Why smart home tech will revolutionize the green building industry

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The Smart Home Gender Gap
What it is and how to bridge it

The smart home technology market is a sleeping giant – and no one’s sure exactly when it will awaken. Many market observers think the tipping point will be an advance in technology that proves impossible for consumers to resist. But we think market success may actually hinge on speaking credibly to an audience that has been largely overlooked: women. See what our research shows about the smart home gender gap: what it is and how to bridge it.
Smart Home Strategies for Utilities
Five reasons you should get in the game

The energy landscape is changing, and utilities are retooling old business models to include more products and services. Smart home technology is a natural fit, offering utilities unbeatable opportunities for increasing customer revenue and loyalty. But you’d never know it, judging by how slowly utilities are moving into the space. Our research shows that now is the time to act – and we’ve got five compelling reasons why.
The short answer
choose **smart thermostats** as one of the top things that have an impact on making a home more energy efficient

9%

choose **insulation** as one of the top things that have an impact on making a home more energy efficient

9%

Source: Energy Pulse 2015
The longer answer
1.8b
Connected home devices expected to ship in 2019

$490b
Expected connected home revenues in 2019

60% believe a fully connected home will be achievable within five years.

84% of smartphone or tablet owners either currently, or plan to, control a connected home device in the next year.

Source: Energy Pulse 2015

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39%
prioritize smart thermostats as the technology they’d “try” if given a chance

Source: Energy Pulse 2015
N=920
Within the year...

19.8m
Likely household penetration for smart thermostats

19.5m
Likely household penetration for smart lighting
Meanwhile...
Likelihood of doing nearly every EE home improvement we track is in a 3-4 year flatline.
Propensities have declined and stagnated

- Unplug chargers, small appliances and electronics when not in use
- Install high-efficiency/ENERGY STAR® certified windows
- Purchase an ENERGY STAR® certified refrigerator or freezer
- Replace most inefficient lighting (and even CFLs) with more efficient LED bulbs
- Install extra insulation
- Install a smart thermostat that learns your temperature preferences and knows when you’re not home
- Replace showerhead with water-efficient model
- Replace toilet with a water-conserving (e.g., dual flush) model
- Install “smart” outlet switch for easy-off of non-essentials or light or motion-sensing light bulbs or switches

N=2,029
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11% 9% 10% 10% 13% 10% 12% 11% 6% 9% 8% 7% 8% 8% 7% 9% 8% 8% 9% 9% 10% 10%

Add caulking or weather stripping

Install a higher-efficiency air conditioning system

Replace most incandescent bulbs with energy-efficient CFL or LED light bulbs (net)

Install a super high-efficiency, tankless or heat pump water heater

Purchase an ENERGY STAR® certified clothes washer

Purchase an ENERGY STAR® certified dishwasher

Have a professional home energy inspector evaluate your home

Change habits at home to save energy: adjust thermostat settings, wash clothes in cold water, etc.

Purchase ENERGY STAR® certified electronic products like a TV, computer or printer*

*New item in 2015

N=2,029
Have a professional seal the air leaks in your home*
Add duct sealing/duct insulation
Add solar panels to generate electricity for your home
Add a home energy monitoring device or display
Install a higher-efficiency furnace, heat pump or boiler system
Replace most incandescent bulbs with energy-efficient CFL light bulbs
Get rid of/recycle an old inefficient second refrigerator

*New item in 2015

N=2,029

Energy-Efficient Home Activity Propensity – Continued
Most homeowners prioritize aesthetic remodeling

Q15 – If you were suddenly given $10,000 to make home improvements, which two of the following things would you do?

- Redecorate/update furniture
- Replace carpet or add hardwood or tile
- Add solar panels
- Remodel kitchen or bathroom (net)
- Replace windows with more energy-efficient ones
- Replace major appliances with higher-efficiency units
- Replace HVAC or furnace with a higher-efficiency unit
- Remodel kitchen
- Remodel bathroom

N=2,029
43%

Plan to make aesthetic improvements

Source: Energy Pulse 2014
They deny they have a problem & don’t think efficiency is “worth it”.

