A collaborative effort from MLS decision makers, the National Association of REALTORS®, Association Executives, REALTORS®, and other national organizations and associations
Greetings,

The following document is a valuable resource for those interested in implementing a green initiative for their Multiple Listing Service (MLS). This tool kit provides a snapshot of the green home industry, outlines why adopting a green initiative for the MLS is important, and offers strategies for effective changes. The recommendations in the tool kit are a 'best practices' and step by step guide to a successful implementation.

Additionally, the tool kit contains access to supporting documents and resources that will assist the process, such as links to case studies of MLS systems which have completed a green initiative, example data entry forms containing searchable green features, a glossary of green terms, and much more.

The National Association of REALTORS® through its Green REsource Council and NeighborWorks® America organized subject matter experts from across the country to create the tool kit. An emphasis was placed on developing a team of individuals that either have had direct experience with MLS system management and / or with implementing a green MLS initiative.

The following associations and organizations collaborated in the creation of the tool kit:

- Multi-Regional Multiple Listing Service
- Council of Multiple Listing Services
- National Association of REALTORS®
- US Green Building Council
- EcoBroker® International
- Appraisal Institute
- Metropolitan Regional Information System
- Traverse Area Association of REALTORS®
- NeighborWorks® America
- National Association of Home Builders
- Enterprise Community Partners, Inc.

Please see the “Acknowledgements” page for the individuals involved.

If you're in the process of greening your MLS, I encourage you to rely on the shared experiences and recommendations found in the tool kit. Ultimately, you must determine what's best for your area and for your members.

If you've been thinking about greening your MLS and haven't taken action, the tool kit can help you take that first step. Or if green homes haven't arrived in your market (see "Snapshot of the Green Home Industry") and you sense that a green MLS isn't appropriate for your membership right now, the tool kit can offer guidance when you do decide that your market is ready for such change.
As you work through the process, please keep in mind that green is not just a trend. To build green means to build better. Many features of today’s green home will be tomorrow’s standards.

When adopting a green MLS initiative, numerous questions and concerns likely will emerge. It’s why the tool kit developers have agreed to serve as resources and to answer your questions. It’s also an opportunity for you to learn from others who have gone through the experience and to save yourself time and money.

The authors of the sections are indicated, and contact information for them is listed in the “Contact Information” section.

If you’re considering a green MLS initiative, I recommend that you read the tool kit in the following order and review the additional supporting information:

- Snapshot of the Green Home Industry
- Why an MLS with Green Fields
- Recommendations for a Successful Green Program
- Green Home Certifications
- Recommendations for Data Entry Forms

If you have already started your green MLS initiative, I suggest at a minimum, you review both recommendation sections.

I wish you the very best in your efforts to Green your MLS.

Sincerely,

__________________________
Al Medina – GREEN, LEED AP
Director, NAR’s Green Designation
National Association of REALTORS®
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Snapshot of the Green Home Industry

Why Green Homes?

Why have green homes proliferated in some areas and not in others?
Are certified green home programs growing and in demand?
How do certified green homes compare in terms of market performance?
What is the government’s impact on green housing stock?

According to the U.S. Green Building Council's (USGBC) 2008 LEED for Homes Reference Guide:

“The environmental impact of the residential sector is significant. There are more than 120 million homes in the United States, and about 2 million new homes are constructed each year. According to the U.S. Department of Energy, the residential sector accounts for 22% of the total energy consumed in the nation and 74% of the water. Levels of indoor air pollutants can often be four to five times higher than outdoor levels. The residential sector also contributes 21% of U.S. carbon dioxide emissions. The considerable impact on the environment created by homes necessitates a shift toward more sustainable residences.

Green homebuilding addresses these issues by promoting the design and construction of homes that have much higher performance levels than homes built to the minimum building codes. Generally, green homes are healthier, more comfortable, more durable, and more energy efficient and have much smaller environmental footprint than conventional homes.

Breakthroughs in building science, technology, and operations are now available to designers, builders, operators and owners who want to build green and maximize both economic and environmental performance. Green homes rely upon established, proven design features and
technologies that do not have a significantly large cost.

In fact, many green measures, particularly those that involve energy and water efficiency, will reduce long-term costs. Often these reductions in operating costs will more than offset the additional up-front costs of a green home. The homebuilding industry is beginning to recognize the value of healthy homes and environmentally responsible projects.”

Although certifications are necessary to officially designate a home green, everyone can have greener homes and lives. A home’s green features are what make it more efficient and environmentally friendly or greener. A resource efficient green home is one that—compared with a standard home—uses less energy, water, and natural resources; creates less waste; and is healthier for its inhabitants. Homes can be built green or existing properties can undergo green renovations.

Why have green homes proliferated in some areas and not in others?

The number of green homes in a given area depends on where local government, home builders, and consumers are in their green education and adoption. If green organizations, such as the USGBC and Green Drinks, are emerging in your area it is likely that green home awareness and education will increase with all parties influencing the home industry.

With increasing amounts of state and local governments encouraging or even mandating green design and construction, it is anticipated that homes with green certifications and green features will increase dramatically. This trend is supported by numerous homeowner and builder incentives from the federal level. Even if you do not have an abundance of green homes in your community now, you probably will soon when green building awareness increases and more builders develop green homes. In the coming years, more state and local governments will be taking additional action. Please see “What is the government’s impact on sustainable housing stock?” below.
Are certified green home programs growing and in demand?

Several national green home certification programs are gaining momentum. Of the total new residential permits issued across the country, the percentage of homes qualifying for ENERGY STAR® and other green home certification programs are steadily increasing.

- According to the U.S. Environmental Protection Agency (EPA), in 2008 nearly 17 percent of all home permits issued qualified under the ENERGY STAR® program (this is up from 12 percent in 2007). Though final statistics are not yet available, the EPA estimates that figure will be approximately 20 percent for 2009.

