

Green Single Family and Multifamily Homes 2020



Green Single-Family and Multifamily Homes 2020

SmartMarket Brief

Comprehensive Summary

Download the brief at www.nahb.org/smr





Background



Survey History

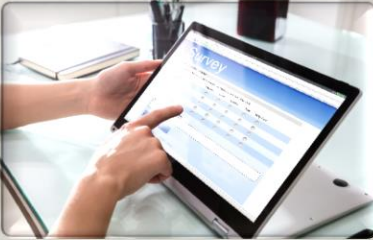


2020 Green SmartMarket Surveys



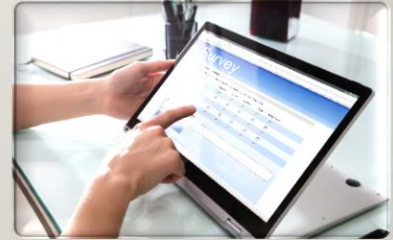
**Green Building
Market Activity**

**Marketing
Green Homes**



**Drivers and
Obstacles**

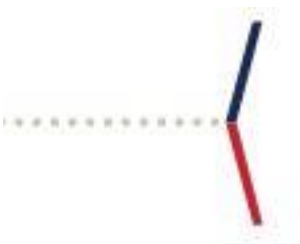
**Use of Green
Products and
Practices**



Survey Definition of Green Building

“A green home incorporates strategies in design and construction that increase energy, water and resource efficiency, indoor environmental quality, and minimize environmental impacts on the site; and/or is certified by a third-party to the National Green Building Standard, LEED for Homes, or any other green rating system.”

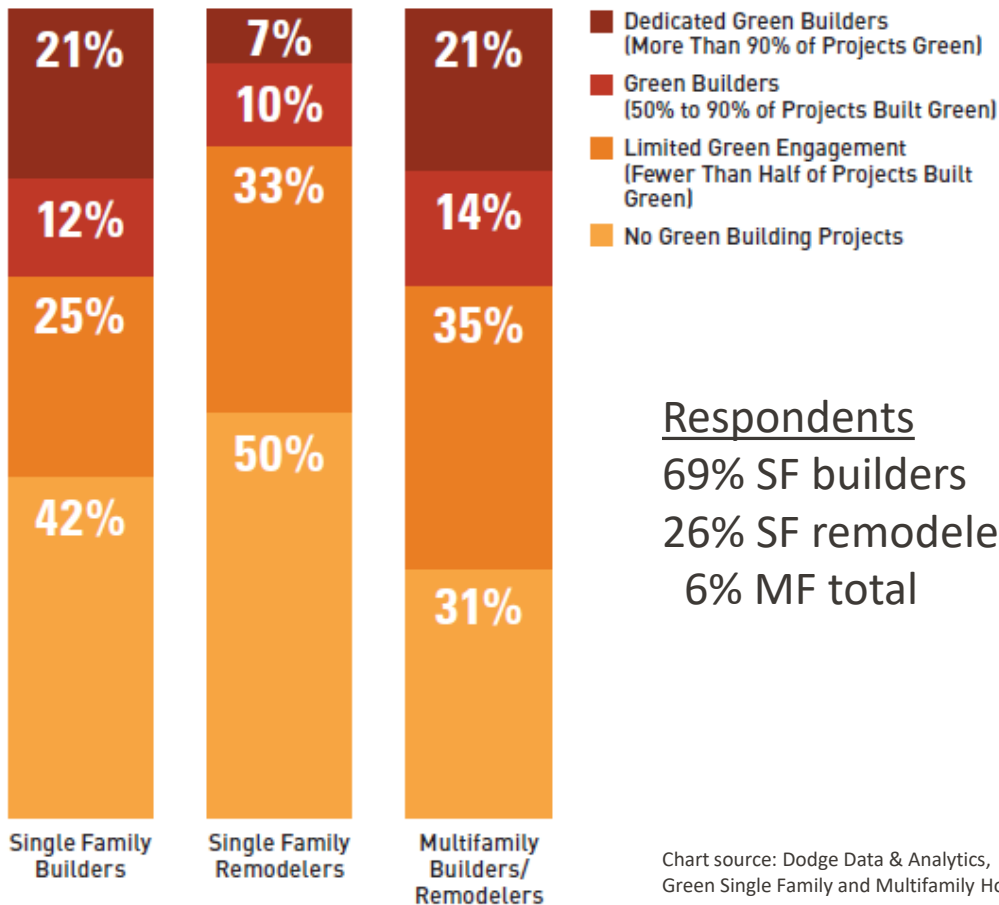




Level of Green Building Activity by Respondents

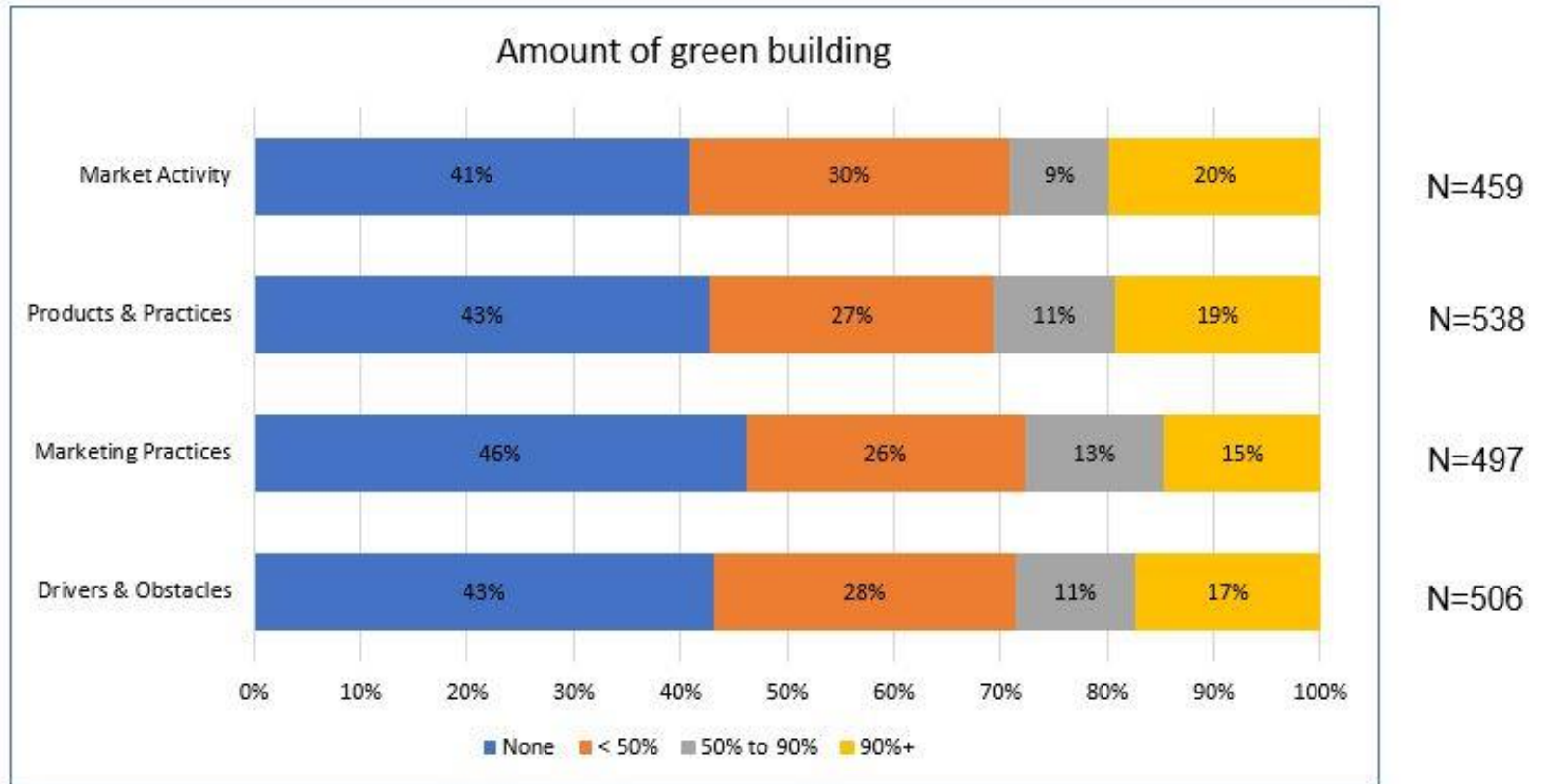


Percentage of Green Projects (Average Across Four Surveys)



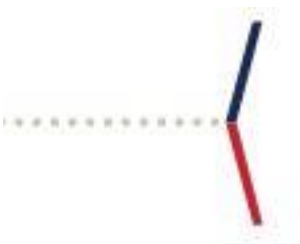
Respondents
69% SF builders
26% SF remodelers
6% MF total

