The Council of MLS (CMLS) Quick Start Guide: MLS Green Fields is based on best practices and success stories from CMLS members using certification requirements defined by the Real Estate Standards Organization (RESO). The intent of this supplement is to provide a best practice check list that makes the identification and implementation of “green fields” or home performance indicators easier, and to provide information related to RESO certification.

This guide was produced in collaboration with the CMLS Green Section Council and Real Estate Standards Organization. It was published by the Council of Multiple Listing Services.
Quick Start

Jump to the page that best defines your organization. You’ll find associated fields and “lookup value” lists grouped for easy identification in each section.

Just Getting Started (start with page 3).

• Update nine existing fields with lookup values.
• Implement the Green Search/Marketing Group.
• Update six additional fields with lookup values.

Adding Best Practices (start with page 7).

• Implement Green Verification Group across one program.
• Implement PV solar fields in Power Production Group.

Approaching Best In Class (start with page 9).

• Implement additional Green Verification Group fields.
• Implement Power Production Group.

Terminology Tips

Drop-downs. Lookup values. Pick-list options. Feature sets. Enumerations. Depending on where your MLS is located and the role you have within your MLS, you probably know at least one of these terms, but not all.

That’s perfectly fine. They all mean relatively the same thing. These are all the terms various MLSs use to refer to a pre-programmed list of options that a user can choose from when entering data into a controlled field.

We’ve introduced them here as “lookup values,” which is the label RESO uses in the Data Dictionary Wiki, and we will use that term throughout the rest of this guide.

RESO Certification Tips

RESO certification is considered the industry’s benchmark practice for MLSs. The highlighted fields are also considered standard as anticipated in RESO Data Dictionary 1.7, published in summer 2018.

Most of the fields in this Quick Start Guide are part of RESO’s silver certification. MLSs that choose to implement these fields were asked to meet certification standards by Jan. 1, 2018, or on the date of implementation. Exact specifications are available in the latest RESO Data Dictionary Wiki and all green field header lists are hyperlinked to the data dictionary for convenience.
Just Getting Started

Getting started is easier than you think. Start with the nine existing fields and lookup values. Most MLSs already have a foundation for adding these fields. They are the same fields used for common features like doors and appliances. In many cases, you’ll only have to change traditional lookup values to include environmentally friendly values, which are also known as home performance indicators.

Nine Existing Fields and Lookup Values

**Appliances**
- ENERGY STAR Qualified Appliances
- ENERGY STAR Qualified Dishwasher
- ENERGY STAR Qualified Dryer
- ENERGY STAR Qualified Freezer
- ENERGY STAR Qualified Refrigerator
- ENERGY STAR Qualified Washer
- ENERGY STAR Qualified Water Heater
- Instant Hot Water
- Solar Hot Water
- Tankless Water Heater
- Vented Exhaust Fan
- Water Purifier
- Water Purifier Owned
- Water Purifier Rented

**Construction Materials**
- Attic/Crawl Hatchway(s) Insulated
- Batts Insulation
- Blown-In Insulation
- Cement Siding
- Ducts Professionally Air Sealed
- Exterior Duct Work is Insulated
- Foam Insulation
- ICAT Recessed Lighting
- ICFs (Insulated Concrete Forms)
- Low VOC Insulation
- Radian Barrier
- Rammed Earth
- Recycled/Bio-Based Insulation
- Spray Foam Insulation
- Trombe Wall

**Cooling**
- Attic Fan
- Ceiling Fan(s)
- Ductless (Synonym: ductless mini-split)
- ENERGY STAR Qualified Equipment
- Geothermal (Synonym: ground-source heat pump or water-source heat pump)
- Heat Pump (Synonym: Air-source heat pump)
- Humidity Control
- Whole House Fan
- Zoned

**Current Financing**
- Leased Renewables
- Property-Assessed Clean Energy
- Power Purchase Agreement

**Door Features**
- ENERGY STAR Qualified Doors
- Storm Door(s)

**Electric**
- Energy Storage Device
- Net Meter
- Photovoltaics Seller Owned
- Photovoltaics Third-Party Owned
- Pre-Wired for Renewables
- Ready for Renewables
- Wind Turbine Seller Owned
- Wind Turbine Third-Party Owned

