Green Multifamily and Single-Family Homes 2017

SmartMarket Brief: Deep Dive
Introduction
Survey Topics

- Green Building Market Activity
- Marketing Green Homes
- Drivers and Obstacles for Green Homes
- Green Building Practices and Features
- Renewable Energy and Net Zero Homes
Research
Demographics

• Respondents
• Green Involvement
• What is Green Building?

Chart source: Dodge Data & Analytics,
Green Multifamily and Single Family Homes 2017
Does Size Matter?

Dedicated Green Builders

<table>
<thead>
<tr>
<th>Year</th>
<th>Small</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>12%</td>
<td>24%</td>
</tr>
<tr>
<td>2022</td>
<td>31%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Small  | Large

Source: NAHB
Green Building Market Activity
Green Building Activity Levels: Single-Family New Homes

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Green Building Activity Levels: Single-Family Remodelers

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Green Building Activity Levels: Multifamily New Homes

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Cost of Building Green
Single-Family Cost of Building

Builders

- 5%–10%: 38% (2014), 42% (2015), 49% (2017)
- 1%–4%: 30% (2014), 15% (2015), 17% (2017)
- Don’t Know: 7% (2014), 5% (2015), 8% (2017)

Remodelers

- 5%–10%: 51% (2014), 44% (2015), 36% (2017)
- 1%–4%: 9% (2014), 9% (2015), 9% (2017)
- No/Insignificant Costs: 3% (2014), 1% (2015), 2% (2017)
- Don’t Know: 6% (2014), 7% (2015), 10% (2017)

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Multifamily Cost of Building

Chart source: Dodge Data & Analytics,
Green Multifamily and Single Family Homes 2017
Will Customers Pay for Green?

Single Family Builders

- 2017: 21% Won't Pay More, 71% Will Pay More
- 2014: 16% Won't Pay More, 73% Will Pay More

Single Family Remodelers

- 2017: 17% Won't Pay More, 66% Will Pay More
- 2014: 16% Won't Pay More, 79% Will Pay More

Multifamily Builders

- 2017: 30% Won't Pay More, 57% Will Pay More
- 2014: 19% Won't Pay More, 68% Will Pay More

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
What is the Premium for Green?

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Marketing Green Homes
Ease of Marketing

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Ease of Marketing for Single-Family Home Builders

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
### Marketing Terminology

<table>
<thead>
<tr>
<th></th>
<th>Single Family Builders and Remodelers</th>
<th>Multifamily Builders and Remodelers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Most Effective Terms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-Term Utility Cost Savings</td>
<td>62%</td>
<td>58%</td>
</tr>
<tr>
<td>Operating Efficiency</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td><strong>Fairly Effective Terms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthier Homes</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Quality Construction</td>
<td>42%</td>
<td>29%</td>
</tr>
<tr>
<td>High Performance</td>
<td>39%</td>
<td>27%</td>
</tr>
<tr>
<td><strong>Least Effective Terms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable Construction</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>Sustainable</td>
<td>15%</td>
<td>8%</td>
</tr>
</tbody>
</table>

*Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017*
Single-Family
Drivers for Future Green Homes

Drivers Rated as ‘Important’
by Single-Family Builders and Remodelers

Chart source: Dodge Data & Analytics,
Green Multifamily and Single Family Homes 2017
Obstacles for Future Green Homes

Obstacles Rated as ‘Important’
by Single-Family Builders and Remodelers

Chart source: Dodge Data & Analytics,
Green Multifamily and Single Family Homes 2017
Drivers Rated as ‘Important’
by Multifamily Builders and Remodelers
Obstacles for Future Green Homes

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017

Obstacles Rated as ‘Important’ by Multifamily Builders and Remodelers
Greatest Differences Among Builders

Drivers

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Greatest Differences Among Builders

- **Appraisers Don’t Understand Long-Term Value of Green**: 58% for Single Family Builders/Remodelers, 37% for Multifamily Builders/Remodelers
- **First Costs Higher for Green Building/Remodeling**: 56% for Single Family Builders/Remodelers, 70% for Multifamily Builders/Remodelers
- **Lenders Don’t Understand Long-Term Value of Green**: 55% for Single Family Builders/Remodelers, 37% for Multifamily Builders/Remodelers
- **Lack of Consumer Education About Green Building**: 55% for Single Family Builders/Remodelers, 43% for Multifamily Builders/Remodelers
- **Overall Economic Conditions**: 54% for Single Family Builders/Remodelers, 43% for Multifamily Builders/Remodelers