- According to the EPA nearly 1,000,000 homes have qualified under the ENERGY STAR® program

- Started in 2007, USGBC's LEED® for Homes currently has over 4,000 certified units and over 19,200 registered units

- Started in early 2009, NAHB's Green Building Program currently has over 800 green homes certified by the NAHB Research Center, and over 600 homes have pre-drywall inspections scheduled

- Local and regional green building programs, such as Built Green, EarthCraft House, Earth Advantage, and numerous municipal programs have significantly contributed to the supply of certified green homes in the marketplace.

It's clear that green programs are emerging in all regions, not just areas like the Pacific Northwest, California, Colorado and Austin, Texas, which are considered early adopters of green. Whether it’s in the form of new building codes, local green building programs or green MLSs, there is evidence across the country--in the Northeast region and cities such as Chicago, Atlanta, Dallas, Houston, and Phoenix--that the green movement is gaining momentum.

When the construction industry and the housing markets improve, anticipate a rapid increase in the number of homes with national, regional or local green certifications.
How do certified green homes compare in terms of market performance?

In areas with a history of certified green home transactions and a statistically significant number of them, there is substantial evidence indicating that certified green homes sell for higher prices and more quickly than their competition.

In the May 2009 Certified Home Performance study, conducted by the Earth Advantage Institute and with the assistance of brokers, appraisers, and university professors, there is a sale price premium and marketing time advantage for homes that have a third-party green certification. The study’s abstract says:

“The author documents that certified homes in the Seattle metro area sold at a price premium of 9.6% when compared to noncertified counterparts, based on a sample of 68 certified homes. In the Portland metro area, certified homes sold at a price premium ranging between 3% and 5%. In addition, the certified homes stayed on the market for 18 days less than noncertified homes. These results are based on a sample of 92 certified homes and comparable properties approved by a project appraiser.”

Similar statistics comparing certified green homes to non-certified homes have emerged in Atlanta, Georgia (see “Results and Review”). As the green home movement gathers momentum and more cities see an increase in certified green homes and homes with green features, future studies from communities across the country likely will reveal a preference for certified green homes. Eventually most cities and municipalities will make the green home of today standard practice as building codes and regulations are modified.

What is the government's impact on green housing stock?

The government's influence on green homes is significant. There are numerous green incentives and tax credits for consumers and home builders from the federal government and from several states. The latest stimulus package, for example, includes weatherization money and additional funding for existing green programs. At the local level, government commitment to green policies, incentives, and credits varies greatly from area to area.
According to McGraw Hill Construction's *Green Outlook 2009*, “In the last three years, the proliferation of green building policies, standards, legislation, and programs at the state and location level has been astounding.” It also says:

- At the state level, there were policies in only 13 states in 2005, but by October of 2008, this number had nearly tripled to where 31 states had policies on the books.

- Local governments have increased at similar rates – nearly tripling from 57 localities in 20 states to 156 localities in 35 states.

- This shift is an indicator that the government and public are more invested in making green building part of their long-term plans…. As a result tracking future trends in government regulations will be essential in order to understand the market fully.

Most of these policies have been adopted for public buildings, with some cities even requiring a third-party green certification. Now such policies are being applied to residential properties in some cities. That means that residential builders going through a permitting process must include sustainable elements in their design or even comply with a green home certification before gaining approval.

On January 12, 2010, the California Building Standards Commission unanimously adopted the first-in-the-nation mandatory Green Building Standards Code (CALGREEN), requiring that all new buildings in the state be more energy efficient and environmentally responsible. The new code will take effect January 1, 2011 and includes all new residential structures.

Whether you embrace green principles or not, the green home industry is on the verge of major growth.

Will your MLS system be prepared?

*Author: Al Medina*

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Why an MLS with Green Fields?

Growing Demand

Better Price and Faster Sale

Greater Investment, Better Environment

Encourage Proper Valuation

Growing Demand

The increasing costs and the environmental impact of creating energy are driving a social and economic demand for greater efficiency. Further, the importance of water conservation, air quality, and sustainable resources is expected to grow in coming years, and properties with efficient and healthy attributes are expected to become increasingly desirable.

Better Price and Faster Sale

The selling price of a home and the time it takes to sell a home are important to both listing agents and sellers. The attributes of a property justify the asking price and homes with valued features often attract the most buyers. Such properties tend to sell for a greater price and in less time.

The MLS can provide listing agents and sellers a powerful marketing tool by incorporating clear and searchable fields representing environmentally-friendly aspects of a house and/or any green certifications that have been awarded to the property. Creating searchable pick-lists rather than relying on the property description makes it easier for buyer’s agents to quickly find homes with green attributes that their clients are seeking. The consistency of such pick-lists of green attributes also makes it easier for the appraiser to understand the value “green” brings to the property.

See the “Snapshot of the Green Home Industry” section for supporting information and statistics.
Greater Investment, Better Environment

A green MLS benefits everyone, from the home owner investing in better attic insulation to large builders employing new energy efficient construction techniques. Being able to quantify the return on green investments (ROGI) and having a stronger method to market green properties also can motivate more people to become energy and resource efficient. Thus, a green MLS can help contribute to a better environment and help consumers save money in the long run.

Author: Rob Larson

Encourage Proper Valuation

Consumers and agents frequently ask about how much green improvements increase property values. Unfortunately, there is no way to find out because such features have not been added as searchable fields in most MLSs today. However, studies from the Pacific Northwest and data from the Atlanta MLS show that certified green homes have a clear market advantage over conventional homes.

It is imperative that brokers, sales people, homebuilders and appraisers support a unified approach where green information on properties is recognized so that the hard data necessary to determine a home’s value are more readily available.

Among valuers, the appraiser is expected to perform valuation services competently and in a manner that is independent, impartial and objective. Appraisers today must have professional appraisal designations, and states impose intensive continuing education credentialing for such professionals to be licensed. Because appraisers are subject to a “competency rule,” certain appraisal organizations have developed and provide accredited green valuation courses for appraisers.
Appraisers can utilize three approaches to value a property with resource and energy efficient features. They can opt for the sales comparison approach, the cost approach, and the income capitalization approach. In residential appraising, the cost approach can assist in cost-benefit decisions and the income approach is beneficial to affordability and life cycle analysis. Of these options, the sales comparison approach is used most often by appraisers.