Green Building Levels by Survey



Topic #1:
Green Building
Market Activity





Green Practices: All Single-Family Builders

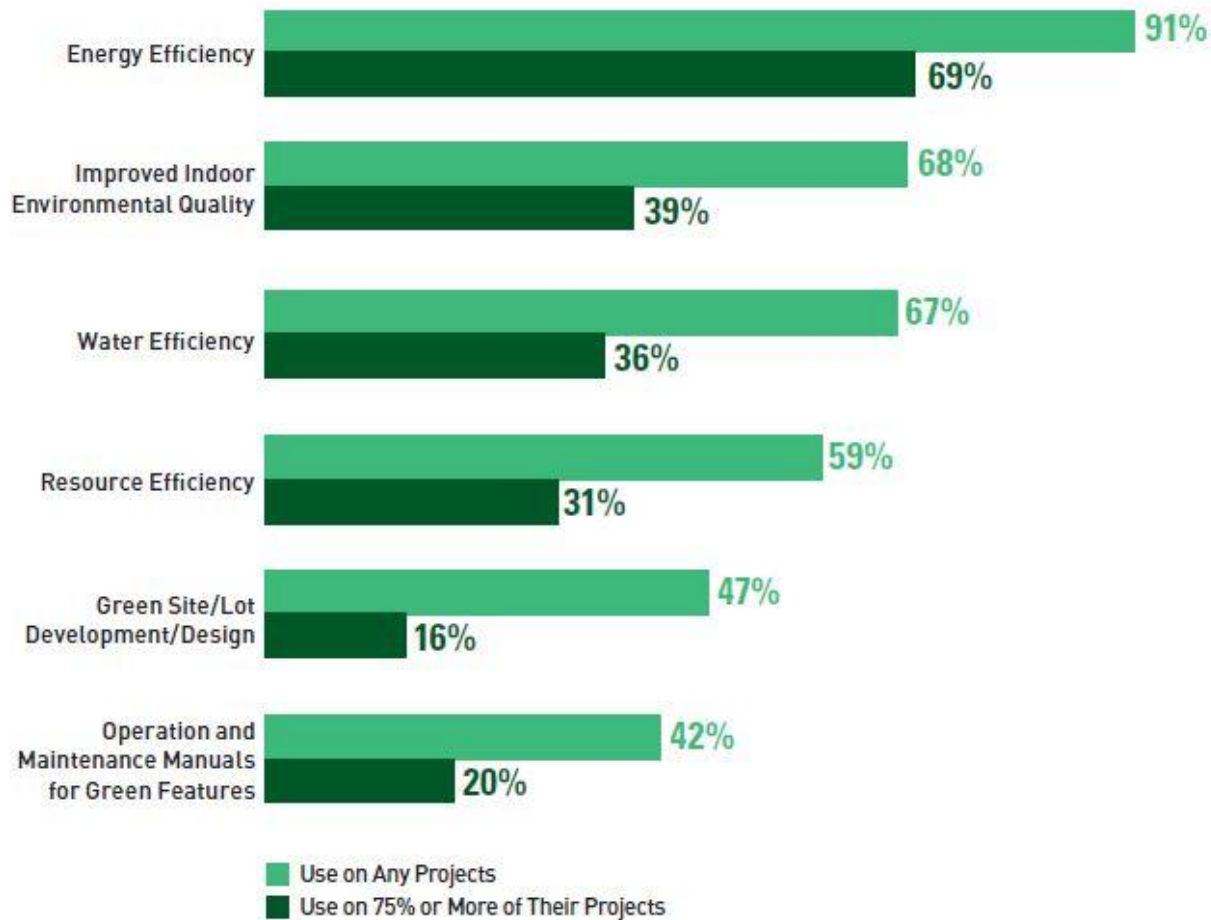
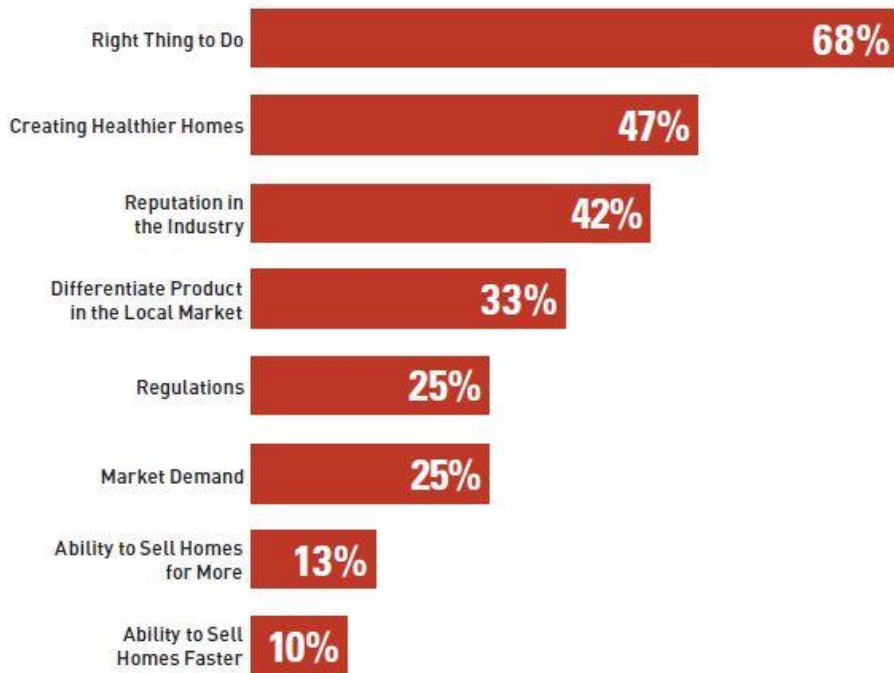


Chart source: Dodge Data & Analytics,
Green Single Family and Multifamily Homes 2020

To Build Green or Not to Build Green?

Top Reasons Single Family Home Builders Build Green

According to Builders Doing 50% or More Homes Green



Reasons That Companies Have Not Done More Green Building

According to Builders and Remodelers Doing Fewer Than Half of Their Projects Green

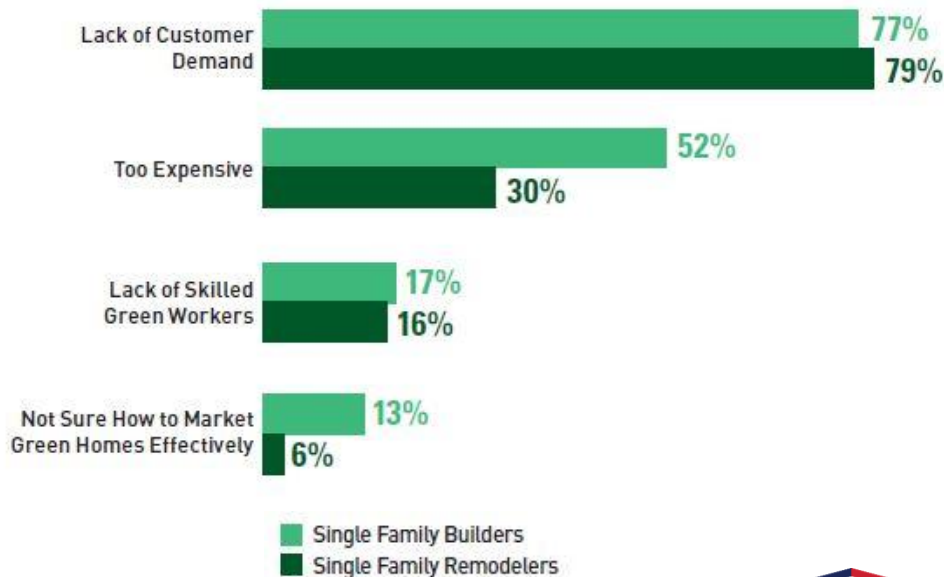
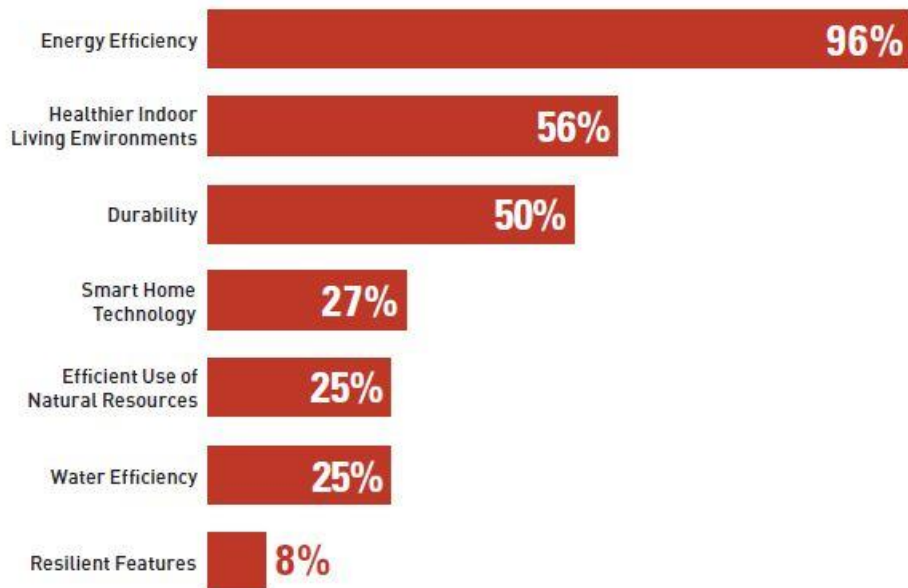


Chart source: Dodge Data & Analytics,
Green Single Family and Multifamily Homes 2020

What Practices are Green Builders Using?

Top Practices to Improve Green Home Performance

According to Home Builders Doing More Than 50% Green Homes



Use of Green Practices on More Than 75% of Home Projects

According to Home Builders Doing More Than 50% of Their Projects Green

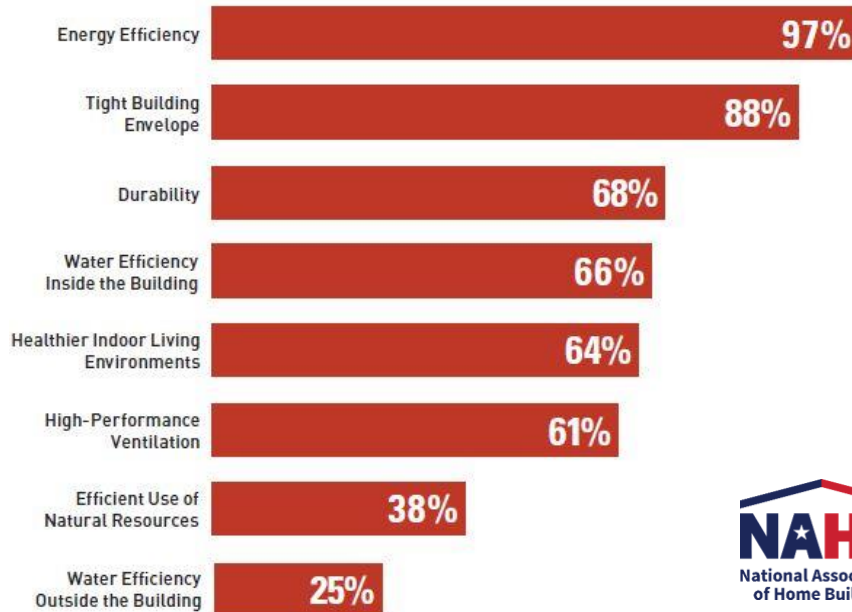
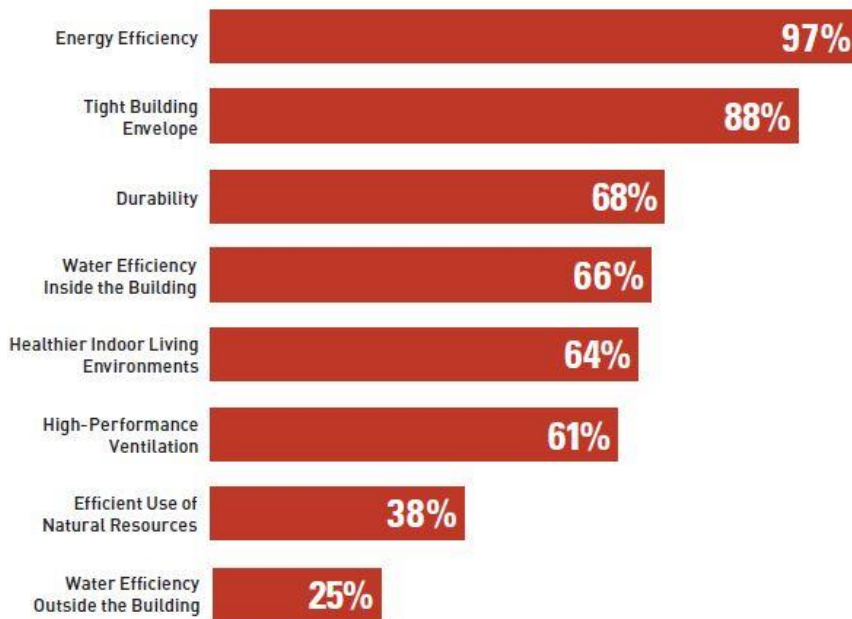


