Understanding perceptions and finding the way forward for SIPs.
We create a market advantage for organizations that create a sustainable, energy-responsible future.
The company we keep
We start here...

energypulse™
ecopulse™
b2bpulse™
..and we end with campaigns that build brands, shift perceptions and drive sales
Today we will look at results from Professional Builder Magazine’s survey of builders and compare those to Shelton Group’s national Energy Pulse® data, which explored what consumers actually think and what they’re willing to pay for.
First, why does sustainability matter?
82% of Millennials are anxious about how climate change will affect their children’s quality of life.

Source: Millennial Pulse 2017
The average American recognizes that he or she needs to do something.
85% of respondents think the average person should be taking concrete steps to reduce his/her environmental impact.
And

83%

of Americans believe that we have a moral duty to leave the earth in as good or better shape than we found it

Source: Eco Pulse 2018
Would you like to be seen as someone who buys eco-friendly products?

- 2013: 33%
- 2014: 38%
- 2015: 37%
- 2016: 46%
- 2017: 40%

n=2,005
What major purchase best reflects our values, green or otherwise?
So what does this all mean for consumers when they think about buying a home?
89% of people who expect to buy a new home in the next two years say higher energy efficiency would cause them to choose one new home over another.
As part of Energy Pulse, we take a look at those who already own a “green home” as well as those who are in the market for a new home and say that energy efficiency would very/strongly impact their new home purchase decision.
Let’s explore these two groups

**Green Homebuyers**
- Already purchased a certified green home

**Energy Savvies**
- In the market for a new home
- Say that energy efficiency would very/strongly impact their new home purchase decision
Green homebuyers (环球) and Energy Savvies (能源智慧) look a lot alike...

- Significantly more likely to currently live in an urban area
- Predominantly Millennials and significantly more likely to be 25-44 years old
- More likely to have kids in the household
- More likely to identify with the Democratic political party
- Predominately Caucasian (50%), but significantly more likely to be African-American vs. the overall
- More likely to be male
- More likely to be well-educated, with a graduate or professional degree
- More likely to live in the West
...with **one significant difference**: green home buyers are more likely to **have a higher HHI**.
Similarly, while the two groups **share attitudes about the environment** in many areas...

- **More likely to say** “The environmental impact of our energy use” is their biggest energy concern.
- **Much more likely to say** the government should pay more attention to environmental issues.
- **Significantly more likely to say** energy conservation is important in the way they make decisions and purchases.
...money is more of a motivator for Energy Savvies, who haven’t yet bought a green home.

More likely to say “The environmental impact of our energy use” is their biggest energy concern

Much more likely to say the government should pay more attention to environmental issues

Significantly more likely to say energy conservation is important in the way they make decisions and purchases

Their top reason to participate in energy conservation activities or buy energy-efficient products or services was “to preserve the quality of life for future generations” and significantly less likely to say it was “to save money”

Their top reason to participate in energy conservation activities or buy energy-efficient products or services was “to save money”
Today we’ll focus on the Energy Savvies, the future homebuyers that align most with current owners of Green homes. These future buyers represents the ripest target for builders selling green homes.
What do these home buyers want in a new home?
Garages, granite countertops, sound systems and pools still make the top 15 list for features these buyers want...

- Garage: 34%
- Granite countertops: 27%
- A Wi-Fi enabled sound system with speakers throughout: 24%
- A pool: 24%
... yet ENERGY STAR® appliances and certification, as well as efficient HVACs and toilets, make up the bulk of the top tier.

Q24 - Which of the following features do you want your new home to have?

- Garage: 34%
- ENERGY STAR® certified appliances: 32%
- High-efficiency heating and air conditioning system: 32%
- Water-efficient toilets: 31%
- ENERGY STAR® certification: 30%
- Granite countertops: 27%
- Water-efficient showerheads: 27%
- A Wi-Fi enabled sound system with speakers throughout: 24%
- A pool: 24%
- Smart (connected to a mobile app) appliances: 27%
- Solar panels: 32%
- An electric generator: 29%
- Smart thermostat that learns my preferences and knows: 27%
- A HEPA air purification system: 27%
... and smart thermostats and appliances, along with solar panels and generators, are wanted more than Wi-Fi speakers and pools.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Garage</td>
<td>34%</td>
</tr>
<tr>
<td>ENERGY STAR® certified appliances</td>
<td>32%</td>
</tr>
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<tr>
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<td>27%</td>
</tr>
<tr>
<td>A smart thermostat that learns my preferences and knows...</td>
<td>27%</td>
</tr>
<tr>
<td>Water-efficient showerheads</td>
<td>27%</td>
</tr>
<tr>
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<td>26%</td>
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<tr>
<td>A pool</td>
<td>24%</td>
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</tbody>
</table>
So what are the must-haves in a green home?
Builders have some strong opinions.
Builders know that higher efficiency (or SEER) HVAC, higher efficiency appliances, and insulation with higher R-values matter a lot in a green home.