An MLS that gathers information with more accuracy becomes more valuable to the appraisers. As the green home comparable data improves, the appraiser can begin to support the value placed on other green home features such as water efficiency, materials and resources, and indoor environmental quality. As a result, they will be able to more accurately assess and place proper value on green homes.

Author: Don Briggs, MAI, SRA - and the Appraisal Institute
Recommendations for a Successful Green Program

Goals and Objectives
Assembling the Team
Research and Planning
Education and Communication
Promotion
Deployment and Testing
Maintenance
Results and Review

**Goals and Objectives**

As you establish goals and objectives for greening the MLS, it is important to consider local market trends. After all, incorporating market-specific and region-specific green certifications and features makes it easier for brokers, sales people, appraisers and consumers to recognize and understand them.

Some questions to consider before starting the green process include:

- How does a greening effort fit with the organization’s strategic and budget plan? Make sure the Board of Directors understands the effect of a green MLS initiative on planning and budgeting.

- What does it mean for the organization to be green? The term “green” has become so common and has different meanings to different people. It is helpful to have a clear definition so that stakeholders understand your meaning. Also, a clear understanding will make stakeholders more open to opting in on a greening initiative.

- What does the concept of “green” mean to you? Piloting a new green program typically requires a personal commitment from leadership, and your enthusiasm can become contagious and spread virally through the organization.
Assembling the Team

Finding team members for a greening effort should not be difficult. First seek out those who already have been involved in green real estate. A good way to start is by looking for NAR Green Designees or EcoBrokers® within your organization. Such people will likely have knowledge of, an interest in, and a passion for such an effort. They also understand how green initiatives pertain to the real estate industry.

Next, scour your community for professions and organizations that already have green criteria or credentialing in place. Possibilities include building trades and industrial trades, service-sector businesses, and community-based and public service organizations.

Having stakeholders with different levels of expertise and knowledge tend to enrich the innovative spirit of the team, and the strategy can forge strong bonds between your organization and like-minded professionals.

The tool kit’s case studies indicate that the green champion in each situation brought together decision makers from the MLS, green home builders, green building consultants, architects, and real estate licensees. Such professionals tend to be knowledgeable about the market, the types of homes being built, and the features being incorporated into properties. In having a well-rounded team representative of the industry helps an MLS ensure that the needs of each segment are met.

Cooperating with your neighboring MLSs and paying attention to national standards and trends are an important part of any growth or change to the MLS’s data structure. So researching existing standards and looking at what neighboring MLSs include can help to ensure that your lookup options are robust and relevant, but not excessive.

They can include national certifications, such as LEED-H or the National Green Building Standard, local and regional certification programs, as well as individual features, such as efficient windows and HVAC systems.

Understand that greening your organization will require a shared philosophical approach about how you will do business, along with a commitment from the team to see the project through the long haul. Going green will change the way your organization does things. In addition,
creating the culture of green will be a great deal easier with a team made up of stakeholders with differing ideas, interests, and incentives than a team of like-minded individuals focused on a single outcome.

Author: Kim Pontius and Carson Matthews

Research and Planning

Green Building Certifications
Green Features
Changing Environment
Legal Issues

The key to any successful project lies in research and planning. A careful review of certifications, features, future changes, legal issues, education, adoption and upkeep of your new green elements should be done before jumping into action.

Take advantage of the information links from MLSs that have gone green and incorporated green fields. Also, review the various case studies that were utilized to help form the recommendations.

Green Building Certifications

There are several national green designation programs, such as LEED® for Homes, ENERGY STAR® and NAHB Green, as well as regional programs like Atlanta-based EarthCraft House and Seattle-based Built Green. Check with local green builders and architects to ensure that you are including all of the relevant designations.

In addition, many of these designations have different certification levels, such as Silver, Gold, Platinum and Emerald. It is important to understand that these commonly used colors are based on a numeric rating. For example, Gold may
equal a rating of 75 to 89, while Platinum equals a rating of 90 and above. Allowing the listing agent to enter the actual rating, while also providing a place for the color-based certification level or even automatically generating the certification level’s color will be beneficial to the laymen’s understanding of the rank received.

Another consideration is whether to include the **Home Energy Rating System (HERS)**, a widely-used green home building program in United States. It is the only rating system that can be used to accurately compare the energy efficiency of homes in different regions. For instance, using **HERS**, a building expert can compare a home in California to one in Georgia. This system also is commonly used for new construction and renovations and for Energy Efficient Mortgages (EEM) and Energy Improvement Mortgages (EIM).

*Please see the “Green Home Certifications” section for more details.*

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**Green Features**

It is important to understand the green features most widely used by local home builders as well as those selected by owners performing upgrades. Each region of the country is different, so be sure to include features that are used in your market and plan on expanding your lists as new features become popular.

In the **Recommendation for Data Entry Forms** section you will see mention of **specific green features** as well as **generic green attributes**. An example of a specific feature would be “TVA Insulation Package” and an example of a generic attribute would be “energy efficient insulation”. Use of the specific features will give the details needed by industry professionals to determine the property’s value and to speak knowledgeably with their clients. Use of specific features also requires more effort on part of the MLS in keeping lists up to date with the changing trends and technologies. Use of generic attributes may make it easier for the typical buyer to understand that the property has efficient aspects. Using generic attributes also requires less updating. For example, a new insulation package may emerge, replacing the aforementioned TVA Insulation Package and requiring the addition of the new feature, but the generic “energy efficient insulation” would need no updating.
Features can be a powerful tool and the MLS should give careful consideration as to the method used whether it be specific features, generic attributes or both, along with the resources that will be required to maintain those features.