Obstacles

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Green Homes: Building Practices and Features
Top Practices for Improving Performance

Single-Family

- Energy Efficient: 95%
- Water Efficient: 63%
- Healthy Indoor Living Environment: 50%
- Durable/Resilient: 32%
- Efficient Use of Natural Resources: 30%
- Lower Impact Development: 13%
- Other: 5%

Multifamily

- Energy Efficient: 90%
- Water Efficient: 52%
- Healthy Indoor Living Environment: 31%
- Durable/Resilient: 23%
- Efficient Use of Natural Resources: 48%
- Lower Impact Development: 10%
- Other: 17%

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Top Practices for Improving Performance

Single-Family

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Top Practices for Improving Performance

Multifamily

- Energy Efficient: 90%
- Water Efficient: 10%
- Healthy Indoor Living Environment: 52%
- Reduced Carbon Footprint: 17%
- Durable/Resilient: 31%
- Lower Impact Development: 23%
- Efficient Use of Natural Resources: 48%

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Trusted Sources of Information

- Home Building/Construction Websites: 40% (Multifamily Builders/Remodelers: 60%)
- Trade Shows/Conferences/Workshops: 44% (Multifamily Builders/Remodelers: 56%)
- Colleagues: 46% (Multifamily Builders/Remodelers: 54%)
- Trade Associations: 40% (Multifamily Builders/Remodelers: 60%)
- Building Product Manufacturers: 44% (Multifamily Builders/Remodelers: 56%)

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Green Homes: Renewable Energy and Net Zero
Renewable Energy Use
Renewable Energy Offerings: Single-Family

Current Offerings

- Renewable Energy Incorporated Into All Projects: 30%
- Offer Renewable Energy as an Option: 36%
- Only Offer Renewable Energy Upon Request From Owner: 25%
- Do Not Offer Renewable Energy: 9%

Expected by 2019

- Renewable Energy Incorporated Into All Projects: 31%
- Offer Renewable Energy as an Option: 39%
- Only Offer Renewable Energy Upon Request From Owner: 17%
- Do Not Offer Renewable Energy: 13%

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Renewable Use: Single-Family

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Renewable Energy Offerings: Multifamily

Current Offerings

- Renewable Energy Incorporated Into All Projects: 52%
- Offer Renewable Energy as an Option: 16%
- Only Offer Renewable Energy Upon Request From Owner: 24%
- Do Not Offer Renewable Energy: 8%

Expected by 2019

- Renewable Energy Incorporated Into All Projects: 40%
- Offer Renewable Energy as an Option: 22%
- Only Offer Renewable Energy Upon Request From Owner: 19%
- Do Not Offer Renewable Energy: 19%

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Renewable Use: Multifamily

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Net Zero Homes
Net Zero Building

Built in the Last Two Years


Expect to Build in the Next Two Years


Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Factors Influencing Net Zero Construction

- More Customer Demand: 89%
- Competitive Advantage: 82%
- Less Expensive Renewable Technologies: 81%
- Ability to Charge More for Net Zero Homes: 78%
- More Data on How to Achieve Tighter Envelope Performance: 60%

Chart source: Dodge Data & Analytics, Green Multifamily and Single Family Homes 2017
Summary: Key Findings
Green Building Market Activity
Continues to increase among single and multifamily builders and remodelers, with the greatest growth by 2022 expected among dedicated green builders.

Drivers and Obstacles for Green Homes
Single-Family:
- First cost premium becoming a much lower obstacle
- Multiple drivers similarly influencing the market
Multifamily:
- First cost still a barrier to entry
- Financial incentives a key driver

Marketing Green Homes
Marketing advantages seen by builders:
“Long-term Utility Cost Savings”
“Operating Efficiency”
“Healthier Homes”
2017 SmartMarket Brief: Key Findings

**Green Building Practices and Features**

What improves home performance?

#1: Energy Efficiency

#2: Healthier Indoor Environment

#3: Durability (Single-Family)

#3: Water Efficiency (Multifamily)

**Renewable Energy and ‘Net Zero’ Homes**

- Solar technologies and ground source heat exchange being used by one quarter of single-family builders
- 29% of single-family builders have built a net zero, net zero ready or near net zero home; this is expected to increase to 44% by 2019
For More Information:

NAHB Sustainability:  www.nahb.org/sustainability

2017 SmartMarket Brief available for download here:  www.nahb.org/sm

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