleum/New	
# of Stories One	<input type="checkbox"/> Full Basement <input type="checkbox"/> Partial Basement	Exterior Walls SIP (Structural Insulated Panel)		Walls Drywall/New	
Type <input checked="" type="checkbox"/> Det. <input type="checkbox"/> Att. <input type="checkbox"/> S-Det./End Unit	Basement Area sq. ft.	Roof Surface Metal/New		Trim/Finish Wood/New	
<input type="checkbox"/> Existing <input checked="" type="checkbox"/> Proposed <input type="checkbox"/> Under Const.	Basement Finished %	Gutters & Downspouts Yes/New		Bath Floor Linoleum/New	
Design (Style) Key West	<input type="checkbox"/> Outside Entry/Exit <input type="checkbox"/> Sump Pump	Window Type Low-E, High Impact/New		Bath Wainscot Tile/New	
Year Built Proposed - 2009	Evidence of <input type="checkbox"/> Infestation	Storm Sash/Insulated Yes/new		Car Storage <input type="checkbox"/> None	
Effective Age (Yrs) New	<input type="checkbox"/> Dampness <input type="checkbox"/> Settlement	Screens Yes/new		<input checked="" type="checkbox"/> Driveway # of Cars	
Attic <input type="checkbox"/> None	Heating <input checked="" type="checkbox"/> FWA <input type="checkbox"/> HWBB <input type="checkbox"/> Radiant	Amenities <input type="checkbox"/> WoodStove(s) #		Driveway Surface	
<input checked="" type="checkbox"/> Drop Stair <input type="checkbox"/> Stairs	<input type="checkbox"/> Other <b>Fuel Heat Pump</b>	<input type="checkbox"/> Fireplace(s) # <input type="checkbox"/> Fence		<input checked="" type="checkbox"/> Garage # of Cars Two	
<input type="checkbox"/> Floor <input type="checkbox"/> Scuttle	Cooling <input checked="" type="checkbox"/> Central Air Conditioning	<input type="checkbox"/> Patio/Deck <input checked="" type="checkbox"/> Porch		<input type="checkbox"/> Carport # of Cars	
<input type="checkbox"/> Finished <input type="checkbox"/> Heated	<input checked="" type="checkbox"/> Individual <b><input checked="" type="checkbox"/> Other 16 Seer</b>	<input type="checkbox"/> Pool <input type="checkbox"/> Other		<input type="checkbox"/> Att. <input type="checkbox"/> Det. <input type="checkbox"/> Built-in	
Appliances <input type="checkbox"/> Refrigerator <input checked="" type="checkbox"/> Range/Oven <input checked="" type="checkbox"/> Dishwasher <input checked="" type="checkbox"/> Disposal <input type="checkbox"/> Microwave <input type="checkbox"/> Washer/Dryer <input checked="" type="checkbox"/> Other (describe) Energy Star Appliances					
Finished area <b>above</b> grade contains: Rooms Bedrooms Bath(s) Square Feet of Gross Living Area Above Grade					
Additional features (special energy efficient items, etc.) Energy Star House with third party rating; green features include low-E windows, non toxic pest control, graywater reuse system, solar water heater, spray soybean based insulation, low VOC paint, recycled glass counter tops,					
Describe the condition of the property (including needed repairs, deterioration, renovations, remodeling, etc.) The proposed construction has a functional floor plan, acceptable in this market area.					
Are there any physical deficiencies or adverse conditions that affect the livability, soundness or structural integrity of the property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, describe					
Does the property generally conform to the neighborhood (functional utility, style, condition, use, construction, etc.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, describe The proposed construction exceeds the existing house quality when the energy and green features are considered. This house will have less maintenance cost and lower utility expenses.					



# Important to Account for Energy Efficiency in the Appraisal



FEATURE		SUBJECT			COMPARABLE SALE # 1			COMPARABLE SALE # 2			COMPARABLE SALE # 3		
Address		5035 PATRICK CIRCLE HOLT, MI 48842-2914			1609 HOLBROOK HOLT, MI. 48842			3070 IVYWOOD LN HOLT, MI. 48842			2137 MOORWOOD HOLT, MI. 48842		
Proximity to Subject					1.79 MILES E			3.55 MILES NE			1.44 MILES NW		
Sale Price		\$ N/A			\$ 155,000			\$ 169,000			\$ 169,900		
Sale Price/Gross Liv. Area		\$ 0.00 sq. ft.			\$ 87.47 sq. ft.			\$ 94.15 sq. ft.			\$ 96.42 sq. ft.		
Data Source(s)					MLS#186699 / PUBLIC RECORD			MLS#190983			MLS#173414		
Verification Source(s)					CURRENT MLS DATA			CURRENT MLS DATA			CURRENT MLS DATA		
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION			+(-) \$ Adjustment			DESCRIPTION			+(-) \$ Adjustment		
Sale or Financing		CONV / D.O.M. 33						FHA / D.O.M. 45					
Concessions		SELLER PD. -0-						SELLER PD 10,140			-7,605		
Date of Sale/Time					04/17/2009						08/19/2009		
Location		SUBURBAN			SUBURBAN			SUBURBAN			SUBURBAN		
Leasehold/Fee Simple		FEE SIMPLE			FEE SIMPLE			FEE SIMPLE			FEE SIMPLE		
Site		109.73 X 173.06			70 X 124.5			+500			100 X 160		
View		RESIDENTIAL			RESIDENTIAL						RESIDENTIAL		
Design (Style)		1.5 STORY			2 STORY						TWO STORY		
Quality of Construction		GOOD			GOOD						GOOD		
Actual Age		13 YRS			13 YRS						14 YRS		
Condition		GOOD			GOOD						GOOD		
Above Grade		Total	Bdrms	Baths	Total	Bdrms	Baths				Total	Bdrms	Baths
Room Count		8	4	2.50	9	3	2.50	+500			7	3	2.50
Gross Living Area		1,743 sq. ft.			1,772 sq. ft.			-290			1,795 sq. ft.		
Basement & Finished Rooms Below Grade		FULL BASEMENT RR, BATH, BR			FULL BASEMENT REC ROOM			+1,000			FULL BASEMENT REC ROOM		
Functional Utility		GOOD			GOOD						GOOD		
Heating/Cooling		FWA / CAC			FWA / NONE			+1,000			FWA / CAC		
Energy Efficient Items		AVERAGE			AVERAGE						AVERAGE		
Garage/Carport		2 CAR GARAGE			2 CAR GARAGE						2 CAR GARAGE		
Porch/Patio/Deck		DECK / POR / FEN			DECK / POR / FEN						DECK / PAT / POR		



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## Thank You !!!

### Welcome for Green Home Tour

[Access to videos](#)

Luis Imery – *Owner* [www.imerygroup.com](http://www.imerygroup.com) Cell: 770-2941014

# Why Aren't EEMs Popular?

- Most lenders and realtors don't know about or understand EEMs
- EEMs are most useful for borrowers who can already qualify for a mortgage
- Appraisers don't know how to incorporate energy savings value into appraisal
- Require additional steps (i.e., obtain rating, establish escrows) and costs (home energy rating)

# Advantages to Lenders Involved with EEMs

- Lenders can become partners to use the ENERGY STAR logo to promote EEMs and ENERGY STAR Mortgages
- Lenders must submit a partnership agreement
- Lenders must have first done one EEM before becoming a partner, and must do three EEMs per year to maintain active partner status
- Partners are listed on ENERGY STAR's website  
<http://www.energystar.gov>