*Please see Recommendations for Data Entry Forms section.*

**Changing Environment**

Green technology and building methods are constantly evolving, so before adding new fields, your MLS team should closely review the latest in appliances, insulation, windows, doors, roofing, landscaping, and so forth, to be sure you are incorporating features on your lists that best support home sellers' return on investment.

**Legal Issues**

Reviewing the legal concerns that can ensue after any change to the MLS data structure is an important step. In particular, if you are changing existing data to reflect a new “green” connotation, be cautious of erroneously labeling a feature “green” if listing agents and sellers had no intention of such categorization for previously listed properties. For instance, an agent may have described windows with two panes of glass in a listing without intending to claim that those windows were energy efficient.

The addition of *generic green attributes* or *specific green features* can also be challenged by buyers and others. To avoid an accusation of green -washing and misrepresentation, such as for dealing with septic systems, it is prudent for listing agents to have details and documentation of a property's green attributes or an agreement with the seller to support any green claims. For example, the MLS in Traverse City has a voluntary *seller disclosure document* and places the onus on sellers to properly divulge green features.
Please see “Risks” in the Recommendations for Data Entry Forms section.

Education and Communication

Educating members is critical to the success of a green initiative for your MLS. For other changes to the MLS data structure, you may have relied on internal training and communications processes exclusively. When greening your MLS there is assistance available for educating your members, and local and national green educators can be a great resource. Please visit GreenREsourceCouncil.org for more information on NAR’s Green Designation and education program.

The green industry is very excited to see the coming involvement from MLSs throughout the United States. Certification providers may help with promotional materials and member outreach ideas, and many often are willing to speak at local association events. Blending external resources with your normal methods for training and communications should prove very effective and ease some of the burden on the MLS.

To promote understanding and awareness among consumers and users and so that parties use the system properly, it is important to take the time to explain the benefits of the new field options to all users. That includes members, such as brokers and appraisers; and third-party users, such as vendors. In addition, those who get data feeds from your MLS, such as IDX (internet data exchange) sites, publications (on-line and print), and back office systems also need to understand the green changes.

Promotion

A launch event can be effective in bringing attention to your new green fields. In addition, Webinars (WebEx style conferences) are a cost-effective—and greener—way to communicate to large audiences because participants do not have to leave their homes or offices. Such events also create an opportunity for interaction, a way to explain green MLS benefits, and to take questions about field changes.
Education typically is an ongoing process and is important to the success of a green MLS. Consider providing newsletter updates, e-mail messages, or other types of communications to members as changes occur with technology and certifications. Also, place a green emphasis in your support and training materials so that existing and new members can easily stay current. While educating members on MLS changes, you can also encourage them to obtain NAR's Green Designation. It provides advanced training in green homes and sustainable business practices.

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Deployment and Testing

Any MLS change requires a fair amount of effort. It not only entails making actual MLS changes, but requires considering the changes that users (IDX web sites, for example) need to make their systems. Additional considerations are needed to update training materials and accommodate the end-users' learning curve.

Timing your green changes with other planned changes to your metadata can reduce the efforts required. And by organizing changes to occur less frequently, your external data users' costs of ramping up for development can be reduced. Such consideration of their bottom line can aid in gaining cooperation in promoting important changes.

Placement of new fields also has to be well thought out. With some features, you may be incorporating new lookup options to existing fields. In this case, bringing the new features to the top of the pick list for a period of time can gain members' attention.

When adding new fields, grouping the fields into a section titled "green" (or some other catchy name) also can increase their usage. And to drive attention to the new fields, making them "required" (with a "none" option) will force members to recognize the new field(s) during listing input.

When it is time to test the new data structure, involving parties that can help foster adoption and acceptance can ensure a smooth rollout. For instance, by including the same green professionals you consulted during the planning phase for the rollout, you can ensure that the finished product retains its relevance. Also, interested members invited for a preview can be helpful in promoting the new system among colleagues.
Maintenance

Depending on the implementation decisions you make, maintenance, at minimum, entails updating of some fields. A minimal effort is needed to add new certifications and restrict input of certifications that have become invalid. If you opted to include specific green features, you will need to review them periodically. As they age, they could lose their green designation. New features will also need to be added in order to keep your feature lists relevant. If you opted for the more generic attributes, less, if any change, will be required.

Author: Rob Larson

Results and Review

One of the most gratifying aspects of greening the MLS is seeing it at work. Areas where green MLS statistics have been kept show the positive trends that green home sales are making in their area. For instance, in Atlanta during 2009, certified green homes sold 3.6% closer to list price and were on the market 31 days less than conventional new construction (108 vs. 139 days).

Such findings are significant and valuable not only to brokers, but to builders, appraisers, lenders, and consumers too.

For additional data on green home sales, visit www.GreenREsourceCouncil.org/research.cfm. There, you'll find an array of market reports, such as Earth Advantage's "Certified Home Performance" and the "Atlanta - 2009 Green Sales" statistics, plus other research on the market value of high-performance green buildings.

Because the green movement is evolving quickly, it is important to evaluate your data to be sure it is up to date when you compile and report any results from greening your MLS. In 2009, for instance, the industry saw the addition of NAHB Green to the list of national green building certifications. Thus, reviews of your MLS twice per year can help to ensure that your data is current and in sync with the market.