**Heating**
- Ductless (Synonym: ductless mini-split)
- ENERGY STAR Qualified Equipment
- ENERGY STAR or ACCA RSI Qualified Installation
- Geothermal (Synonym: ground-source heat pump or water-source heat pump)
- Heat Pump (Synonym: air-source heat pump)
- Humidity Control
- Solar Radiant Heat Flooring
- Solar Heat Baseboard(s)
- Zoned

**Other Equipment**
- Air Purifier
- Dehumidifier
- Irrigation Equipment

**Window Features**
- ENERGY STAR Qualified Windows
- Insulated Windows
- Low Emissivity Windows
- Plantation Shutters
- Screens
- Shutters
- Skylight(s)
- Solar Screens
- Storm Window(s)
- Triple Pane Windows
Heat pumps have become increasingly popular because they provide a highly efficient means of space heating and cooling. Since the equipment provides heating and cooling, offer heat pump as a lookup value in each field. There are two main types of heat pumps: air-source (with an electric plug) and ground-source (built deep into the ground).

<table>
<thead>
<tr>
<th>Marketing Claim</th>
<th>Mitigation Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>“geothermal”</td>
<td>• Ground-source heat pumps have become commonly known as geothermal.</td>
</tr>
<tr>
<td></td>
<td>• True geothermal is related to steam power from something like a geyser.</td>
</tr>
<tr>
<td>“ductless mini-splits”</td>
<td>• This is an example of an air-source heat pump.</td>
</tr>
<tr>
<td></td>
<td>• Lookup value for air-source heat pump and ductless mini-split is a best practice.</td>
</tr>
<tr>
<td>“solar heat pump”</td>
<td>• This is not exactly accurate as a value.</td>
</tr>
<tr>
<td></td>
<td>• See solar heat (below) for a better solution.</td>
</tr>
</tbody>
</table>

There is some confusion related to solar heat. True solar heat is relatively rare. Review three marketing claims that seem to create the most confusion and then consider the corresponding suggestions to mitigate them.

<table>
<thead>
<tr>
<th>Marketing Claim</th>
<th>Mitigation Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Passive solar design”</td>
<td>• Offer “Passive Solar” as a choice in Architectural Design field.</td>
</tr>
<tr>
<td></td>
<td>• List features like “Trombe Wall” in the Construction Materials field.</td>
</tr>
<tr>
<td></td>
<td>• Offer third-party certifications such as “PHIUS Passive Home” using Green Verification Group.</td>
</tr>
<tr>
<td>“Active solar” or “solar thermal heat”</td>
<td>• Offer “Solar Radiant Heat Flooring” in the Heating field.</td>
</tr>
<tr>
<td></td>
<td>• Offer “Solar Heat Baseboard(s)” in the Heating field.</td>
</tr>
<tr>
<td>“Solar heat pump” or “solar-assisted heat pump”</td>
<td>• A standard air-source heat pump may be attached to a dedicated PV solar system with a backup connection to the standard electric system.</td>
</tr>
<tr>
<td></td>
<td>• Note the system details by using the Power Production Group.</td>
</tr>
</tbody>
</table>

As with solar heat, true solar AC is rare. Review the marketing claims below and then consider the corresponding mitigation tips.

<table>
<thead>
<tr>
<th>Marketing Claim</th>
<th>Mitigation Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Solar AC” or “solar-assisted AC”</td>
<td>• A standard air-source heat pump may be attached to a dedicated PV solar system, with a backup connection to the standard electric system; indicate with air-source heat pump in Cooling field.</td>
</tr>
<tr>
<td></td>
<td>• As above for a standard electrical central air conditioning unit, powered with a dedicated PV solar system; indicate with AC in Cooling field.</td>
</tr>
<tr>
<td></td>
<td>• Note the PV system details using the Power Production Group.</td>
</tr>
</tbody>
</table>
New green technologies and features are being introduced almost every day. The Green Search/Marketing Group provides the perfect opportunity for MLSs to keep up. Rather than trying to capture and fit in every emerging home performance indicator, adding the group will allow sellers to market homes using major green categories but without requiring MLSs to continually redefine lookup values.

