



Home Innovation Research Labs

The National Green Building Standard

After Five Years: From the Perspective of an Adopting Entity

Bob Hill Director of Laboratory & Certification June 9-10, 2014



Market Place Acceptance and Recognition

Certificates Issued

	Guidelines	2008 NGBS	2012 NGBS
SF Homes	1,286	5,853	645
MF bldgs.	NA	870	8
MF units	NA	24,215	200
Land Development	NA	20	2
Renovations	NA	262	3
Functional Areas	NA	NA	2
Months	36	64	16



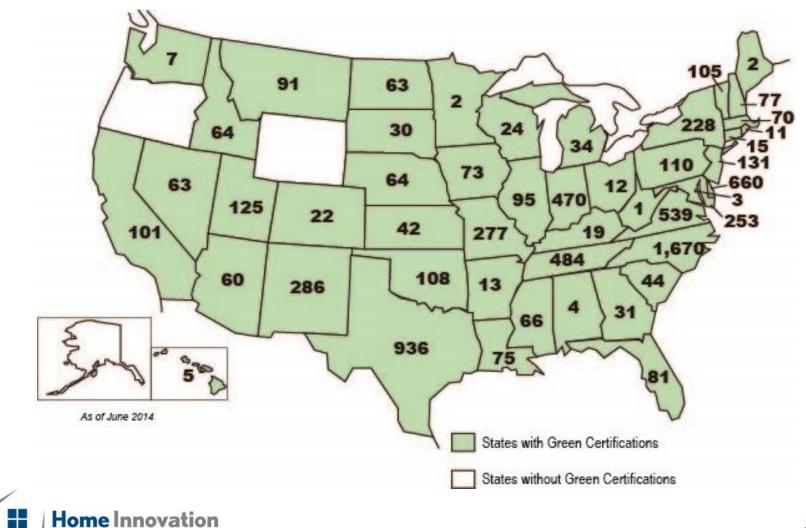
Market Place Acceptance and Recognition

Projects Registered but not yet certified

	2008 NGBS	2012 NGBS
SF Homes	754	786
MF bldgs.	651	209
MF units	42,678	7,548
Land Development	8	2
Renovations	72	29
Functional Areas	NA	1