Author: Kim Pontius and Carson Matthews
## Green Home Certifications

<table>
<thead>
<tr>
<th>Third Party Certification Name</th>
<th>Rating Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEED (Leadership in Energy and Environmental Design) and LEED for Homes (LEED-H)</td>
<td>Created by the US Green Building Council, it covers a broad spectrum of efficiencies each of 8 areas in LEED for Homes are given a score which sum up to the LEED Rating. At 45 points the property is Certified. At 60 points the certification is given the designation of &quot;Silver&quot;. At 75 points &quot;Gold&quot; and 90 points &quot;Platinum&quot; with total possible points of 136. LEED for Commercial uses the same principal with some differences in the areas rated and the scale of possible scores. <a href="http://www.usgbc.org/DisplayPage.aspx?CMSPageID=222">http://www.usgbc.org/DisplayPage.aspx?CMSPageID=222</a></td>
</tr>
<tr>
<td>ENERGY STAR</td>
<td>To earn the ENERGY STAR, a home must meet guidelines for energy efficiency set by the U.S. Environmental Protection Agency. These homes are at least 15% more energy efficient than homes built to the <a href="http://www.energystar.gov/index.cfm?c=new_homes.nh_features">2004 International Residential Code (IRC)</a>, and include additional energy-saving features that typically make them 20–30% more efficient than standard homes. <a href="http://www.energystar.gov/index.cfm?c=new_homes.nh_features">http://www.energystar.gov/index.cfm?c=new_homes.nh_features</a></td>
</tr>
<tr>
<td>HERS (Home Energy Rating System)</td>
<td>The HERS Index is a scoring system established by the Residential Energy Services Network (RESNET) in which a home built to the specifications of the HERS Reference Home (based on the 2006 International Energy Conservation Code) scores a HERS Index of 100, while a net zero energy home scores a HERS Index of 0. The lower a home's HERS Index, the more energy efficient it is in comparison to the HERS Reference Home. Each 1-point decrease in the HERS Index corresponds to a 1% reduction in energy consumption compared to the HERS Reference Home. Thus a home with a HERS Index of 85 is 15% more energy efficient than the HERS Reference Home and a home with a HERS Index of 80 is 20% more energy efficient. <a href="http://www.natresnet.org/">http://www.natresnet.org/</a></td>
</tr>
</tbody>
</table>
National Green Building Standard (NGBS)

Created by the National Association of Home Builders (NAHB), it is much like LEED-H, 7 categories are tested and given a numeric score. This score is summed for a total rating value and a performance point level of Bronze, Silver, Gold or Emerald is given. http://www.nahbgreen.org/Guidelines/ansistandard.aspx

NAHB Model Green Home Building Guidelines (GBG)

The National Association of Home Builders Green Home Building Guidelines is also a numeric system like NGBS and HERS. http://www.nahbgreen.org/Guidelines/nahbguidelines.aspx

Enterprise Green Communities

Enterprise Green Communities provides resources and expertise to enable developers to build and rehabilitate homes that are healthier, more energy efficient and better for the environment -- without compromising affordability. Green Communities also assists state and local governments to ensure their housing and economic development policies are smart and sustainable. http://www.greencommunitiesonline.org/

Living Building Challenge

Is a program launched and operated by the Cascadia Region Green Building Council and goes beyond the LEED standard by the US Green Building Council. A building, neighborhood, renovation, or infrastructure (non-conditioned space) which meets this rigorous green building standard must achieve all corresponding prerequisites or imperatives (no point system). http://www.cascadiagbc.org

Local Programs

Many local communities have Green Building Guidelines that have been established by their local building professionals. In some communities they are the primary designation of Green Homes rather than utilizing one of the national programs above. Check with your local Contractors Association to see which local, regional, or state programs
are most appropriate for your MLS.

**Additional Noteworthy Programs:**

**EPA Water Sense**  [http://www.epa.gov/watersense/](http://www.epa.gov/watersense/)

**EPA Indoor airPLUS**  [http://www.epa.gov/indoorairplus/](http://www.epa.gov/indoorairplus/)

**Other**

Energy Performance Score (EPS) developed by Energy Trust of Oregon assesses a home’s energy use and costs.

Walkscore (walkscore.com) allows you to enter an address and then it creates a score from 1 to 100 (best) of your location based on the number of things you can walk to (transit, grocery stores, parks, libraries, restaurants etc. 13 in all).

GAPScore (gapscore.com) is tool to assist in assessing a home’s green potential.

HomeStar is another program being developed by the Department of Energy, Labor, and Education.

*Please note this list is not all inclusive and individual rating programs should be checked periodically as their criteria and requirements change over time.*

**Author:**  Al Medina

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Greener Fields in the MLS: A representation of Property Efficiencies through Certifications and Features.

Background

Increasing energy costs and the impact on the environment of creating energy are driving a social and economic demand for ever improving efficiencies. Further, the importance of water conservation, air quality and sustainable resources also are expected to grow. As this demand has grown so has the economic relevance in the price and time it takes to sell property.

A good representation of energy and resource efficient property attributes in the MLS can assist in increasing properties' values and, as a result, stimulate investment in green buildings and green features among builders and home owners. Because there is now evidence that green buildings and appliances generate positive returns, green features are likely to contribute to greater returns on investment in the years ahead. Thus, now is a good time for the real estate industry to promote a greening of the MLS.
Risks

There are various risks to home buyers and sellers, to agents and brokers and to the credibility of green in the MLS. Both a lack of representation and false representation of properties’ green attributes can result in sellers under pricing or buyers overpaying for a house. Agents and brokers also are legal risk when any aspects of properties are misrepresented in MLS listings.

Plus, exaggerations of green features and certifications can result in a green-washing of MLS listings and cause a decline in the value and desirability of truly environmentally and financially beneficial building attributes and features. There are several different steps and policies that can be implemented to mitigate such risk. The MLS in Phoenix, for example, requires agents to upload certification documentation within four days of placing a listing. If they do not, the listing is deactivated. If your MLS elects to require some form of confirmation, you may decide to simply remove the green certification from a listing or impose a modest fine for failure to provide whatever documentation you decide is necessary.

Agents can educate consumers and make them aware of the value of green attributes of their property. As the economic relevance of green features continues to grow, consumers naturally will become more aware of them and have more resources at their disposal to determine their worth.

Educating agents and brokers also can mitigate some of the legal risk that a misrepresentation of “green” in listings can create.

Further, the design of the MLS fields and enumerations (a list of options in a field) can be done in a way that allows for extensive detailing of green features that attract buyers, but without an implied or explicit representation that features are green. When a property does have verifiably green features, the MLS should offer some searchable means to promote such attributes.

