# **ENERGY/GREEN Features Checklist**

Information deemed reliable but not guaranteed. It is the responsibility of the Buyer and Seller to verify accuracy of any specific features listed below.

#### Energy/Green Features Currently In or On the Property - Please Input Data for ALL that Apply

#### **Energy / Green Certifications**

HERS Index (RESNET)	Date:	Score:	
ENERGY STAR for Homes (U.S. EPA)	Date:	Achieved (Y/N): Yes No	Version:
LEED for Homes (USGBC)	Date:	Level:	Version:
Home Energy Score (U.S. DOE)	Date:	Score:	
Other: (National Green Building Standard, Passive House, Living Building Challenge, Etc.)	Date:	Achieved, Score, Etc.:	

## **Energy Efficient Features**

Insulation	Attic	Material/Install: R-Va			R-Value:	
	Walls	Material/Install:			R-Value:	
	Basement	Material/Install:			R-Value:	
	Crawl Space	Material/Install:			R-Value:	
	Slab (Edge/Under)	Material/Install:			R-Value:	
Envelope Tightness	Blower door test results:		Units	S: CFM25 CFM5	0 ACH50 Natural ACH	
Windows	ENERGY STAR	Tinted	Argon Filled		Triple Pane	
	Low E	Double Pane	ie Storm		Solar Shades	
Appliances (ENERGY STAR)	Dishwasher	Refrigerator	Washing Machine		Other:	
Water Heating	Conventional Tank	Energy Factor:		Size:		
	Tankless	Energy Factor:				
	Heat Pump	Energy Factor:		Size:		
	Solar Thermal	Solar Energy Factor:		Size:		
Heating and Cooling	Furnace	Efficiency Factor:				
	AC	SEER:				
	Heat Pump (Air Source)	HSPF:	COP:	EER:	SEER:	
	Heat Pump (Ground Source / Geothermal)	HSPF:	COP:	EER:	SEER:	
	Ductless (Mini-Split, PTAC	) HSPF:	COP:	EER:	SEER:	
	Programmable Thermosta	nostat Radiant Floor He		Dual Fuel Heat Pump	Integrated Space/Water	
Indoor Air Quality	EPA Indoor Air Plus	Air Cycler	Radon System		Low-VOC Paints	
	Energy/Heat Recovery Ventilator	Automatically Cor	Automatically Controlled Exhaust Fans			
Solar Photovoltaic (PV)	Array Size:	Age of Panels:	Age of Panels: Energy production(Wa		/atts):	

### Water Efficient Features

Indoor Water	Low Flow / WaterSen Showerheads	Low Flow / Wate	erSense Lavatory Faucets	Low Flow / WaterSense Toilets		
	Dual Flush Toilets	s On Demand Circulation Pump System		WaterSense New Home Specification		
Outdoor Water	Rainwater Catchment	Drought Tolerant / Native Landscaping	Permeable Hardscapes	Irrigation System	ENERGY STAR Pool Pump	
Notes						

## **Residential Green and Energy Efficient Glossary and Resources**

**ICC-700 National Green Building Standard (NGBS):** An ANSI-approved residential green building standard developed by the National Association of Home Builders (NAHB) and the International Code Council (ICC). It is applicable to single and multifamily projects, renovations and additions and residential land development. To comply, all buildings must incorporate sustainable lot development techniques and address energy, water & material resource efficiency and indoor environmental quality. Also, all owners must be educated about building operation and maintenance. Certification to the NGBS is provided by the Home Innovation Research Labs. http://www.nahb.org/page.aspx/generic/sectionID=2510 or http://www.homeinnovation.com/

**LEED:** Leadership in Energy and Environmental Design is redefining the way we think about the places where we live, work and learn. As an internationally recognized mark of excellence, LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988

**Energy Star®:** ENERGY STAR certified new homes must meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency. These homes are independently verified to be at least 15% more energy efficient than homes built to the 2009 International Energy Conservation Code (IECC), and feature additional measures that deliver a total energy efficiency improvement of up to 30 percent compared to typical new homes and even more compared to most resale homes. http://www.energystar.gov/index.cfm?c=new\_homes.hm\_index