Introducing the group offers several additional benefits. These fields simplify the search function for buyers who are looking for a specific performance category, e.g., an agent working with a family that includes an asthmatic child is interested in extensive indoor air quality features. The group also benefits appraisers. Instead of asking them to understand all window types and whether they are currently considered “green,” the appraiser can search consistent categories built into the group and find homes within a similar range of efficiencies for comparison.

To keep up with RESO standards, add the Green Search/Marketing Group. Ask your IT team or technology provider to help you add them.

**Green Search/Marketing Group and Lookup Values**

**GreenEnergyEfficient**
- Appliances
- Construction
- Doors
- Exposure/Shade
- HVAC
- Incentives
- Insulation
- Lighting
- Roof
- Thermostat
- Water Heater
- Windows

**GreenEnergyGeneration**
- Solar
- Wind

**GreenIndoorAirQuality**
- Contaminant Control
- Integrated Pest Management
- Moisture Control
- Ventilation

**GreenLocation**

**GreenSustainability**
- Conserving Methods
- Onsite Recycling Center
- Recycled Materials
- Regionally Sourced Materials
- Renewable Materials
- Salvaged Materials

**GreenWaterConservation**
- Efficient Hot Water Distribution
- Gray Water System
- Green Infrastructure
- Low-Flow Fixtures
- Water Recycling
- Water-Smart Landscaping
Green Search/Marketing Field Quick Start

Tips | Quick Start
---|---
Selecting lookup values | Due to the nature of Green Search/Marketing Group, the related lookup values are stable over the long term and do not change much by climate, housing characteristics, or market practices.

*Best Practice: Implement RESO lookup values as is from the Data Dictionary Wiki.*

Liability considerations | Green Search/Marketing Group data is unverified and therefore requires important follow-up steps to confirm information provided. Listing agents and sellers will need to provide explanations and backing of the green search and marketing attributes they choose to display in the MLS.

Context | The RESO Data Dictionary Workgroup carefully designed the Green Search/Marketing Group so they could be used alongside the existing traditional fields with green lookup values but without confusing duplication.

*Best Practice: Implement RESO lookup values as is from the Data Dictionary Wiki.*

MLS policy/rules | *Best Practice: Evaluate need for updated MLS policy or rules before implementing Green Search/Marketing Group.*

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Like existing green lookup values, the next section highlights additional fields where lookup values may be enhanced by environmentally friendly values, which are also known as home performance indicators.

**Six Additional Fields and Lookup Values**

- **ArchitecturalStyle**
  - Passive Solar*

- **InteriorFeatures**
  - Ceiling Fan(s)
  - Smart Home
  - Smart Thermostat
  - Solar Tube(s)
  - WaterSense Labeled Fixture(s)

- **Parking Features**
  - Electric Vehicle Charging Station(s)

- **PoolFeatures**
  - ENERGY STAR Qualified Pool Pump
  - Solar Cover
  - Solar Heat

- **Roof**
  - ENERGY STAR Qualified Roofing Material*
  - Green Roof

- **SecurityFeatures**
  - Carbon Monoxide Detector(s)
  - Fire Alarm
  - Smoke Detector(s)

*Look up value is not currently defined by RESO in Data Dictionary.*
CMLS has defined several best practices. These include implementing fields vertically, aligning RESO-standard fields with forms and data display, and syndicating appropriate fields. Figure 1 provides one example of vertical implementation.

**Vertical Field Tips**

Vertical implementation means a group of fields is coded together to jointly convey multiple characteristics. For example, MLSs commonly code fields describing rooms vertically to convey details about type, size, flooring, and more together.

The next set of fields represents data that is provided to a homeowner or builder from a third-party verification program. Implementing even one program is a best practice.