Keeping a separation of normal features that “may be green” and expressions of "verified green" features, too, can aid in risk mitigation. Plus, a focus on verifiability and a separation of detailed features from expressions of “green” all can contribute to
reducing risk.

Vigilance in these areas is important to maintain the integrity of the MLS and to ensure the trust of everyone who uses the system.

**Building Certification**

The fields and enumerations that represent a building's efficiency rating may include a list of nationally-recognized certifications, but it is helpful to keep them flexible so future or local certifications can be added.

Though it is fine for individual MLSs to take creative license for field labeling, it is important to maintain the specific meanings. Because certifications change over time, can come from more than one issuing body, and normally have a rating system, the following fields should be included:

- **Green Building Certification**—The name of the certification awarded to a new or pre-existing residential or commercial structure. (i.e. LEED® for Homes, HERS, ENERGY STAR®, National Green Building Standard)

- **Green Certifying Body**—The name of the body or group providing the certification named in the green building certification field. This is often the same name as the certification name, but some certifications can be issued from different bodies, such as the USGBC, RESNET, NAHB Research Center or ENERGY STAR®.

- **Green Year Certified**—The year the certification was awarded. This is important, since building codes and certification program change regularly. It is possible that a home considered energy efficient five years ago may not be energy efficient enough today to meet basic code requirements.

- **Green Certification Rating**—Many certifications have a rating system
that provides an indication of a structure's level of energy efficiency. This is commonly expressed in a numeric value, which often relates to a name, such as Gold or Silver. To accommodate such distinctions, some implementation considerations may be needed.

For instance, a simple text field would support the various numeric ratings as well as allow the listing agent to enter any of the varying colors. This would be the most flexible and require the least maintenance by the MLS. However, free text fields can lack consistency and may be a problem when searching or creating statistics.

The recommended method would make use of the fact that most certifications have a numeric rating which relate to a color. For example a rating of 10 – 20 might equal the gold level. By providing a decimal field during input the MLS would collect the exact rating. Using that rating, the MLS could calculate the certification level (color). Then both rating and level (color) could be displayed and searched. This method would also help to ensure that the level (color) shown is legitimate and not a case of green-washing. However, this method requires more setup work, and the MLS will need to maintain the rating and level (color) translation.

The following green certification fields are flexible enough to cover all certification types and rating systems.

| Building Certification: | (A Pick-list with the name or type of certification or rating system) |
| Certifying Body: | (A pick-list with the name of the body or institution providing the certification or rating) |
| Year Certified: | (A numeric field with the year the certification was received) |
| Certification Rating: | (A numeric field with the rating or ranking received) |

Features

Keeping a clear separation of features that “may be green” from a direct expression of
“being green” tends to offer flexibility of expression and gives a clear avenue to mitigate risk for agents and brokers.

It is not advisable, for instance, to automatically move existing features into a “green” field or other representation of being green. As an example, a listing agent may have identified dual pane windows as a feature of a house, never intending to claim that those windows were green or efficient. But if dual pane windows suddenly are placed in a green field because of an MLS change, it potentially changes the meaning of features in existing listings. Moreover, it could create a false statement of “green” or “efficient” that the listing agent or broker was not intending at the time of input. Thus, two separate categories of features should be developed.

**Generic Green Attributes**

The following lists are not all inclusive, but are examples of ways to display green or efficient attributes of properties. Because specific features, such as dual pane windows, will not always be considered green or efficient, providing the option of entering the more generic "energy efficient windows" allow sellers to promote efficient aspects in a simple way that will not age.

This approach also simplifies buyers' search for specific efficiencies. For example, instead of having to understand a number of different window types (and whether they are currently considered green), users merely need to know that they are interested in efficient windows. However, listing agents and sellers will need to provide explanation and backing of the green attributes they chose to display in the MLS.

The following is an example of six fields with their pick list options that could be considered. These lists are not meant to be exhaustive, but rather representative of the types of generic options you might include in your MLS:

<table>
<thead>
<tr>
<th>Energy Efficient:</th>
<th>Energy Generation:</th>
<th>Water Conservation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Construction</td>
<td>☐ Solar</td>
<td>☐ Landscaping</td>
</tr>
<tr>
<td>☐ Insulation</td>
<td>☐ Wind</td>
<td>☐ Flow Control</td>
</tr>
<tr>
<td>☐ Windows</td>
<td>☐ Geothermal</td>
<td>☐ Reclamation</td>
</tr>
<tr>
<td>☐ Doors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Roofing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sustainability:**

<table>
<thead>
<tr>
<th>Indoor Air Quality:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
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Specific Green Features

In the previous section were examples of generic attributes and how they were simple to understand and required minimal maintenance by the MLS. The following sections address the detailed lists that will allow sellers to identify specific green features. Though these lists require more maintenance and are less likely to be searched by the consumer, their value in conveying the details of a green home should not be underestimated.

Most MLS systems have several fields containing lists of features common to most homes in a region. By keeping these existing feature fields updated with current green methods and technologies, the MLS not only helps to promote energy efficiency, but also assists listing agents and sellers in taking advantage of the proven value of promoting the green attributes of a home for sale. Further, new technology and methods emerge each year, which is why an MLS’s feature lists should be reviewed and updated periodically to ensure the latest technology and methods are reflected.

The following lists are not meant to be exhaustive, but are meant to convey some of the types of green features that are in use today. Additionally, these examples show the green features in fields you may already have in your system today.