Chart source: Dodge Data & Analytics,
Green Single Family and Multifamily Homes 2020

Green Practices by Level of Engagement

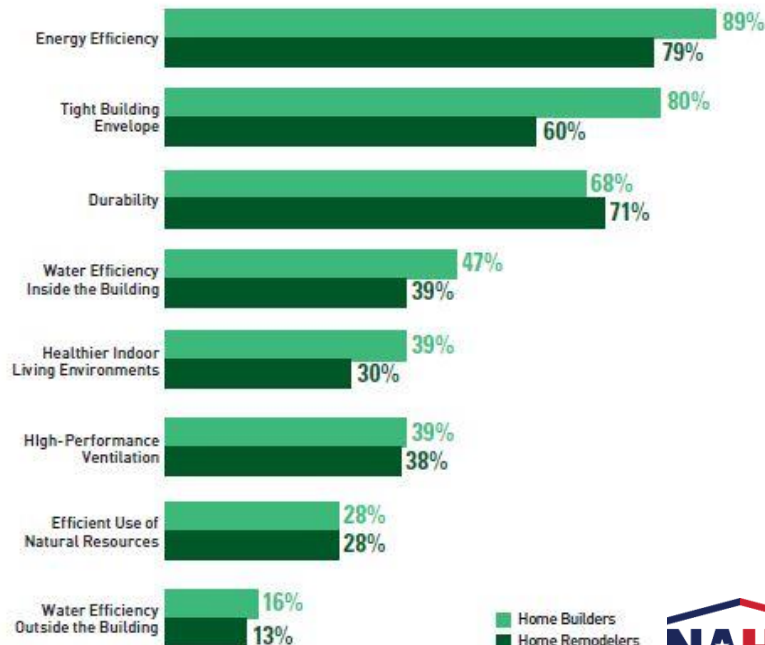
Use of Green Practices on More Than 75% of Home Projects

According to Home Builders Doing More Than 50% of Their Projects Green



Use of Green Practices on at Least 50% of Home Projects

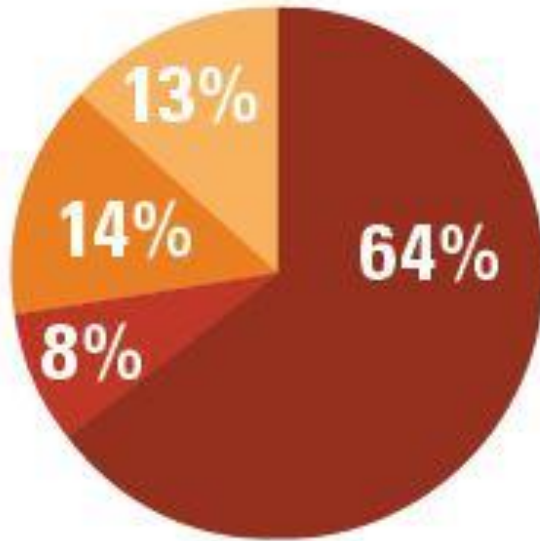
According to Single Family Home Builder/Remodelers Doing Fewer Than 50% of Their Projects Green



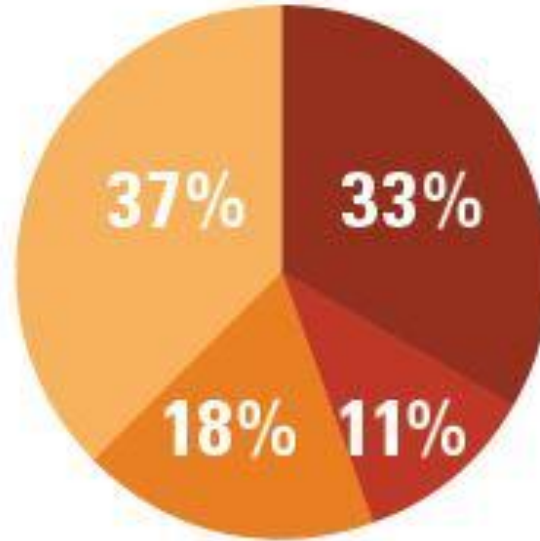
■ Home Builders
■ Home Remodelers

Chart source: Dodge Data & Analytics,
Green Single Family and Multifamily Homes 2020

Emerging Practices and Technologies: Resilient Features



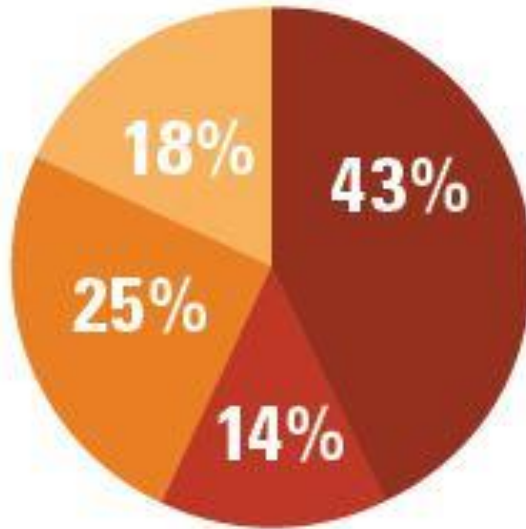
**Green Builders/
Remodelers**



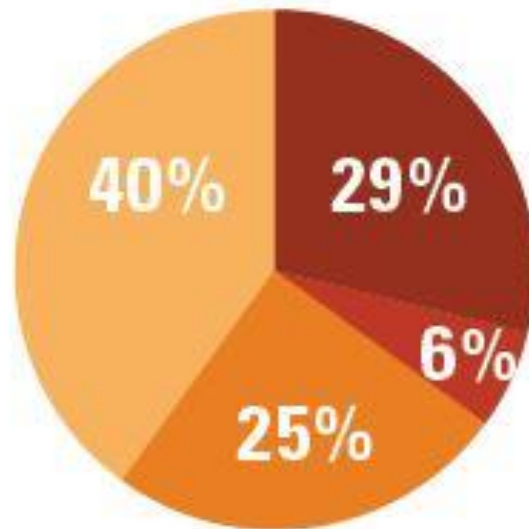
**Builders/Remodelers With
Low/No Green Engagement**



Emerging Practices and Technologies: Smart Home Tech for Managing Energy



**Green Builders/
Remodelers**



**Builders/Remodelers With
Low/No Green Engagement**



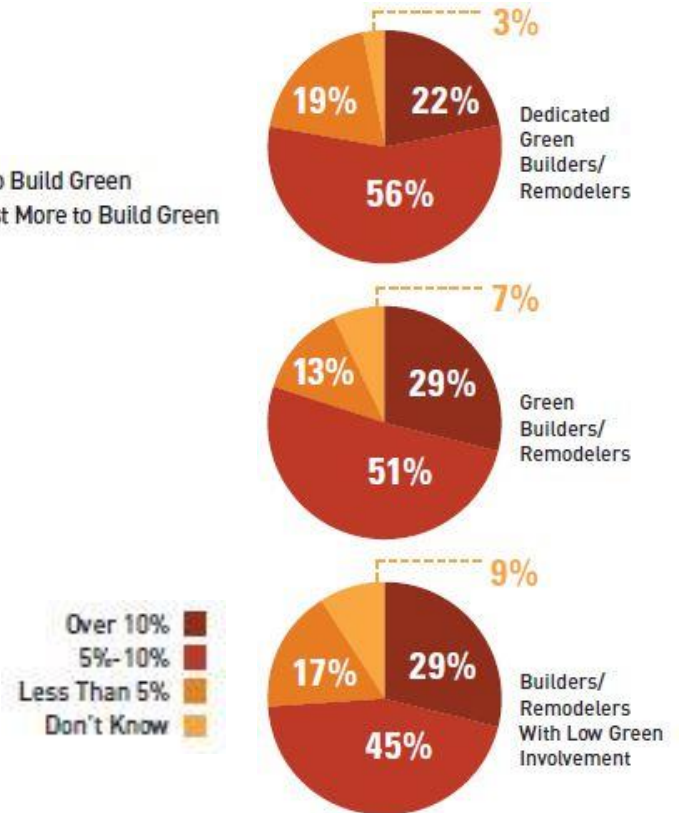
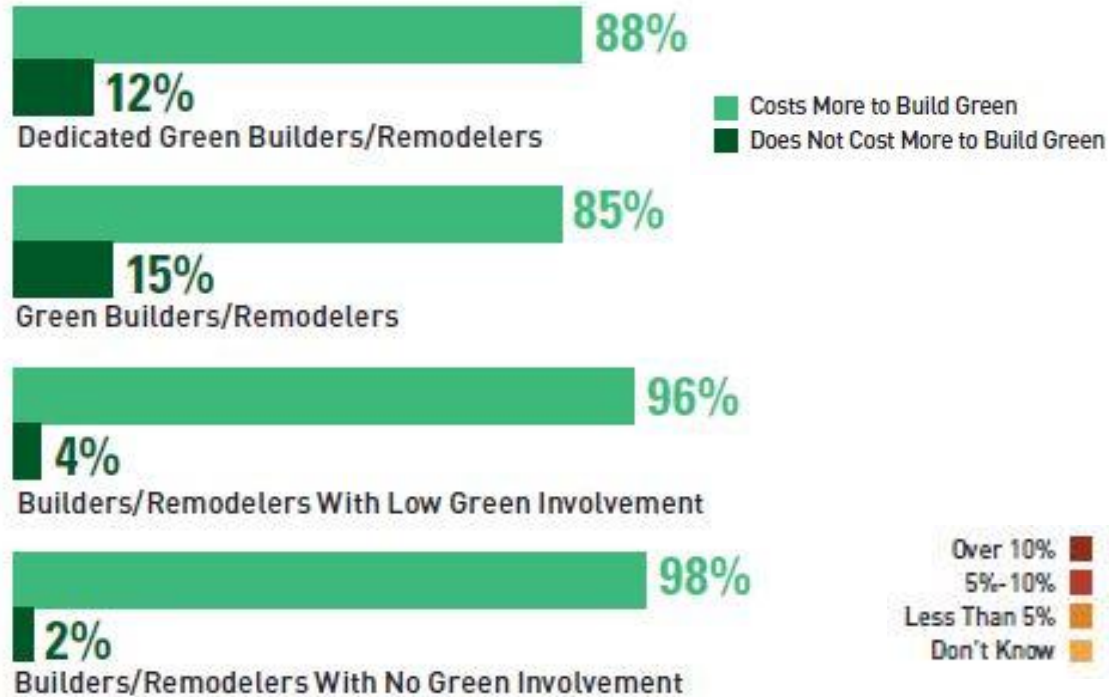