**Home Energy Score (HES):** The Home Energy Score is similar to a vehicle's mile-per-gallon rating. The Home Energy Score allows homeowners to compare the energy performance of their homes to other homes in the area. It also provides homeowners with suggestions for improving their homes' efficiency. The process starts with a home energy assessor collecting energy information during a brief home walk-through. The assessor then scores the home on a scale of 1 to 10, with a score of 10 indicating that the home has excellent energy performance. A score of 1 indicates that the home needs extensive energy improvements. In addition to providing the score, the home energy assessor provides the homeowner with a list of recommended energy improvements and the associated cost savings estimates. http://www1.eere.energy.gov/buildings/residential/hes\_index.html

**HERS Index:** The Home Energy Rating System (HERS) Index is the Industry Standard by which a home's energy efficiency is measured. It's also the nationally recognized system for inspecting and calculating a home's energy performance. http://www.resnet.us/hers-index This Index is assessed by a qualified third party certifier based on the physical characteristics of the house. The energy estimates from this assessment may vary depending on the lifestyle of the occupants, increasing utility expenses, and changes in the maintenance or characteristics of the energy features.

**Building Envelope:** The building envelope is everything that separates the building's interior from the exterior. This includes the foundation, exterior walls, roof, doors and windows.

**Geothermal:** A geothermal heat pump uses the constant below ground temperature of soil or water to heat and cool your home. http://energy.gov/energysaver/articles/geothermal-heat-pumps

**Low-E:** Low emittance indicates a coating is added to the glass surface. The coating allows visible light to pass through the glass while stopping the radiant heat energy from the sun and heat sources in the building from passing through the glass. Approximately 40% of the sun's harmful ultra violet rays are blocked and insulation enhanced.

Whole Building Ventilation System: A whole building ventilation system assists in a controlled movement of air in tight envelope construction and may include air-purifying systems. Whole building ventilation equipment is often a part of the forced air heating or cooling systems.

**Energy Recovery Ventilation System:** Often called Heat Recovery Ventilators (HRV). These systems replenish the indoor air without wasting all the energy already used to heat the indoor air. In some climates, these systems are also used to handle water vapor in the incoming air.

**Passive Solar:** Passive solar is technology for using sunlight to light and heat buildings with no circulating fluid or energy conversion system. <a href="http://rredc.nrel.gov/solar/glossary">http://rredc.nrel.gov/solar/glossary</a> A complete passive solar building design has the following five elements: (1) aperture (collector) (2) absorber (3) thermal mass (4) distribution (5) control. <a href="http://www.nrel.gov/docs/fy01osti/27954.pdf">http://www.nrel.gov/docs/fy01osti/27954.pdf</a>

**SEER:** Seasonal energy efficiency ratio - The higher the SEER rating, the more energy efficient the equipment is. A higher SEER can result in lower energy costs.

http://www.energystar.gov/index.cfm?c=tax\_credits.tx\_definitions&dts=ssps,mcs,seer,eer

Water Sense: EPA released its Final Version 1.1 WaterSense New Home Specification. This specification will be effective January 1, 2013 and establishes the criteria for new homes labeled under the WaterSense program and is applicable to newly constructed single-family and multi-family homes. http://www.epa.gov/watersense/new\_homes/homes\_final.html

Water Heaters: Solar, Heat Pump, Tankless On Demand or Tankless Coil water heaters are described at the following location: http://energy.gov/energysaver/articles/solar-water-heaters.

**Green Certifying Organizations:** A partial list of organizations can be found at: http://www.usgbc.org/ShowFile.aspx?DocumentID=2001

**HERS Insulation Installed Rating:** Rating 1 is the best with 3 the lowest rating. http://www.resnet.us/standards/Enhancements\_to\_National\_Rating\_Standards.pdf

**SAVE Act:** The SAVE Act is proposed legislation to improve the accuracy of mortgage underwriting used by federal mortgage agencies by ensuring that energy costs are included in the underwriting process. http://www.imt.org/finance-and-leasing/save-act