Lists follow on next page.
HVAC:
- HVAC >16 SEER
- Geothermal HVAC
- ENERGY STAR Air-Conditioning
- ENERGY STAR Heating
- Geothermal heat (Closed Loop)
- Energy Recover Ventilator
- High Efficiency Furnace
- Zoned Air-Conditioning
- Zoned Heating
- HVAC >13 SEER
- Radiant Floors – Air
- Radiant Floors – Electrical
- Radiant Floors – Hydronic
- Radiant Heated Floors
- Attic Fan
- Ceiling Fan(s)
- Active Solar Heating
- Solar Heat

Water Heater:
- ENERGY STAR Hot Water Heater
- High Efficiency Hot Water
- Tankless Water Heater
- Solar Assisted Hot Water
- Solar Domestic Hot Water
- Solar Hot Water Heat

Construction:
- Adv.Framing/Concrete Const.
- ICF -Insulating Concrete Forms
- Straw Bale
- Trombe Wall
- Sun Space
- Radiant Barrier
- Sealed Combustion
  - Fireplace/Woodstove
- Sealed Crawl Space
- Sealed Ducting
- Modular/Prefabrication
- Passive Solar
- Solar Rough-In

Insulation:
- ICF - Insulated Concrete Forms
- Cellulose Insulation – Post Consumer Recycled Content
- Insulation – Blown
- Insulation – Foam in Place
- Spray Foam Insulation
- NES Insulation Pkg.
- TVA Insulation Pkg.
- Blown Cellulose
- Fiber Cement
- SIP – Structured Insulated Panels
- R-Value Upgrades

Windows:
- Double Pane Windows
- Multi-Pane Windows
- Triple Pane Windows
- ENERGY STAR Windows
- Low Emittance Doors/Windows
- Insulated Glass Windows
- Storm Windows
- Sunscreen(s)

Doors:
- Storm Doors
- Insulated Doors
- ENERGY STAR Doors

Roofing:
- Green/Living Roof
- Reflective Roof Coating

Exposure/Shade:
- Southern Exposure

Appliances:
- Energy Efficient Appliances
- ENERGY STAR Appliance(s)

Thermostat/Controllers
- Elec. Thermostat Timer
- Programmable Thermostat
- Set Back Thermostat

It is safe to assume that if you already have pick list fields such as those above, that you will have existing pick list options. The following examples show how the above options could co-exist with your existing non-green options.

Specific Green Features: Intermingling Example 1
In the following example, specific green features are intermingled with the normal features found in any MLS. The benefit of this approach is that a home's features, like “radiant barrier” or “double pane windows,” can be expressed without the difficulties associated with directly calling those features “green” or “efficient”. However, the risk here is that user members may not understand which features are considered green. This is a key reason why agent education is so important to successfully implementing a green change.

**Heating:**
- Baseboard
- Central
- Coal
- Combination
- Electric
- Energy Recover Ventilator
- Floor Furnace
- Forced Air
- Geo Thermal
- Heat Pump
- Radiant floor heat

**Construction:**
- Block
- ICF - Insulated Concrete Forms
- Brick
- Frame
- Log
- Radiant Barrier
- Stucco / Wood
- Sealed Crawl Space
- Steel
- Stone
- Thermal Mass Construction
- Vertical Siding

**Windows:**
- Atrium Windows
- Bay Window
- Double Pane Windows
- Garden Window
- Insulated Windows
- Screens
- Tinted Windows
- Wood Frame Windows

**Cooling:**
- Central
- Attic Ventilator
- Electric
- Evaporative
- High Efficiency HVAC
- Natural Gas
- SEER Rated

**Water Heater:**
- Electric
- Gas
- Tankless Water Heater
- Propane
- Solar Water Heating Panels
- Wood

**Roofing:**
- Composition
- Concrete
- Green/Living Roof
- Rock/Stone
- Reflective Roof Coating
- Shake
- Shingle
- TPO Membranes
- Wood

**Specific Green Features: Intermingling Example 2**

In this second example, the use of color highlights green features. However, MLSs should be aware of the legal issues that can emerge with this approach. Given that as some features eventually will no longer be considered green, keeping up with what is
green and what is not and keeping such features up to date in the MLS will be necessary to mitigate legal risk. To see an example of intermingled fields with highlights, View the SoCal MLS Input Form.

### Heating:
- Baseboard
- Central
- Coal
- Combination
- Electric
- Energy Recover Ventilator
- Floor Furnace
- Forced Air
- Geo Thermal
- Radiant floor heat
- Heat Pump

### Construction:
- Block
- Brick
- Frame
- Log
- Radiant Barrier
- ICF – Insulated Concrete Form
- Stucco / Wood
- Sealed Crawl Space
- Steel
- Stone
- Thermal Mass Construction
- Vertical Siding

### Cooling:
- Central
- Attic Ventilator
- Electric
- Evaporative
- High Efficiency HVAC
- Natural Gas
- High SEER Rating

### Windows:
- Atrium Windows
- Bay Window
- Double Pane Windows
- Garden Window
- Insulated Windows
- Screens
- Tinted Windows
- Wood Frame Windows

### Water Heater:
- Electric
- Gas
- Tankless Water Heater
- Propane
- Solar Water Heating Panels
- Wood

### Roofing:
- Composition
- Concrete
- Green/Living Roof
- Rock/Stone
- Reflective Roof Coating
- Shake
- Shingle
- TPO Membranes
- Wood

The preceding examples of listing input forms are meant to aid in the understanding of building certifications, generic green attributes and specific green features and how they might appear in your MLS. Though you can use all three, be cautious when selecting a method of intermingling your existing regular features with new green features. Also be cautious of categorizing any existing features as green and ensure that you have an up-to-date and relevant list of the latest that green has to offer.

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**Other Fields**

An additional field to consider is the Walk Score. Walk Score rates cities on how easy it
is for residents to reach commonly used resources, like shopping, parks and entertainment by foot. Like the Green Certification Rating, this field should be numeric. For more information see www.walkscore.com.

It is expected that there may be the need for additional fields and we hope you will share your ideas and experiences with the Green REsource Council and the green community at large. When submitting your ideas, please include a robust definition of the field or pick list options you are suggesting. Also ensure that a place for your idea doesn’t already exist. For example, a certification or rating system that you don’t see in this tool kit can be added to the existing certification fields.