- My home doesn’t need many/any efficiency improvements: 36% in 2014, 27% in 2013
- I think that cosmetic improvements will make my home more attractive at resale than efficiency improvements will: 27% in 2014, 35% in 2013
- It’s more important to me to make my home more attractive than to make it more efficient: 15% in 2014, 16% in 2013
- Other: 11% in 2014, 15% in 2013
- I just don’t want to make efficiency improvements: 6% in 2014, 4% in 2013
- Cosmetic improvements cost less/are cheaper: 5% in 2014, 4% in 2013

You say you’re likely to make cosmetic improvements to your home, but earlier you said you were not likely to make very many energy efficiency improvements. Why is that?
By contrast...
66% of those who said they had installed a smart thermostat in their current home saw a reduction in their energy use due to their smart thermostat.

Source: Energy Pulse 2015

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Say energy conservation is important-very important in the way it impacts their daily purchases and activities.

Source: Energy Pulse 2015
45% say buying/using eco-friendly products is an important part of their personal image.
Q41 – Where do you get ideas and information for home improvements?

- Home improvement store like Lowe’s or The Home Depot: 57%
- Home improvement television show: 50%
- Friend, neighbor or family member: 36%
- Home decorating and improvement magazine like Real Simple, Better Homes and Gardens or Southern Living: 35%
- Website: 26%
- Attending home and garden shows or “Dream Home” tours: 10%
- None (unaided): 3%
- Other: 1%

N=1,025
Walmart has a connected home section for online shopping.

Product offerings continue to increase and now include smart appliances, health and fitness. The site even allows searching by platform.
Target is creating a smart home section in stores.

Target’s Open House includes connected light bulbs, baby monitors, sprinklers, doorbells and more, displayed in rooms with clear plastic furniture to better highlight the devices and their uses. Target announced in June it would expand to three more existing stores (Minneapolis, Cupertino, CA and NYC) which would have a “connected living experience” department.
Best Buy built a demonstration model of a connected home in the Mall of America.

Connected products displayed include Samsung Family Hub refrigerator, ecobee 3 smart thermostat, Yale smart locks, and Philips Hue lighting.
Many big-box, brick-and-mortar stores now have connected home display space.

- For Lowes, EE products (except for lighting) generally do not have separate displays, but are included with all products in the category.
  - End cap displays are used to highlight connected home products separately.
So let’s recap:

• People care about energy efficiency, and being green is now a mainstream value
• It’s a mainstream concept because it’s cool
• Smart home devices are cool
• People can give themselves permission to buy smart home devices because they’ll save energy
• And because they’re really convenient
• And because they see them everywhere when they’re shopping – clearly everyone’s doing it, so I should, too!
To leverage the promise of smart tech and push green building forward...
We’ll need to bridge the gender gap.
Profile of home technology enthusiasts (13% of the population):

- Male
- Millennials or Gen X
- Well-educated, with bachelor’s degree or higher
- High income ($75K+)
- White-collar and professionals
- Married with children present in the household
- Homeowners (83%)
- Predominantly white, but over-index for minorities (index 126)
- Concerned Parents, True Believers
Women are the driver behind home purchases, yet they are ...

- Less likely to be technophiles or home technology enthusiasts
- Less likely to prioritize home automation when spending money on their homes
- More likely to prioritize making their homes healthier/safer and more beautiful
- Significantly less likely to think that smart/connected homes help save energy, make people feel more secure, or save money

Source: Energy Pulse 2015
So we must position smart home tech as easy, undaunting and as a means to an end to achieve what she really wants – a comfortable, beautiful, quality home.
Building an effective campaign

• Be super clear about who your target audience actually is
  – Profile past buyers, not future/likely buyers

• Be where they’re searching
  – Contextual targeting
  – Behavioral targeting
  – Retargeting

• Use messaging that hits their care-about
  – Comfort, control, health, peace of mind and/or resale value

• Leverage their desires
  – Remember that aesthetics trump efficiency/sustainability

• Learn from results
  – Do A/B testing; ditch what’s not working

• Make it super easy for them to act; give them no more than two actions to take.
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5 things DIYers need to know

Insulation isn’t pretty. Chasing cornices, fixing, warping, and window treatments – that’s the fun part of building or renovating a home. These are the things that enhance your home’s style and energy efficiency. You don’t need to know all that to achieve the right insulation for your project. You just need to have a few basics.