91% Higher efficiency (ENERGY STAR®) appliances

87% Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment

84% Higher R-value (or extra) insulation and superior air sealing
And the list of features Builders consider “must-haves” is extensive...

- Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment (91%)
- Higher efficiency (ENERGY STAR®) appliances (87%)
- Higher R-value (or extra) insulation and superior air sealing (84%)
- Low-E/High efficiency windows (82%)
- Water conserving features like low-flow showerheads, toilets and/or rain water collection systems (82%)
- Longer lasting components - building materials and construction details that increase the useful life of the individual components and the whole house (80%)
- Lower maintenance components - e.g., building elements such as rock or brick that require less maintenance (73%)
- Constructed with materials that produce less off-gasses or VOC’s (indoor air pollution) (64%)
The majority of Energy Savvies, however, don’t give these as much weight.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment</td>
<td>91%</td>
<td></td>
</tr>
<tr>
<td>Higher efficiency (ENERGY STAR®) appliances</td>
<td>87%</td>
<td>#1</td>
</tr>
<tr>
<td>Higher R-value (or extra) insulation and superior air sealing</td>
<td>84%</td>
<td>#3</td>
</tr>
<tr>
<td>Low-E/High efficiency windows</td>
<td>82%</td>
<td>#2</td>
</tr>
<tr>
<td>Water conserving features like low-flow showerheads, toilets and/or rain water collection systems</td>
<td>82%</td>
<td></td>
</tr>
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<td>Longer lasting components - building materials and construction details that increase the useful life of the individual components and the whole house</td>
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<td></td>
</tr>
<tr>
<td>Lower maintenance components - e.g., building elements such as rock or brick that require less maintenance</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Constructed with materials that produce less off-gasses or VOC’s (indoor air pollution)</td>
<td>64%</td>
<td></td>
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</table>

Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment: 38%
Higher efficiency (ENERGY STAR®) appliances: 33%
Higher R-value (or extra) insulation and superior air sealing: 25%
Low-E/High efficiency windows: 28%
Water conserving features like low-flow showerheads, toilets and/or rain water collection systems: 34%
Longer lasting components - building materials and construction details that increase the useful life of the individual components and the whole house: 31%
Lower maintenance components - e.g., building elements such as rock or brick that require less maintenance: 29%
Constructed with materials that produce less off-gasses or VOC’s (indoor air pollution): 23%

n=223
n=55
Q25 - What features do you consider to be must-haves in any home you call “sustainable?” (Consumer survey)
Q8 - Please check the features you consider to be must-haves in any home you call “sustainable?” (Builder survey)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Consumer Survey</th>
<th>Builder Survey</th>
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</thead>
<tbody>
<tr>
<td>Air exchange/Filtering systems to contribute to better indoor air quality</td>
<td>56%</td>
<td></td>
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<tr>
<td>Includes recycled materials</td>
<td>51%</td>
<td></td>
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<tr>
<td>Includes products made in an environmentally friendly way - i.e., zero waste, recycled materials, no harmful chemicals, low energy usage</td>
<td>49%</td>
<td></td>
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<tr>
<td>Natural landscaping/Xeriscaping - A natural approach to landscaping using indigenous plants that need less water, weeding, etc. and trees for natural shading</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>Renewable electric power generation systems such as solar, geothermal or wind</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Incorporates skylights, Natural lighting</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>A &quot;green&quot; certification issued by an independent third party, such as ENERGY STAR®, LEED®, Indoor AirPLUS, WaterSense®, EPA Sero Energy Ready, etc.</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Solar screens to block sunlight</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

n=223
n=55
Why the disconnect?

Energy Savvies don’t understand what truly makes a difference in this kind of construction. 

(This is why builders will likely tell you it’s not worth the extra work and money to go with SIPs)
This confusion is also seen in their lack of confidence with terms and phrases.
Most Energy Savvies aren’t confident about what you mean when you use any of these terms.