Searchability and Statistics

As you are creating your new green data structure, keep in mind how the fields will be used. The most common uses are display, search and statistics. With the display, there are no special concerns other than whether the information fits on the report. Other than limiting field length, simple text boxes that allow the agent to type the desired information is simple for the MLS to deploy and maintain. However, for search and statistics, a text box is far from ideal.

For information like features, certifications and certifying bodies, a pick list is important to ensure consistency. It prevents typing errors, which can result in poor search results. Maintaining the pick lists should be planned for to accommodate the normal churn of features and certifications associated with new features and certifications becoming popular and old certifications and features being retired.

With fields like certification rating or Walk Score, a numeric field is preferable. The approach helps to limit errors by only allowing numeric values and also supports numeric range searching. For example, someone wanting properties with a certification rating of 50 through 90 would not be able to perform such a search unless a numeric certification rating field was available.

Author: Rob Larson
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<tr>
<th>Organizers</th>
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<th>Case Studies</th>
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<tr>
<td>Tom Deyo</td>
<td>Bob Hart</td>
<td>Don Briggs</td>
<td>Atlanta: Carson Matthews</td>
</tr>
<tr>
<td>Al Medina</td>
<td>Al Medina</td>
<td>Rob Larson</td>
<td>Chicago: John Shaterian and Sarah Coulter</td>
</tr>
<tr>
<td>Elyse Umlauf-Garneau</td>
<td>Carson Matthews</td>
<td></td>
<td>Mid-Atlantic Region: Tim Campbell</td>
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</tr>
<tr>
<td></td>
<td>Al Medina</td>
<td></td>
<td>Portland: Teresa St. Martin</td>
</tr>
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<td></td>
<td>Kim Pontius</td>
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<td>Traverse City: Kim Pontius</td>
</tr>
</tbody>
</table>

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Julie Hawkins
Matt Libby
Sandy Marsico
Hugh Morris / Rodney Gansho
Kevin Morrow

Dave Porter
Steve Seawright
Shelley Specchio
John Stovall
Marilyn Wilson
### Contact Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>E-mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don Briggs</td>
<td>Briggs Associates, President</td>
<td><a href="mailto:dbriggs@briggsassoc.com">dbriggs@briggsassoc.com</a></td>
</tr>
<tr>
<td>Tim Campbell</td>
<td>MRIS, Matrix Product Manager</td>
<td><a href="mailto:Tim.Campbell@mris.net">Tim.Campbell@mris.net</a></td>
</tr>
<tr>
<td>Tom Deyo</td>
<td>NeighborWorks®, Deputy Director</td>
<td><a href="mailto:tdeyo@nw.org">tdeyo@nw.org</a></td>
</tr>
<tr>
<td>Rodney Gansho</td>
<td>NAR Board Policy</td>
<td><a href="mailto:rgansho@realtors.org">rgansho@realtors.org</a></td>
</tr>
<tr>
<td>Julie Hawkins</td>
<td>REALTOR®</td>
<td><a href="mailto:Jphawkins@mris.com">Jphawkins@mris.com</a></td>
</tr>
<tr>
<td>Rob Larson</td>
<td>MRMLS, Director of IT</td>
<td><a href="mailto:rob@imrmls.com">rob@imrmls.com</a></td>
</tr>
<tr>
<td>Matt Libby</td>
<td>USGBC</td>
<td><a href="mailto:mlibby@usgbc.org">mlibby@usgbc.org</a></td>
</tr>
<tr>
<td>Trisha Miller</td>
<td>Enterprise, Director</td>
<td><a href="mailto:tmiller@enterprisecommunity.org">tmiller@enterprisecommunity.org</a></td>
</tr>
<tr>
<td>Sandy Marsico</td>
<td>Sandstorm Design, Web Development</td>
<td><a href="mailto:sandy@sandstormdesign.com">sandy@sandstormdesign.com</a></td>
</tr>
<tr>
<td>Carson Matthews</td>
<td>REALTOR®, Keller Williams Realty</td>
<td><a href="mailto:carsonmatthews@bellsouth.net">carsonmatthews@bellsouth.net</a></td>
</tr>
<tr>
<td>Al Medina</td>
<td>NAR’s Green Designation, Director</td>
<td><a href="mailto:amedina@realtors.org">amedina@realtors.org</a></td>
</tr>
<tr>
<td>Kevin Morrow</td>
<td>NAHB, NGBS</td>
<td><a href="mailto:kmorrow@nahb.com">kmorrow@nahb.com</a></td>
</tr>
<tr>
<td>Kim Pontius</td>
<td>TAAR, EVP</td>
<td><a href="mailto:kim@taar.com">kim@taar.com</a></td>
</tr>
<tr>
<td>Dave Porter</td>
<td>Porter Works, Education consultant</td>
<td><a href="mailto:davep@porterworks.com">davep@porterworks.com</a></td>
</tr>
<tr>
<td>Teresa St. Martin</td>
<td>REALTOR®</td>
<td><a href="mailto:teresa@sparkofgreen.com">teresa@sparkofgreen.com</a></td>
</tr>
<tr>
<td>Steve Seawright</td>
<td>Seawright Homes, Builder</td>
<td><a href="mailto:steve.seawright@clarkus.com">steve.seawright@clarkus.com</a></td>
</tr>
<tr>
<td>John Shaterian</td>
<td>REALTOR®</td>
<td><a href="mailto:johns@atproperties.com">johns@atproperties.com</a></td>
</tr>
<tr>
<td>Shelley Specchio</td>
<td>CEO, NNRMLS</td>
<td><a href="mailto:Shelley@nnrmls.com">Shelley@nnrmls.com</a></td>
</tr>
<tr>
<td>John Stovall</td>
<td>Ecobroker®, Vice President</td>
<td><a href="mailto:jstovall@ecobroker.com">jstovall@ecobroker.com</a></td>
</tr>
<tr>
<td>Marilyn Wilson</td>
<td>CMLS Board Member</td>
<td><a href="mailto:marilyn@wavgroup.com">marilyn@wavgroup.com</a></td>
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