Topic #2: Marketing Green Homes

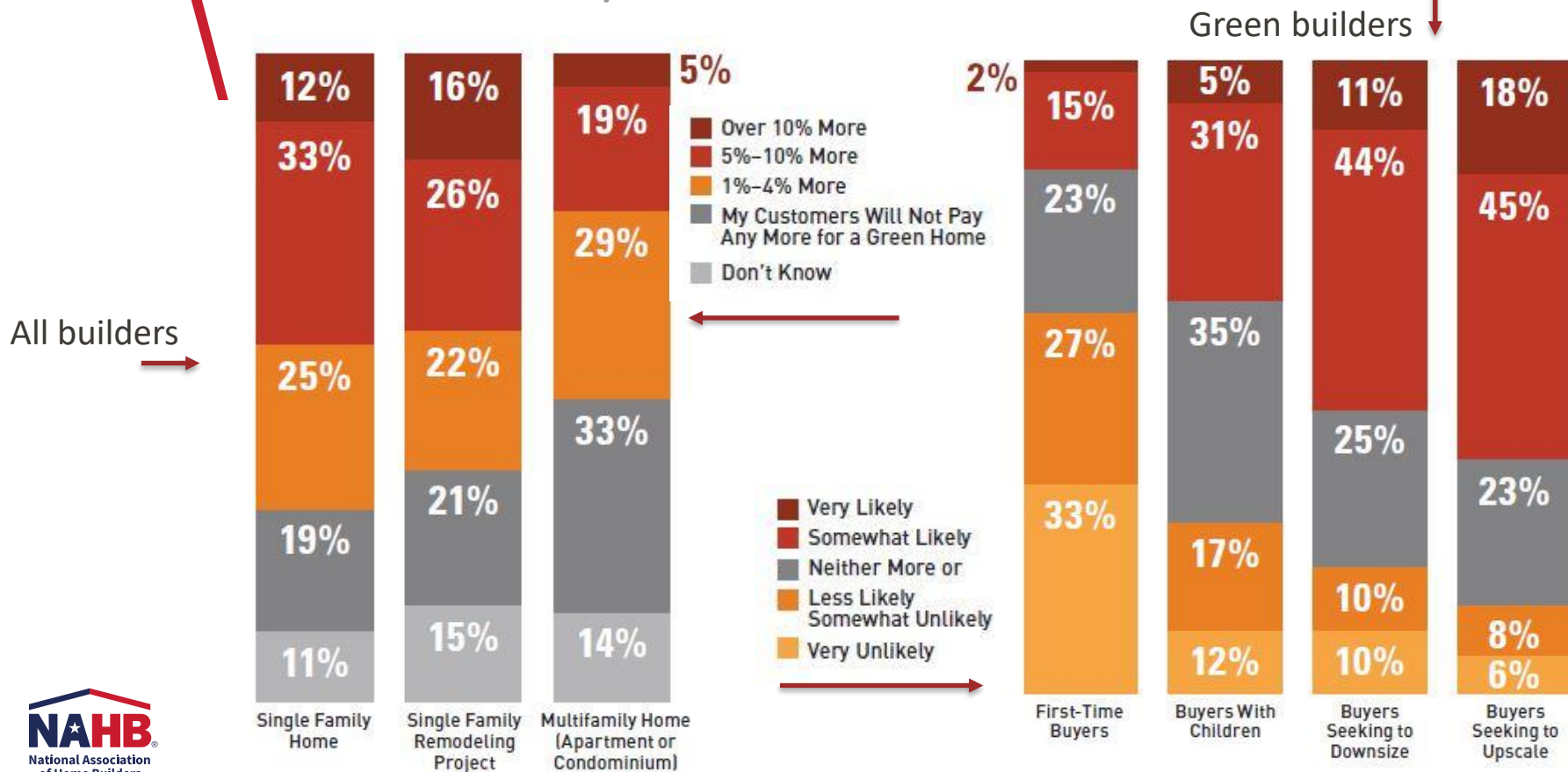
Cost of Building Green



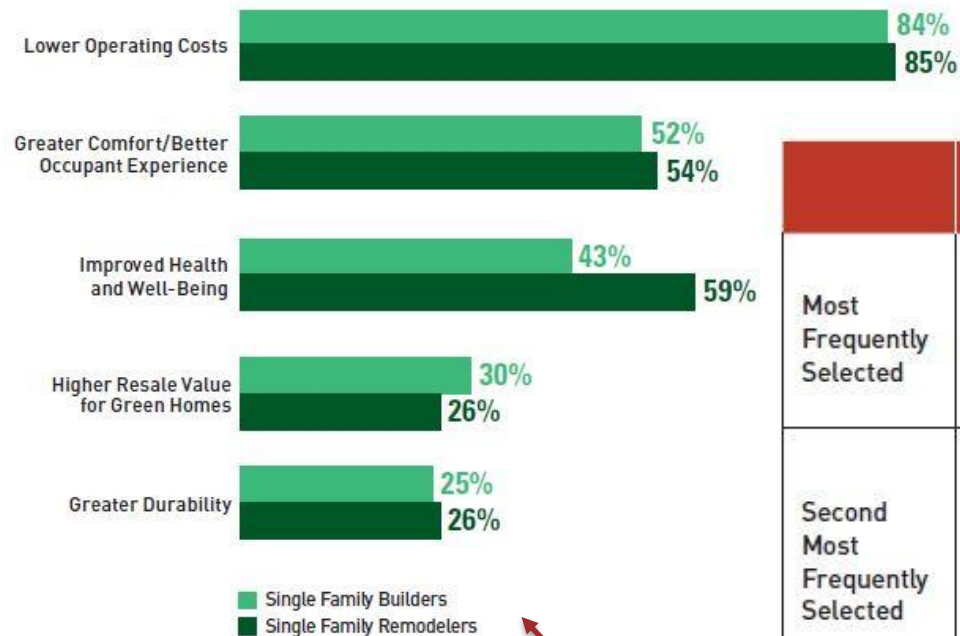
Is There a Cost Premium for Building Green?



Who Will Pay More for Green?



Why Will Customers Pay More for Green?

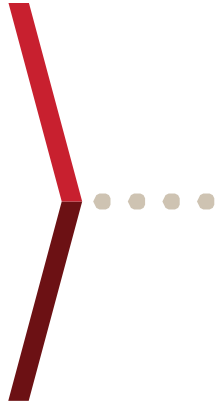


Green builders who believe there is a cost premium

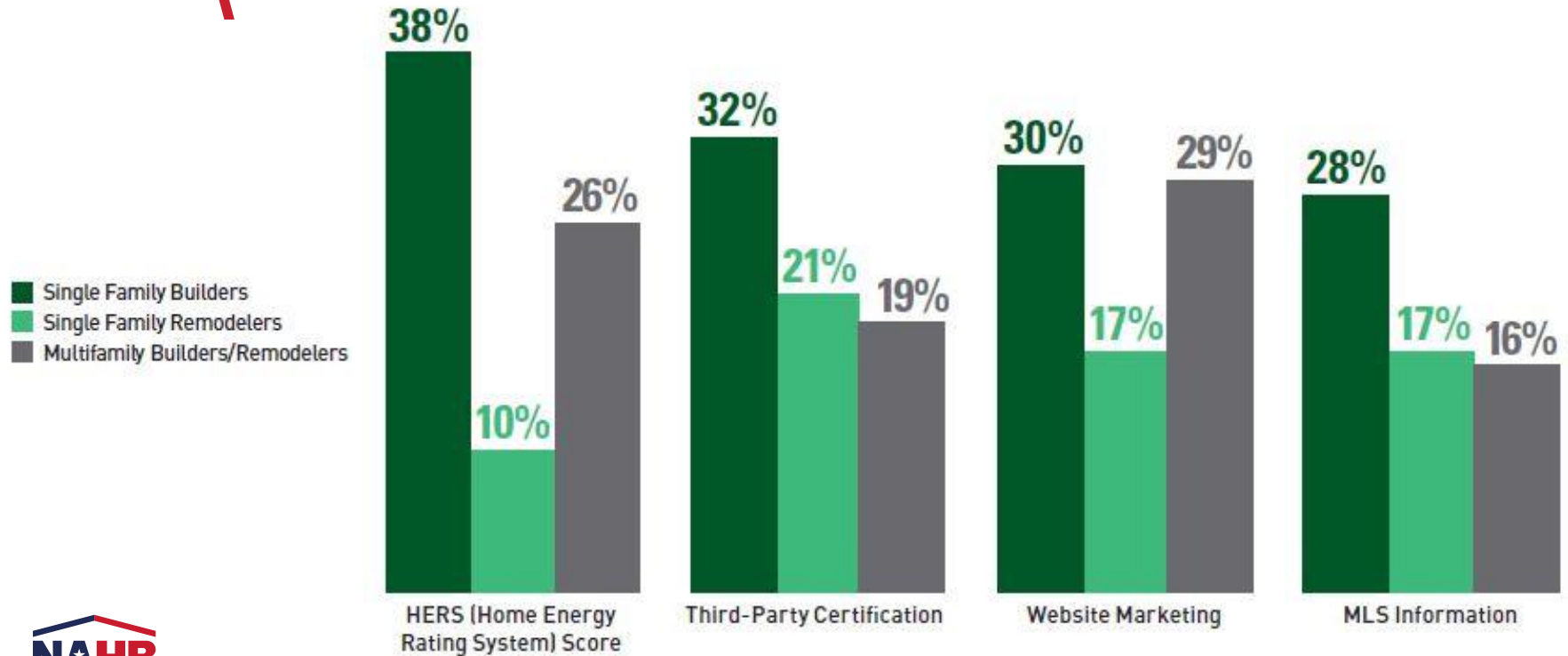
	FIRST-TIME BUYERS	BUYERS WITH CHILDREN	BUYERS SEEKING TO UPSCALE	BUYERS SEEKING TO DOWNSIZE
Most Frequently Selected	53% Lower Operating Costs	42% Improved Health and Well-Being	36% Lower Operating Costs	55% Lower Operating Costs
Second Most Frequently Selected	32% Desire to Do the Right Thing/Reduce Carbon Footprint	35% Lower Operating Costs	33% Greater Comfort/Better Occupant Experience	21% Greater Comfort/Better Occupant Experience