- Efficient home: 30%
- Green home: 28%
- High-performance home: 22%
- Sustainable home: 19%
- Net-zero home: 9%

Q4 - Please check any of the following terms or phrases that you know you could confidently and correctly explain to a friend.
Regardless of what you call it, they say they’re willing to pay more for the benefits of this kind of home.
How much more?
Nearly half of Energy Savvies say they’ll pay 6%-10% or more.

Q27 - How much more would you be willing to pay for a "sustainable home?" (Consumer survey)
Q12 - How much more do you think customers are willing to pay for a "sustainable" home? (Builder survey)
Yet builders have much less faith in consumers’ willingness to pay more, with two thirds of builders estimating 3-5% or less.
There’s also a disconnect between the specific features builders and Energy Savvies themselves believe consumers will pay for.
Top three things Energy Savvies say they’ll pay more for

- Higher efficiency (ENERGY STAR®) appliances
- Renewable electric power generation systems such as solar, geothermal or wind
- Higher efficiency (or SEER) HVAC, furnace, or air conditioning
Top three things Energy Savvies say they’ll pay more for

- Higher efficiency (ENERGY STAR®) appliances
- Renewable electric power generation systems such as solar, geothermal or wind
- Higher efficiency (or SEER) HVAC, furnace, or air conditioning

Top three things builders say they’ll pay more for

- Higher efficiency (or SEER) HVAC, furnace, or air conditioning
- Higher efficiency (ENERGY STAR®) appliances
- Low-E/High efficiency windows
And remember these “Top 3” builder “must-haves”? 

91% 
Higher efficiency (ENERGY STAR®) appliances

87% 
Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment

84% 
Higher R-value (or extra) insulation and superior air sealing
Q8 - Please check the features you consider to be must-haves in any home you call "sustainable?" (Builder survey)

- Higher efficiency (ENERGY STAR®) appliances: 91%
- Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment: 87%
- Higher R-value (or extra) insulation and superior air sealing: 84%

Q10 - In your opinion what sustainable features do you think homebuyers would be willing to pay more for? (Builder survey)

Builders recognize that consumers likely won’t pay on par with the “must” nature of these items...
Q8 - Please check the features you consider to be must-haves in any home you call "sustainable?" (Builder survey)

- Higher efficiency (ENERGY STAR®) appliances: 91%
- Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment: 87%
- Higher R-value (or extra) insulation and superior air sealing: 84%
- Higher R-value (or extra) insulation and superior air sealing: 63%
- Higher R-value (or extra) insulation and superior air sealing: 46%
- Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment: 70%
- Higher R-value (or extra) insulation and superior air sealing: 34%
- Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment: 54%
- Higher efficiency (or SEER) HVAC, furnace, or air conditioning equipment: 24%

Q10 - In your opinion what sustainable features do you think homebuyers would be willing to pay more for? (Builder survey)

- Builder Must-have: ...but Energy Savvies are even less willing to pay more than builders think.

Q26 - What sustainable features would you be willing to pay more for? (Consumer survey)

n=223
n=55
n=54
The disconnect in perception vs. reality makes clear the need to highlight the right things in marketing efforts.
The disconnect also makes clear that it isn’t about marketing individual features – it’s about marketing a comprehensive package of benefits.
What people want to hear about in a new home is a mix of luxury, smart and green.
Conspicuous consumption isn’t gone...
...it’s just starting to look different.
This is a new kind of conspicuous consumption.
SIPs go a long way towards making homes truly sustainable …
But they don’t pass the “I can see it” test.
So make them visible
Imagine a sign in front of the SIPs house that said, “Be comfortable in a new home faster with SIPs”
You can visibly show the speed benefit and comfort benefit during construction, then work with the builder to canvas those neighborhoods to further tell the story.
And as you do that, you need to use messaging that communicates the benefits home buyers actually care about in the right way.
Gain a sustainable advantage.

Frame “savings” messages about money as “loss avoidance”

66%

believe telling someone that an energy-efficient home helps you avoid wasting money and natural resources is an effective way to get people to spend $1,500 on efficient home features

Source: Energy Pulse 2018  n=2,009
Health + Comfort

Gain a sustainable advantage.
68% believe their house has a moderate to strong impact on their health.

Source: Energy Pulse 2018
n=2,009
65% are at least somewhat concerned about indoor air quality

Source: Energy Pulse 2018
n=2,009
80% think energy efficient homes are healthier homes

Source: Energy Pulse 2018
n=2,009
60% believe telling someone that an energy efficient home is a healthier home is an effective way to get people to spend $1500 on efficient home features.