**Green Verification Group and Lookup Values**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GreenBuildingVerification</td>
<td></td>
</tr>
<tr>
<td>GreenVerification[Type]Body</td>
<td></td>
</tr>
<tr>
<td>GreenVerification[Type]Metric</td>
<td></td>
</tr>
<tr>
<td>GreenVerification[Type]Rating</td>
<td></td>
</tr>
<tr>
<td>GreenVerification[Type]Source</td>
<td>Administrator, Assessor, Builder, Contractor or Installer, Other, Owner, Program Sponsor, Program Verifier, Public Records, See Remarks</td>
</tr>
<tr>
<td>GreenVerification[Type]Status</td>
<td>Complete, In Process</td>
</tr>
<tr>
<td>GreenVerification[Type]URL</td>
<td></td>
</tr>
<tr>
<td>GreenVerification[Type]Version</td>
<td></td>
</tr>
<tr>
<td>GreenVerification[Type]Year</td>
<td></td>
</tr>
</tbody>
</table>
In addition to implementing fields and lookup values, verified energy-related documentation can be important to home buyers. Documentation is considered verified when the associated program requires quality assurance and third-party verification.

Comparing home verifications to product verifications in the food industry continues to help clients understand how each verification plays a role in the marketplace. The following chart provides an overview of how to build three types of home energy information with vertical implementation of RESO fields.

### Implementation Quick Start

**See the [Home Energy Information Guide](#)** for more background on the third-party verification data products that agents, appraisers, and consumers are using today.

<table>
<thead>
<tr>
<th>What?</th>
<th>How?</th>
<th>Outside Industry example</th>
<th>Vertical Fields</th>
<th>Priority Programs to implement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Certifications: Recognition through Thresholds</td>
<td>Verification with a rating</td>
<td><img src="image" alt="Energy STAR" /> <img src="image" alt="USDA ORGANIC" /></td>
<td>Body, Type/Program, Year, <strong>Rating</strong>, Version, Status</td>
<td>Home Innovation Research Labs, NGBS Living Future Institute, Living Building Challenge PHIUS, Passive House USDOE, Zero Energy Ready Home USEPA, Water Sense USEPA, Indoor airPLUS LEED, USGBC</td>
</tr>
<tr>
<td>Energy Labels: Rating a Home’s Energy Features</td>
<td>Verification with a metric</td>
<td><img src="image" alt="Nutrition Facts" /></td>
<td>Body, Type/Program, Year, <strong>Metric</strong>, Version, Status</td>
<td>RESNET, HERS USDOE, Home Energy Score</td>
</tr>
<tr>
<td>Verified Energy Improvements</td>
<td>No rating/metric</td>
<td><img src="image" alt="Reduced Fat" /></td>
<td>Body, Type/Program, Year, Version, Status</td>
<td>USDOE, Home Performance with ENERGY STAR</td>
</tr>
</tbody>
</table>
The final set of fields addresses renewable power production systems, including those that generate electric power through photovoltaic (PV) solar systems. Implementing PV solar fields in Power Production Group is a best practice.

See the **CMLS Green Sheet: Solar Power Fields** for additional information. It includes a four-step process that helps define fields by type, valuation, ownership, and support data.

**Power Production Fields and Lookup Values**

<table>
<thead>
<tr>
<th>PowerProductionType</th>
<th>PowerProduction[Type]Size</th>
<th>PowerProduction[Type]YearInstall</th>
<th>GreenVerification[Type]Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photovoltaics</td>
<td>Administrator, Assessor, Builder, Contractor or Installer, Other, Owner, Program Sponsor, Program Verifier, Public Records, See Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Approaching Best In Class**

Approaching and achieving Best In Class demonstrates an MLS’s willingness to provide service and information that meets and exceeds customer expectations. Homeowners and buyers have increasingly expressed how home performance indicators are a critical component of the marketplace.

To achieve Best In Class, MLSs are encouraged to add the Green Verification Group and Power Production Group for all additional programs. This would include emerging technologies such as wind, which is listed in the Power Production Group.

**CMLS Green Section Council**

The CMLS Green Section Council is a group of MLS leaders and industry professionals dedicated to advancing best practices, sharing home-efficiency information, and making that information easily accessible to help MLSs better serve the buying and selling public.

For information about CMLS or the CMLS Green Section Council, visit [councilofmls.org](http://councilofmls.org).