All builders who believe there is a cost premium

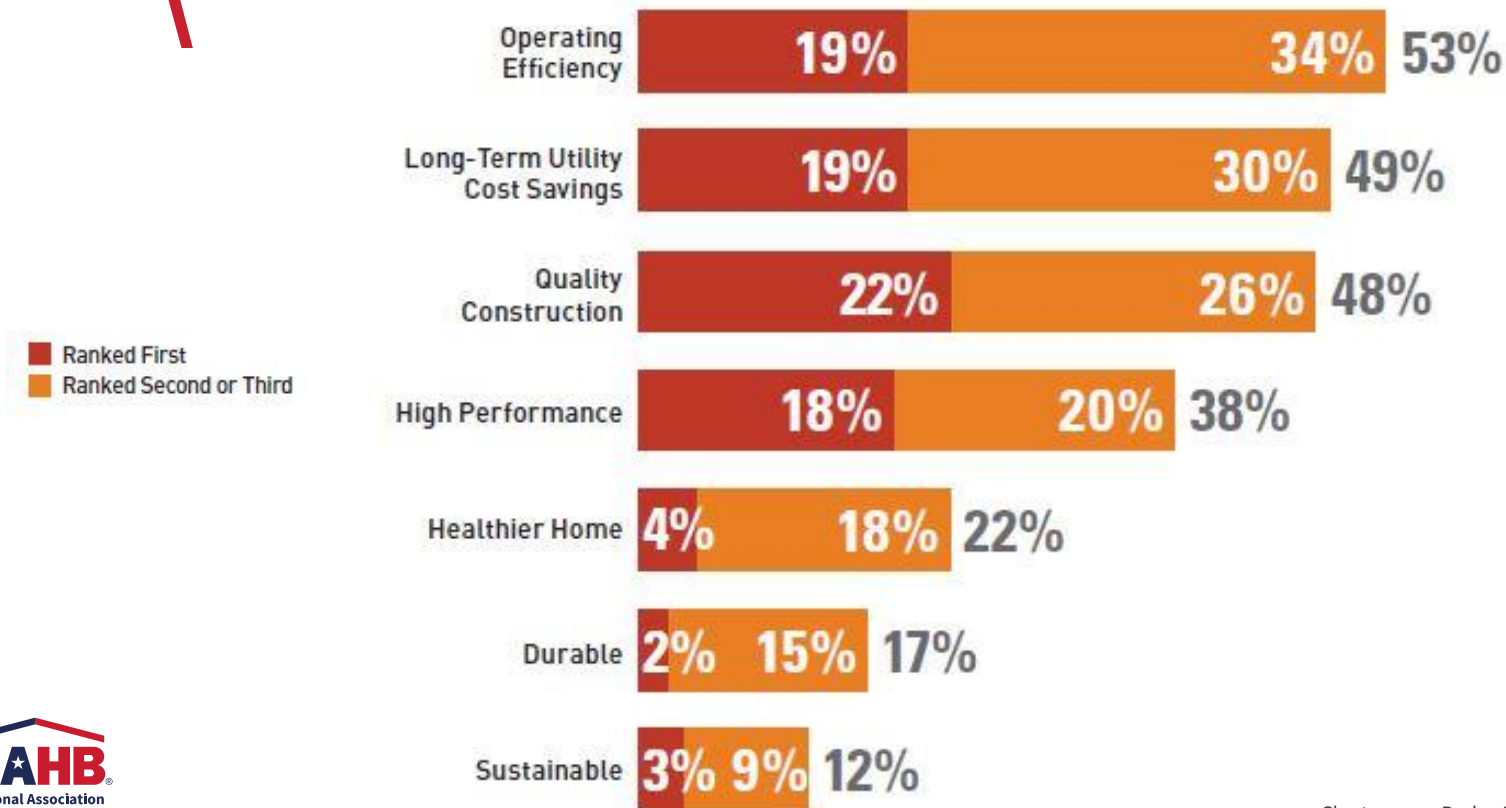
Selling Green



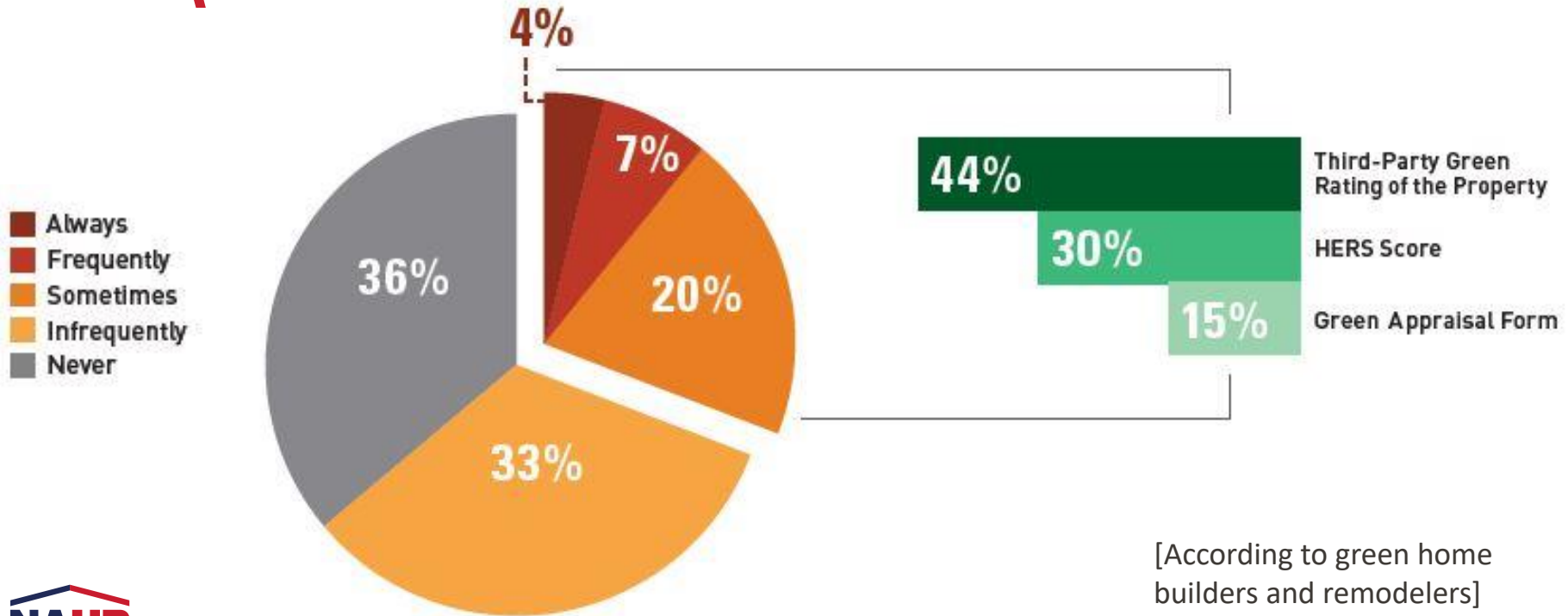
How to Showcase Green to Customers



Most Effective Terms to Describe Green to Customers

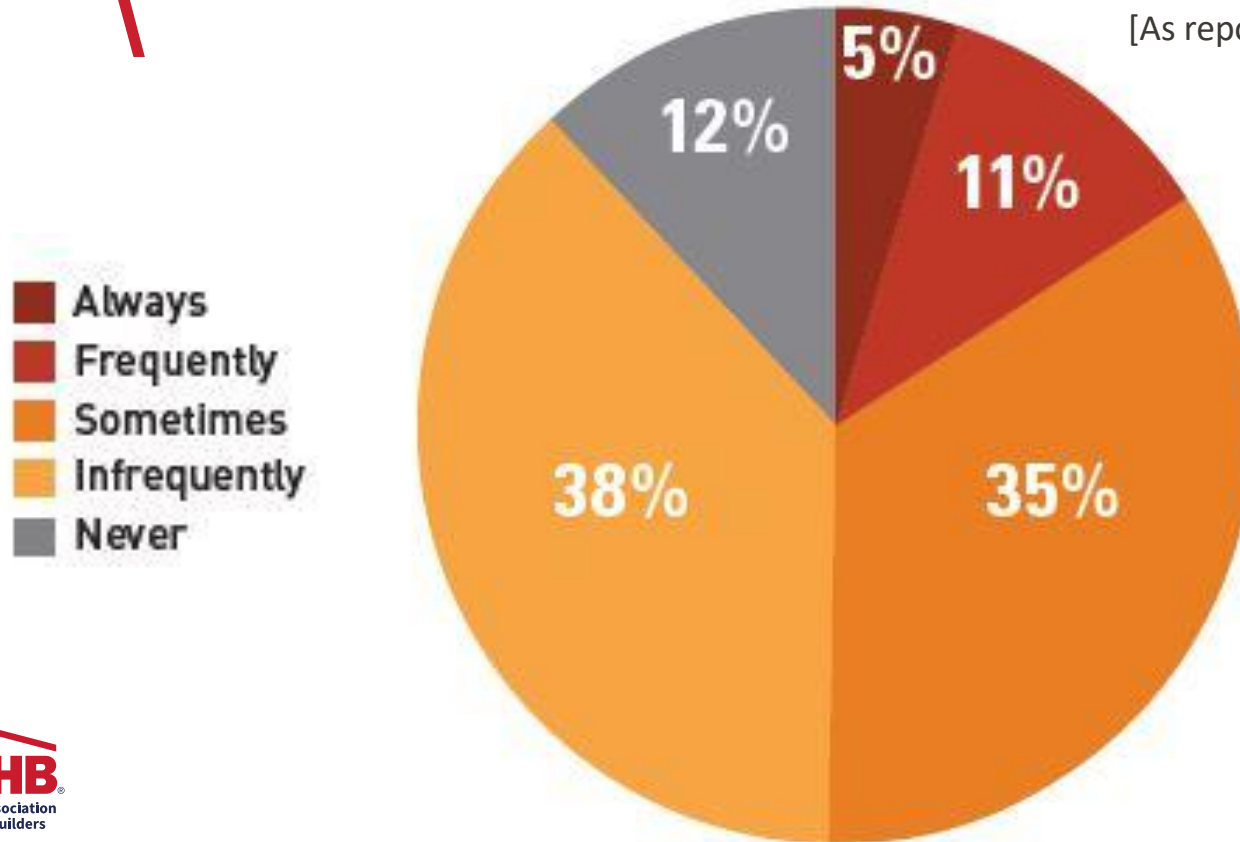


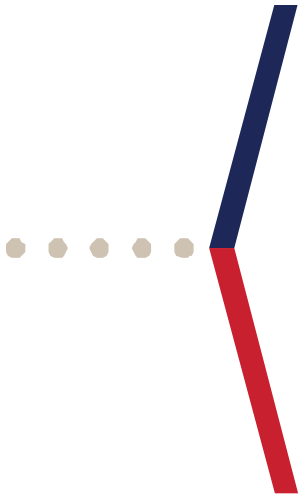
Is Added Value of Green Reflected in Appraisals?