Source: Energy Pulse 2018
n=2,009
Comfort is also a key driver in the EE space.
Ranked 1st

“making my home more comfortable” is ranked as the number one reason consumers give for “spending money on my home”
66% believe telling someone that an energy-efficient home allows you to set your thermostat to a more comfortable level without increasing your bill is an effective way to get people to spend $1,500 on efficient home features.

Source: Energy Pulse 2018
n=2,009
64% believe telling someone that an energy-efficient home is a more *comfortable* home, with fewer drafts and consistent temperatures in all rooms is an effective way to get people to spend $1,500 on efficient home features.

Source: Energy Pulse 2018

n=2,009
You’ve also got to deal with builder perceptions
40% of Builders

Agree/Strongly Agree that more people will be interested in green homes.

89% of Energy Savvy prospective homebuyers

Q28 (consumer) - To what extent do you agree or disagree with the following statement: “Within the next five years, more and more people will be interested in owning ‘sustainable homes’.”
Q11 (builder) - To what extent do you agree or disagree with the following statement: “Among homebuyers in my market, I’m seeing more and more interest in ‘sustainable’ homes.”
Builder perceptions about SIPs gathered in two studies:

US Department of Housing and Urban Development

• Value seen in SIPs is dependent on output volume
  – **High volume builders:** price benefits through reduced time, labor, and waste removal costs—makeup for the higher up-front cost of panels
  – **Low volume builders:** quality benefits in regard to the quality of home output

• Issues seen:
  – Major barrier: lack of crew expertise on installation
  – SIPs are hard to install wiring and plumbing in
  – Other builders aren’t using SIPs
  – Local building inspectors often have to be educated about SIPs, which creates another hurdle for builders to deal with

University of Colorado

• Issues seen:
  – Lack of expertise in installation
  – SIPs reduce air flow and create poor air quality
  – Water damage and fire pose serious threats to long-term durability
  – Very susceptible to mold/mildew
  – Optimum environment for insects to live in, so they have to be treated with insecticides

https://scholar.colorado.edu/cgi/viewcontent.cgi?referer=https://r.search.yahoo.com/_ylt=AwrJ56tLDShbGk0AuE4PxQt;_ylu=X3oDMTByNXM5bzY5SBGNvbG8DYmYxBHcvwMzBHZ0aWQDBHNIYwNzcg----/RV=2/RE=1529380299/RO=10/UR=https://scholar.colorado.edu/cgi/viewcontent.cgi%3Farticle%3D2109%26context%3Dhonr_theses/RK=2/RS=fWafGxEzqWHxSpN2Eti7KWscSYLY-httpsredir=1&article=2109&context=honr_theses
Builder perceptions about SIPs stated in two articles:

**Builder Magazine:**
- Builders who have used SIPs see the value
- Issues seen:
  - Large learning curve with the new technology; lack of expertise
  - SIPs come with less flexibility for changing plans on-site
  - Assemblers do not have to have the same level of carpentry skills, so it represents a loss of jobs
  - Price-savings depends on the situation for the specific builder; not guaranteed
  - “Want” has to come from the home buyer
  - Buyers typically would rather allocate the extra money to additional square footage rather than to EE

**Architect Magazine**
- Issues seen:
  - Long term durability is unknown
  - Difficult to wire and add plumbing
  - Not "tried and true" so they are reluctant to use something untested

https://www.builderonline.com/building/building-science/structural-insulated-panels-have-many-fans-so-why-dont-more-builders-use-them_o;
What you need to do:

• Aggressively tackle negative health perceptions
  – Fund and publish studies
  – Gain endorsements from noted health organizations and/or practitioners

• Position SIPS as an answer to the labor shortage
  – Create training programs branded to communicate how easy it is to install a SIP

• Follow an “anthill approach”
  – Build up a few key communities at a time where you already have a few builders using SIPS vs. spreading out everywhere.
  – In those communities, train builders, the workforce and the building inspectors
    • Lunch and learns, workshops, signage, home shows, AIA courses
Summary
Summary:

• Half of the people in the market for a new home want the benefits of a greener, more efficient home

• But it’s about the benefits – and the comprehensive package. It’s NOT about features or individual options

• Builders are not aligned – they don’t think the market wants efficiency and, if they do, they don’t prioritize what home buyers most value (certifications, visible cues)

• You need to reframe the consumer message to be about avoiding waste, being smart/in control, being comfortable and healthy. And you need to leverage the fast, visible nature of SIPs construction

• You need to reframe your positioning with builders, teeing up SIPs as a solution to the labor shortage problem, overcome negative perceptions and work community-by-community to train and empower them to succeed.
Questions
Thank you!

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