Why you’re insulating

It’s not complicated, but there’s a lot to it. Insulation can make a big difference in your energy bill. That’s why so many contractors, builders, and homeowners put so much attention into it. Insulation helps keep your home cooler in the summer and warmer in the winter.

Energy efficiency

Insulation can save you money on your energy bills. It can help reduce your home’s energy consumption and reduce your carbon footprint.

Acoustics

Insulation helps keep your home quiet. It can help reduce noise from outside, such as from neighbors, traffic, and machinery.

Moisture management

Insulation helps prevent moisture from entering your home. It can help reduce the risk of mold and mildew growth.

Air tightness

Insulation helps keep your home tight. It can help reduce the amount of air that enters your home, which can help reduce your energy bills.

The insulators

Insulation is made of a variety of materials, such as fiberglass, cellulose, and foam. These materials are chosen for their ability to provide the best insulation for your home.

Tips for choosing the right insulation

Choose the right insulation for your home. It’s important to choose the right insulation for your home. The wrong insulation can increase your energy bills and make your home uncomfortable.

The key: you don’t want to waste money on insulation that’s too expensive or doesn’t provide the right level of insulation.

Take our quiz

Take the quiz to see if you know everything about insulation.
H2O: Friend or foe?

Rainbows, babbling brooks, long hot baths... there's no denying the glories of water – but it does have a dark side. No, we're not talking about floods, tsunamis or the sudden downpour that catches you without an umbrella. We're talking about a stealthy, insidious threat to the health of your family and your home: moisture in the air that creeps unnoticed into the walls of your home.

Moisture's mischief – it's not harmless

In hot humid summers, moisture migrates into your walls from the outside. In cold dry winters, moisture generated by everyday family activities – cooking, laundry, bathing, and such – seeps in from the inside. (Bet you didn't know that the average family of four generates two to three gallons of water vapor every day!)

Once inside your wall cavities, that moisture will condense on every surface, creating a breeding ground for mold and mildew. Once it gets started, that nastiness will grow and spread. Eventually its spores can make their way out of your walls, into your living space and into the air your family breathes every day. Asthma and allergic reactions, including eye irritation, runny noses, coughs and other respiratory symptoms, can soon follow.

If you wonder, even for a minute, whether enough moisture can get into your wall to cause real problems, just Google “mold inside wall cavity” and look at the images that come up. I dare you.

And it's not just the health of your family you need to worry about. The health of your home is at stake as well. Moisture is a catalyst for wood rot, which can eat away at your home’s structure and potentially lead to some very costly damage.

Moisture in your home is unavoidable – that's the bad news. The good news is that thanks to modern science, it is manageable. Thanks to modern science, there is a SMART way to control the risks that moisture creates.

Right now – while you're planning or in the process of remodeling your home – is the time to take advantage of that science.

Insulation with an IQ

SMARTBATT™ by CertainTeed is the first and only insulation that can help protect your home and family against mold and rot. At its core is a fast drying, sustainable fiberglass wool. Unlike conventional vapor barriers and kraft facings, its patented MoistureSense™ facing is a smart vapor retarder – its pores open and close based on the humidity in your walls. In low humidity, SMARTBATT blocks indoor moisture from getting into your walls. In high humidity, it lets moisture escape to the air-conditioned indoors.

If you're planning or have already started to remodel, renovate or build a home, you need to know about – and ask for – SMARTBATT.

Learn how it works
Insulation isn’t the fun part of building or remodeling a home. So why not just let your builder or contractor put whatever into your walls?

Because it’s way more important than you think. Here are five reasons you should be giving your insulation some serious thought.

- **There’s more to it than you think.**
  Insulation can—and should—do more than help keep you warm.

- **Where you live matters.**
  Insulation comes in different "R-values." The colder your climate, the higher the R-value you’ll need.