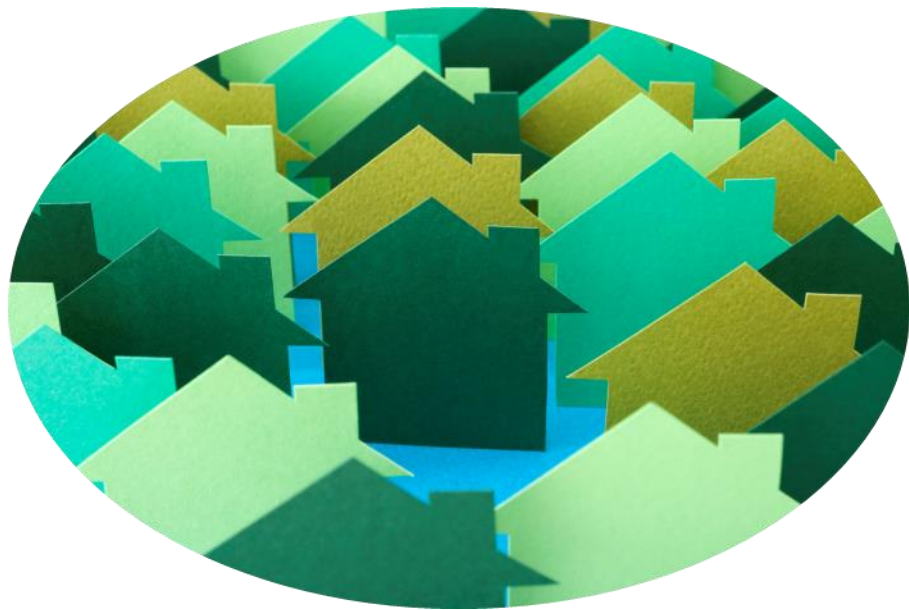
Are Green Features Included in MLS?

[As reported by green home builders]