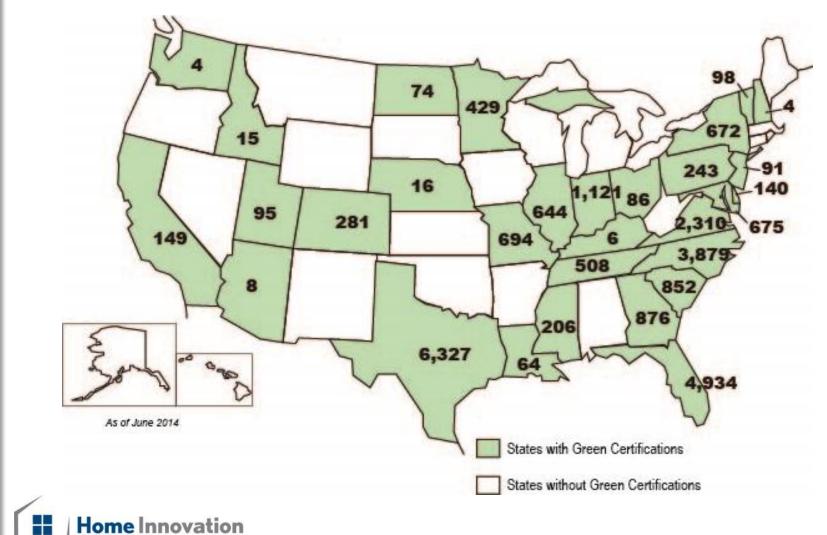
Single Family Certifications



EARCH LABSTM

FS

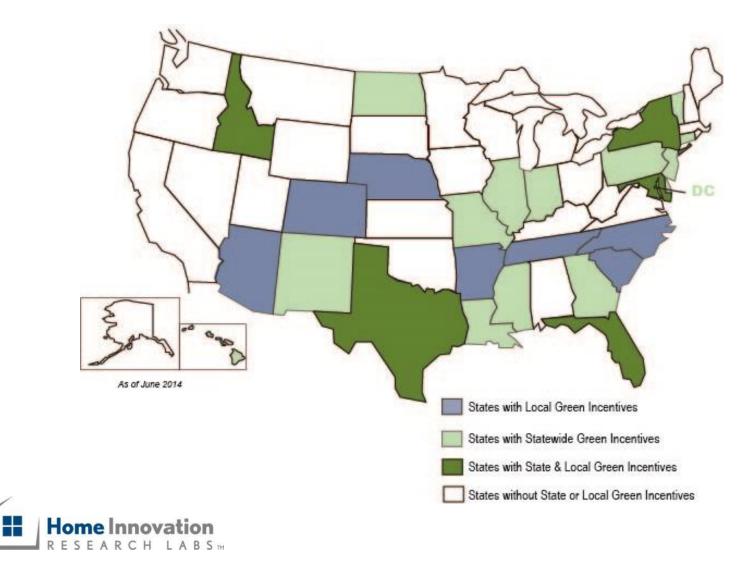
Multifamily Units



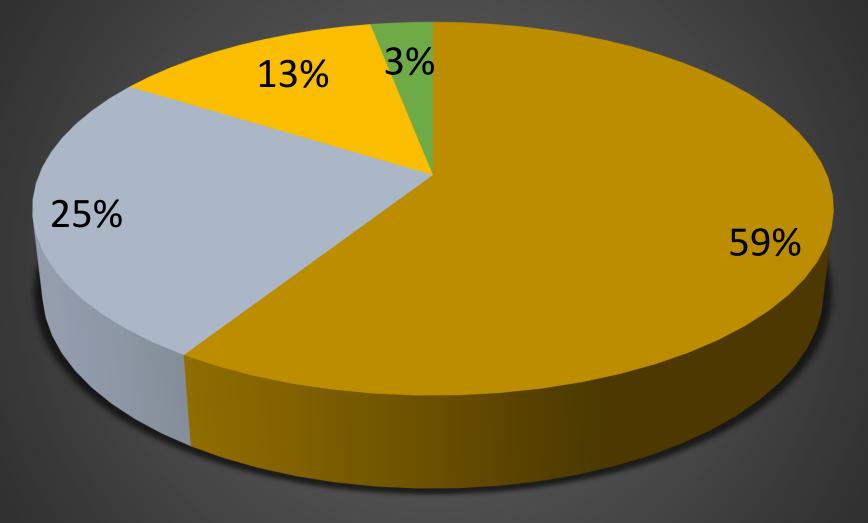
SEARCH LABSTM

E

Green Incentive Programs

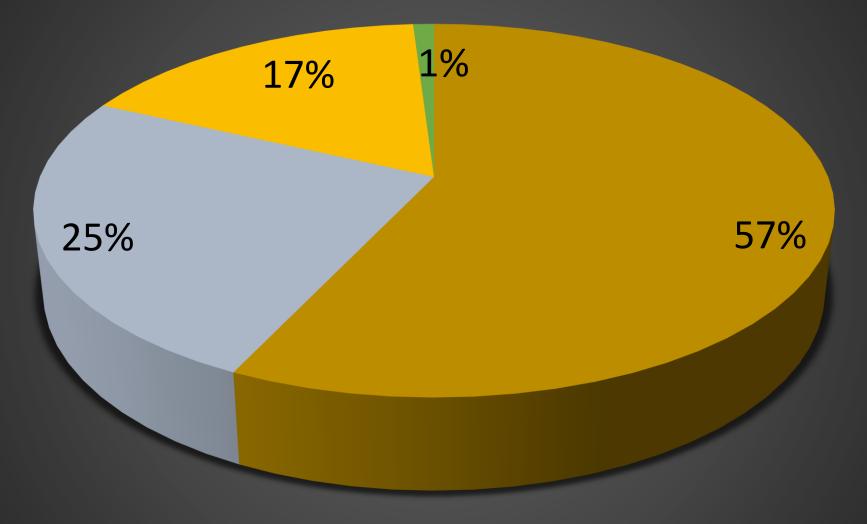


2008 NGBS CERTIFICATIONS



Bronze Silver Gold Emerald

2012 NGBS CERTIFICATIONS



Bronze Silver Gold Emerald

Questions From Users

- Home Innovation has responded to over 1000 questions
 - Chapters 4 & 5 practices
 - Multifamily especially energy
 - Other questions



- Clarify practices
- Equally accommodate a broad range of designs/situations
- Consistency



Consider a wide variety of situations

- Lot/land
 - Urban, suburban, rural
 - Climate
- Construction Type
 - Single-Family
 - Multifamily
 - Low-rise, mid-rise, high-rise, mixed-use
 - Townhouses
 - Foundation
 - Slab on grade
 - Basement
 - Crawl space



- Consider a wide variety of situations Ask yourself
 - Especially mandatory practices does the practice apply equally/appropriately to all situations?
 - Do the practices place an unequal difficulty to get points in specific situations?



Definitions

- Be as precise as possible
- 503.4(1) Natural water and drainage features are preserved.
 - What is a "natural water" feature or "drainage feature"?
 - Do you need both a natural water feature AND a drainage feature?



Be sure the practice is clear

- When is it acceptable for points in the following situations:
 - 901.1.2 Air handling equipment not in the garage....
 - If there is no attached garage????
 - 902.4 HVAC supply registers ... are covered....
 - If the home uses a duct less system?????
 - 505.1(1) Off-street parking areas are shared or driveways are shared ...
 - If the home also has a garage ?????



- Opportunities for Improvement
 - When a practice in one chapter refers to another chapter check for clarity
- 801.6.5 (2) No irrigation is installed and a landscape plane is developed in accordance with Section 503.5, as applicable.
 - What parts of 503.5 are needed?



- Avoid minimize & maximize
- Be clear on the use of AND or OR
 - 503.4(3) All or a percentage of impervious surfaces are <u>minimized and</u> permeable materials are used for driveways, parking areas, walkways, and patios.



• Quantify when possible

- 504.3(7) Soil is improved with organic amendments or mulch.
 - How much soil is improved?
 - How much amendment is added?



Questions?









THANK YOU

Bob Hill Director of Laboratory & Certification Home Innovation Research Labs 301.430.6244 rhill@HomeInnovation.com