- **What you’re insulating matters.**
  Attics, basements, inside and outside walls ... insulating different areas means using different insulation products.

- **The type—and even the brand—of insulation matters.**
  Make sure yours is made by a company known for innovation.

- **You need to get it right the first time.**
  After your walls are closed up, replacing your insulation is going to be big, expensive trouble.

So start thinking about insulation.

To help you get started, let’s find out what you really know about it.

[Take our quiz](#)

Take your knowledge to the next level by exploring our Think about Insulation resources and tools.
Rainbows, babbling brooks, long hot baths… there’s no denying the glory of water – but it does have a dark side. Moisture in the air creeps unnoticed into the walls of your home where mold, mildew and rot can pose threats to the health of your family and your home.

That moisture is unavoidable – but it’s manageable. Thanks to CertainTeed, there’s now a very smart way to take control of the risks that moisture creates: SMARTBATT™ insulation with MoistureSense™ Technology.

MoistureSense™ – the brains behind SMARTBATT
SMARTBATT’s MoistureSense facing is a smart vapor retarder that adapts to the humidity in your walls.

Show me how it works

While you’re at it, check out our SMARTBATT web page for tools, resources and more information.
Think about it. Comfort is not just about the temperature in your home. It’s also about air quality, noise levels, drafts … and saving money on your energy bills.

Now think about the insulation going into your home … because it can have a huge impact on all of those.

CertainTeed insulation products are engineered to help you achieve Complete Comfort.

More comfort, more choice

Known for quality, known for innovation, CertainTeed offers the industry’s most comprehensive line of insulation products.

- Sustainable Insulation® fiberglass batts
- SMARTBATT™ – the industry’s only moisture-managing fiberglass batt
- MamBrain™ – the state-of-the-art smart vapor retarder
- CertaSpray® spray foam insulation
- OPTIMA® blow-in insulation
- InsulSafe® BP – blow-in attic insulation
- Hybrid solutions – advanced product combinations that provide superior thermal resistance, moisture management, an air-tight seal and outstanding noise reduction

Ask your builder or contractor which CertainTeed solution is right for your project.

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Moisture is the enemy of a healthy home – it can lead to mold growth, health issues and even structural damage. SMARTBATT insulation with MoistureSense™ Technology knows that – you need to know that too.

SMARTBATT is the first and only insulation that helps protect your family and your home from moisture’s damaging effects. If you’re planning or have already started to remodel, renovate or build a home, you need to know about – and ask for – SMARTBATT.

Find out what makes it so smart.

Moisture management

Moisture will migrate into your walls. It’s unavoidable. Inside your walls, where you can’t see it happening, mold and rot begin problems can start. Traditional vapor barriers intended to help control moisture can actually help it inside your walls, creating a breeding ground for mold/mildew. SMARTBATT doesn’t.

When the humidity outside is low, SMARTBATT’s facing remains moisture tight to prevent the moisture generated by normal activities within your home, such as cooking, bathing and laundry, from seeping into your walls. When the humidity is high, it opens up to allow the moisture inside the walls to escape into the conditioned environment of your home.

For a healthier family

Mold and mildew can have a significant impact on the quality of the air inside your home – the air your family breathes every day. When mold spores make their way into your home, they can trigger asthma and allergic reactions, including eye irritation, runny noses, coughs and other respiratory symptoms. With SMARTBATT, you help reduce the risk of mold growth in your home and the risk of potentially serious health issues for those living in it.

For a healthier home

Persistent moisture inside your walls can cause wood framing to rot. With outstanding drying capabilities along with its MoistureSense facing, SMARTBATT can help reduce the risk of expensive structural damage to your home.
Results:

• Generated nearly 20,000,000 impressions and over 74,000 clicks to the brand’s website — for less than half of the cost of one small advertisement in some leading home renovation magazines (a savings of over 1400% in terms of CPM).

• The campaign’s click-through rate exceeded Google industry benchmarks for display advertising by over 500%.

• Our pre-roll video placement finished with a 76% completion rate vs. the average of 59%.
Discussion
Thank You!

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