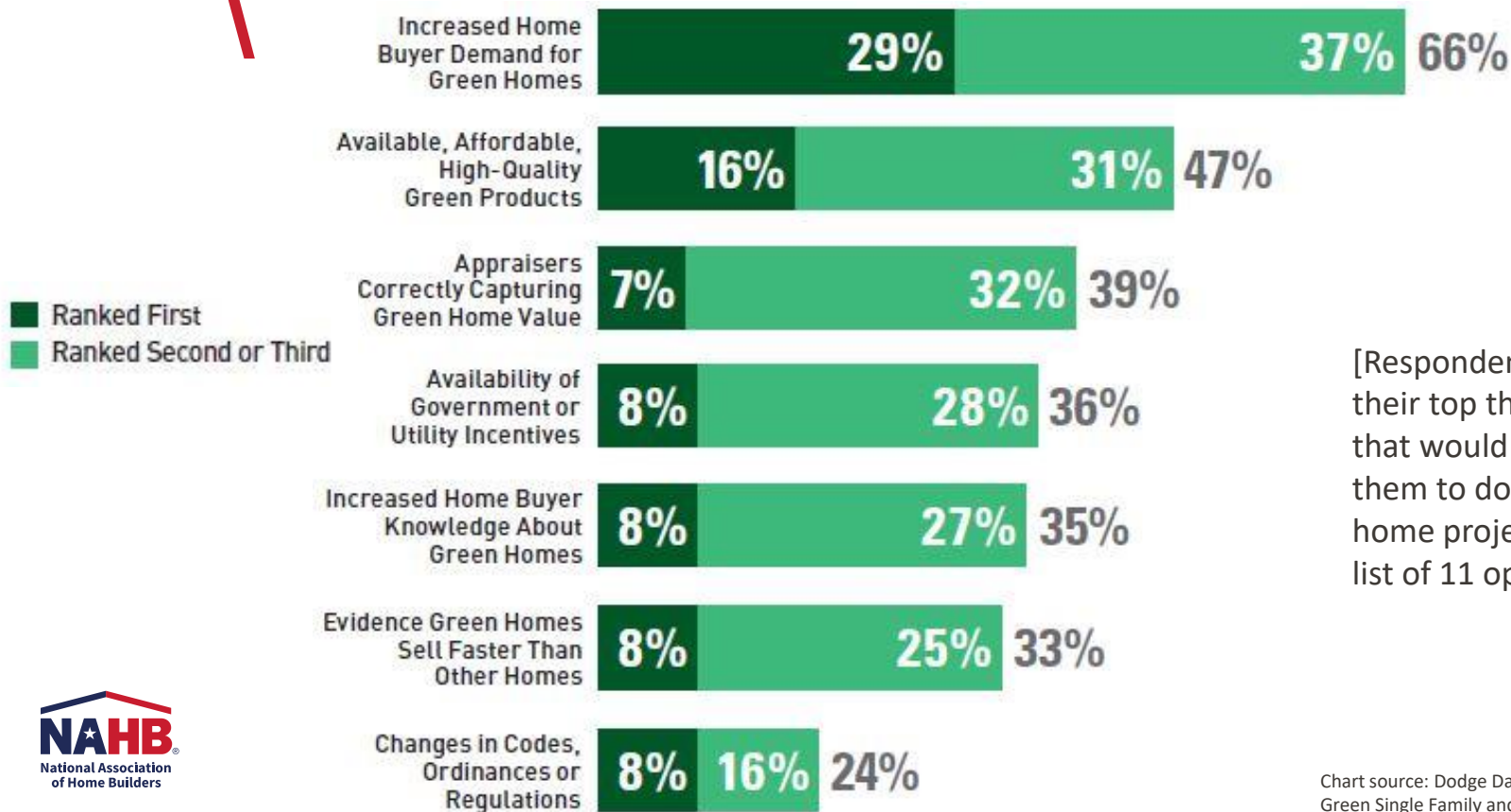




Topic #3: Drivers and Obstacles

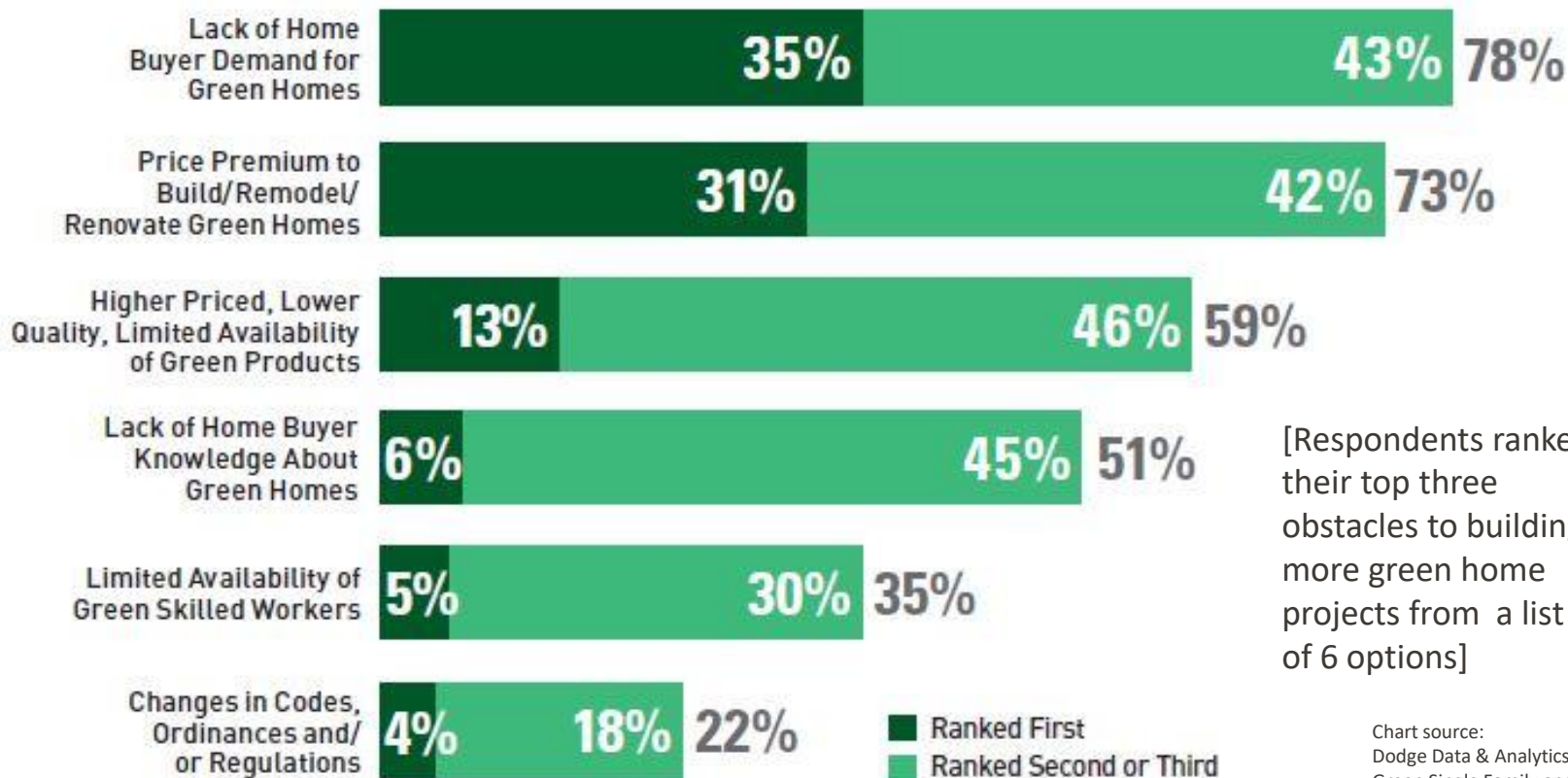


Top Drivers for More Green Single-Family

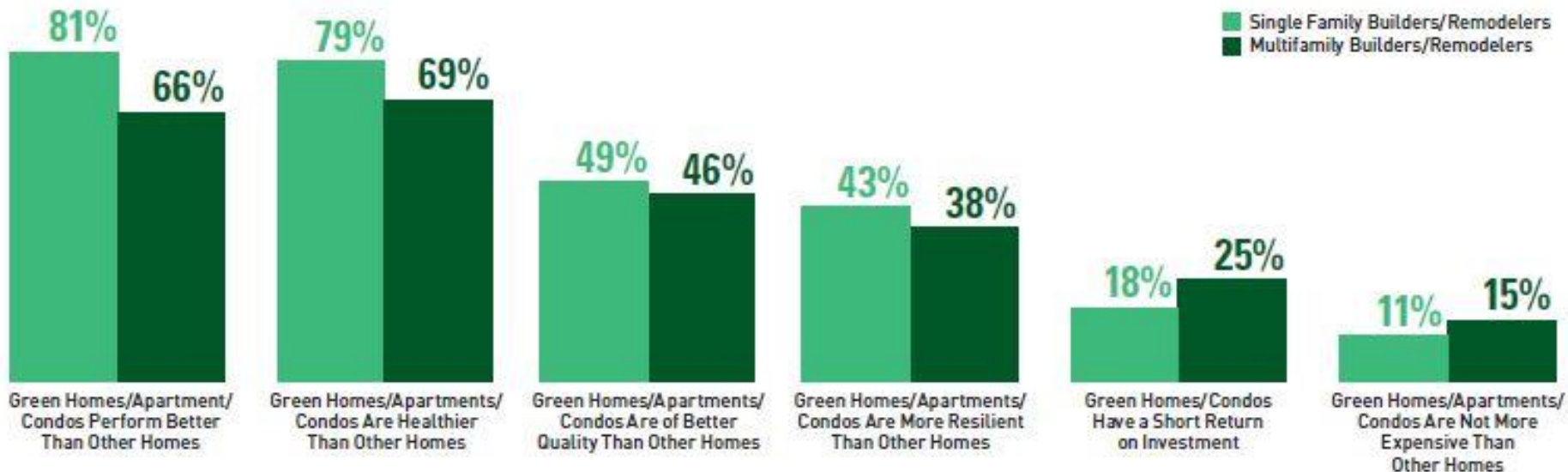


[Respondents ranked their top three drivers that would encourage them to do more green home projects from a list of 11 options]

Top Obstacles to More Green Single-Family



How Builders Perceive Consumers' Beliefs

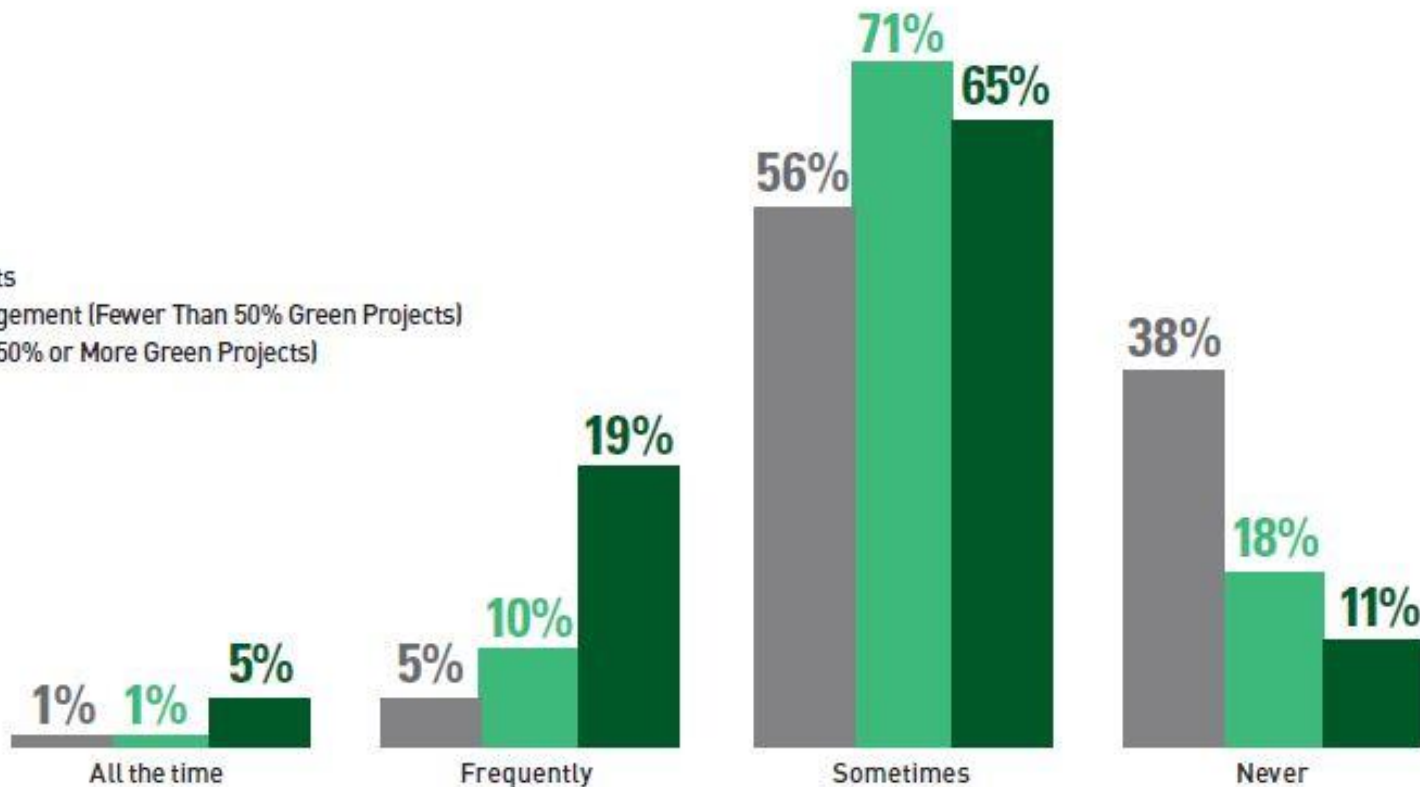




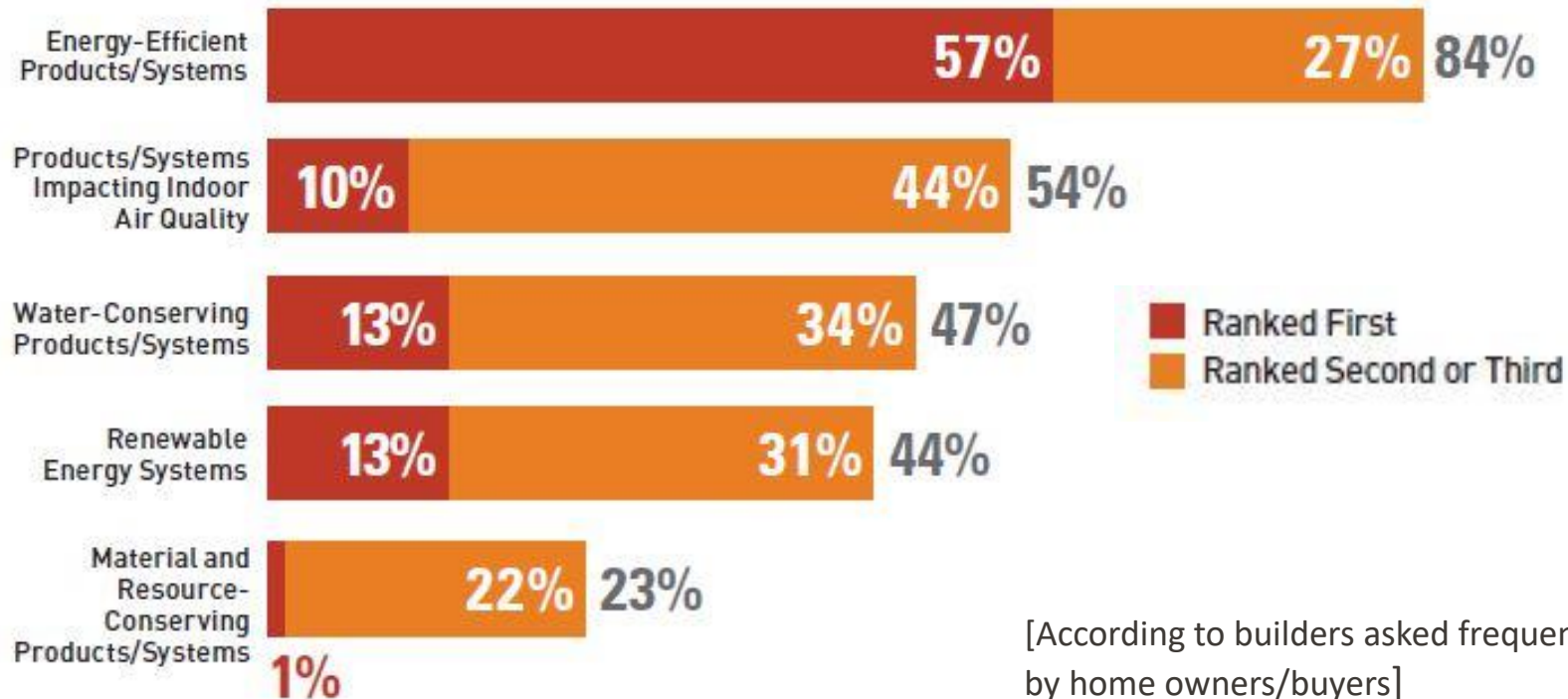
Topic #4: Use of Green Products and Practices

Customers Asking About Green Products

- No Green Projects
- Low Green Engagement (Fewer Than 50% Green Projects)
- Green Builders (50% or More Green Projects)

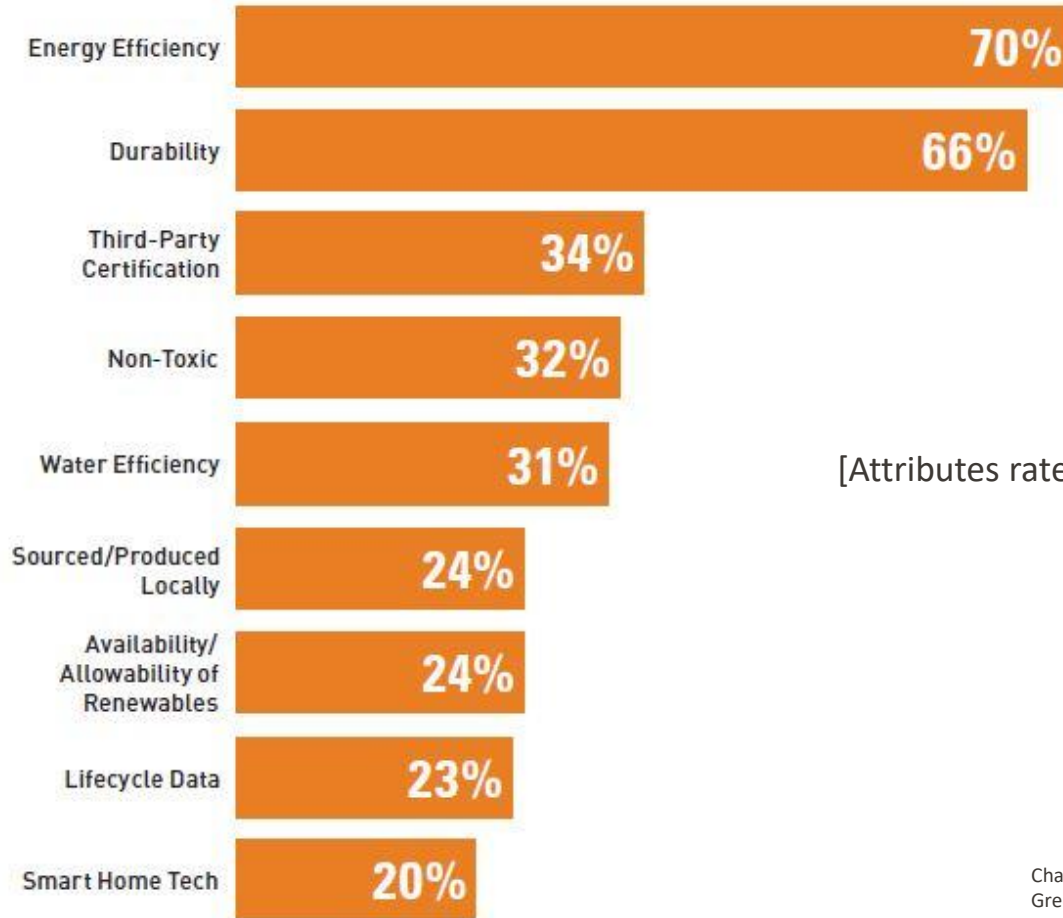


Green Products/Systems Most Frequently Asked About



[According to builders asked frequently
by home owners/buyers]

Green Attributes that Impact Product Selection



[Attributes rated high/very high impact]

Product Selection Impact by Engagement Level

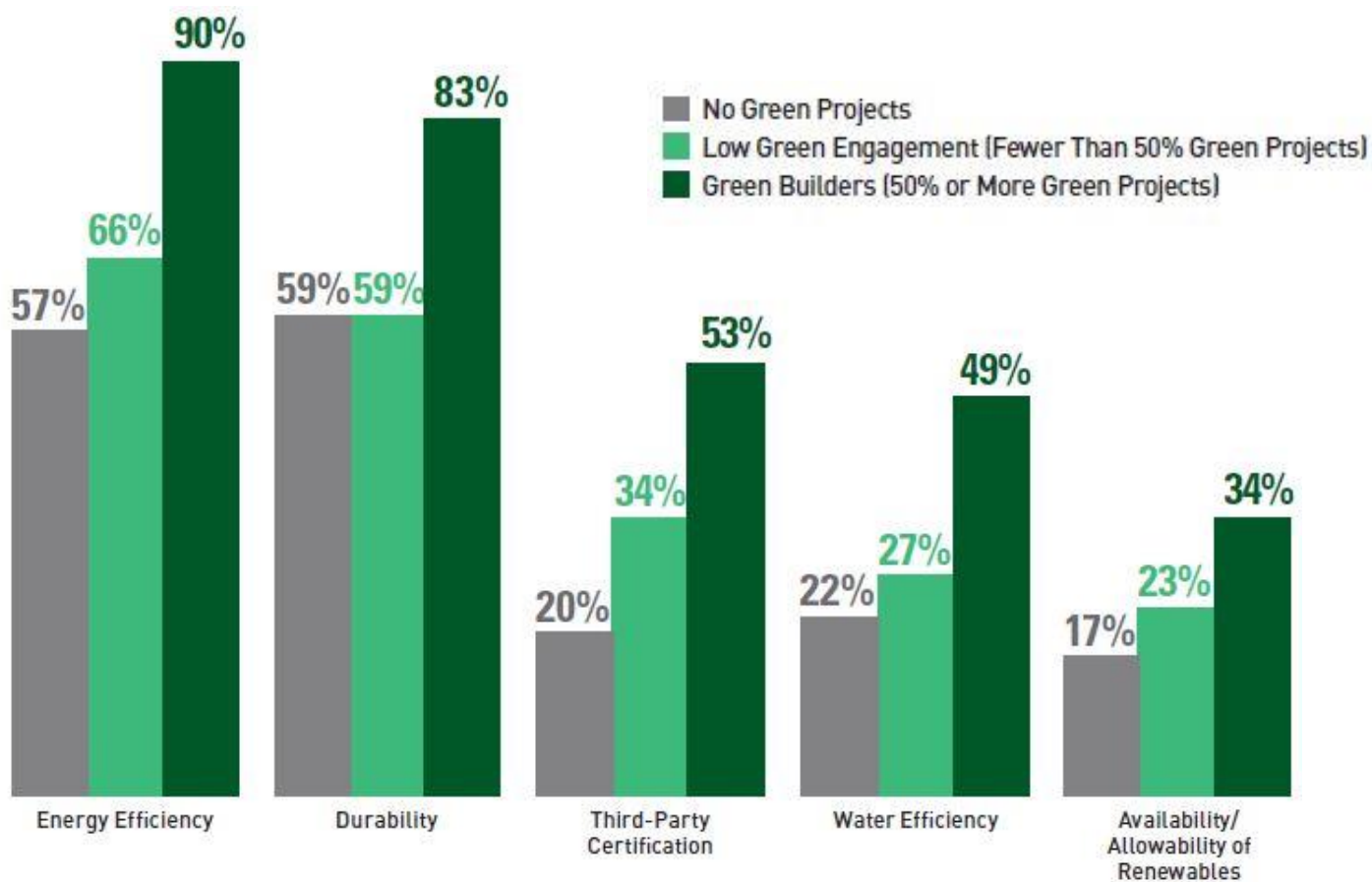


Chart source:
Dodge Data & Analytics,
Green Single Family and
Multifamily Homes 2020

Top Practices/Products to Improve IEQ

[Percentage of builders using a practice/product on half or more projects]

	ALL BUILDERS/ REMODELERS	BUILDERS/ REMODELERS DOING 50% OR MORE GREEN PROJECTS
Direct Outdoor Ventilation of Bathroom Fans, Kitchen Exhausts and Clothes Dryers	72%	81%
Duct Insulation	60%	72%
Low VOC Materials	54%	67%

OTHER PRODUCTS AND PRACTICES	ALL BUILDERS/ REMODELERS	BUILDERS/REMODELERS DOING 50% OR MORE GREEN PROJECTS
Increased Moisture Control	37%	50%
Keeping Boilers/Furnaces/Water Heaters Out of Conditioned Spaces	36%	47%
Radon Control Measures	36%	48%
Humidity Monitoring	33%	43%
Increased Ventilation (Meet/Exceed ASHRAE 62.2)	28%	45%

Top Water Efficiency Products and Practices

[Percentage of builders using a practice/product on half or more projects]

	ALL BUILDERS/ REMODELERS	BUILDERS/REMODELERS DOING 50% OR MORE GREEN PROJECTS
Water-Conserving Plumbing Fixtures and Faucets	72%	81%
Water-Conserving Appliances	60%	72%
Efficient Plumbing Techniques	54%	67%
Tankless Water Heaters	51%	56%
	ALL BUILDERS/ REMODELERS	BUILDERS/REMODELERS DOING 50% OR MORE GREEN PROJECTS
Drought-Tolerant Landscaping	26%	41%
Drip Irrigation	20%	28%
Rainwater Collection and Reuse	7%	7%
Recycled Water Supplied From Utility	3%	4%

Energy-Conserving Products and Practices

[Percentage of builders using a practice/product on half or more projects]

	ALL BUILDERS/ REMODELERS	BUILDERS/REMODELERS DOING 50% OR MORE GREEN PROJECTS
LED Lighting	85%	91%
Energy-Efficient Appliances	76%	88%
Right-Sizing HVAC System	72%	87%
Highly Efficient HVAC and/or Water Heating Equipment	67%	85%
Insulation Exceeding Code Minimums	63%	82%
Windows Exceeding Code-Mandated Performance	62%	75%
Focus on Air Tightness	60%	81%
Blower Door Testing	53%	73%

Use of Renewable Energy Systems

[Percentage of builders using on half or more projects]

	ALL BUILDERS/ REMODELERS	BUILDERS/REMODELERS DOING 50% TO 90% GREEN PROJECTS	BUILDERS/REMODELERS DOING MORE THAN 90% GREEN PROJECTS
Solar Energy Systems	8%	16%	12%
Geothermal Systems	9%	13%	15%
Onsite Energy Storage	3%	3%	3%

Top Green Products and Practices in Use

All the products and practices **shown in the chart at right are** used by 60% or more of the builders and remodelers on over half of their projects



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	ALL BUILDERS/ REMODELERS
LED Lighting	85%
Energy-Efficient Appliances	76%
Right-Sizing HVAC System	72%
Water-Conserving Plumbing Fixtures and Faucets	72%
Direct Outdoor Ventilation of Bathroom Fans, Kitchen Exhausts and Clothes Dryers	72%
Durable Materials	68%
Highly Efficient HVAC and/or Water Heating Equipment	67%
Insulation Exceeding Code Minimums	63%
Windows Exceeding Code-Mandated Performance	62%
Minimize Construction Waste During Design and Construction	61%
Focus on Air Tightness	60%
Water-Conserving Appliances	60%
Duct Insulation	60%



Summary: Key Findings

2020 SmartMarket Brief: Key Findings

Green Building Market Activity

- Lack of market demand is the top reason builders list for not building green
- 91% of all builders use energy efficiency strategies; more than 2/3 on majority of their projects
- Over 2/3 use IEQ and water efficiency strategies; 1/3 on majority of projects
- Green builders use resilient features (64%) and smart tech (43%) on the majority of projects – higher rates than all builders

Marketing Green Homes

- Almost all builders believe green costs more to build – about half say 5-10%
- 15% of green builders say there is no cost differential
- Buyers seeking to upscale or downsize are the most likely to be willing to pay more
- Third-party certification is the top way single-family builders demonstrate green
- Green features are rarely included in MLS listings or reflected in home appraisals

2020 SmartMarket Brief: Key Findings

Drivers and Obstacles

- Consumer demand is the top driver to build more green - lack of demand is top obstacle
- Availability of affordable, high-quality green products also a key driver; lack of these products a key obstacle
- Influencing consumer perceptions on the quality and value of green building offers an opportunity to increase builder engagement

Green Products and Practices

- Energy-efficiency dominates – 8 different practices are used by more than half of all builders on at least half of their projects
- Indoor water efficiency strategies widely employed by all; outdoor less common
- Use of IEQ practices varies; more widely used by green builders across the board
- Almost 10% of all builders and about 15% of green builders use solar or geothermal on more than half of their projects



For More Information

NAHB Sustainability: www.nahb.org/sustainability

2020 SmartMarket Brief available for download: www.nahb.org/smr

Twitter: [@NAHB Green](https://twitter.com/NAHB_Green)

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